FORSYTH COUNTY, NORTH CAROLINA

AIR QUALITY CONTROL ORDINANCE

AND

TECHNICAL CODE

Forsyth County Office of Environmental Assistance and Protection
Forsyth County Government Center
201 N. Chestnut Street
Winston-Salem, North Carolina 27101-4120
phone (336) 703-2440
fax (336) 727-2777
www.co.forsyth.cc/EAP/

-Information Sheet-

This version of Chapter 3 of the Forsyth County Code contains the air quality rules and regulations that were modified and adopted on April 7, 2025, by the Forsyth County Board of Commissioners.

The official copy of Chapter 3 of the Forsyth County Code may be viewed at the Forsyth County Clerk of Court's office located in the Forsyth County Courthouse, 175 North Chestnut Street, Winston-Salem, NC 27101.

A copy of Chapter 3, Air Quality Control, of the Forsyth County Code may be viewed or printed from the Office of Environmental Assistance and Protection's website (www.forsyth.cc/EAP/code.aspx).

FORSYTH COUNTY, NC - AIR QUALITY CONTROL

TABLE OF CONTENTS
CHAPTER 3, AIR QUALITY CONTROL
FORSYTH COUNTY CODE

CHAPTER 3 AIR QUALITY CONTROL 1
SECTION 3-0100. IN GENERAL 1
Sec. 3-0101. Office established 1
Sec. 3-0102. Enforcement of chapter 1
Sec. 3-0103. General powers and duties of director 1
Sec. 3-0104. Authority of director to establish administrative procedures 2
Sec. 3-0105. Fees for inspections, permits, and certificates required by chapter 3
Sec. 3-0106. Penalties for violation of chapter 3
Sec. 3-0107. Civil relief for violations of chapter 4
Sec. 3-0108. Chapter does not prohibit private actions for relief 5
Sec. 3-0109. Judicial review of administrative decisions rendered under chapter 5
Sec. 3-0110. Reserved 5
Sec. 3-0111. Copies of referenced federal regulations 5
Sec. 3-0112. Reserved 5
SECTION 3-0200. ADVISORY BOARD 6
Sec. 3-0201. Established; composition; terms of members 6
Sec. 3-0202. Secretary 6
Sec. 3-0203. Meetings 6
Sec. 3-0204. To serve in advisory capacity; general functions 6
Sec. 3-0205. Appeals to and other appearances before board 6
Sec. 3-0206. Opinions not binding 7
SECTION 3-0300. ASBESTOS HAZARD MANAGEMENT PROGRAM 8
Sec. 3-0301. Definitions 8
Sec. 3-0302. Asbestos Containing Materials Removal Permit 9
Sec.3-0303. Asbestos Containing Material Removal Permit Fees 11
SECTION 3-0400. FORSYTH COUNTY AIR QUALITY TECHNICAL CODE 12
Sec. 3-0401. Adopted 12
SUBCHAPTER 3B – REPEALED 13
SUBCHAPTER 3D AIR POLLUTION CONTROL REQUIREMENTS 14
SECTION 3D-0100. DEFINITIONS AND REFERENCES 14
Sec. 3D-0101. Definitions 14
Sec. 3D-0102. Repealed 16
Sec. 3D-0103. Copies of referenced federal regulations 16
Sec. 3D-0104. Incorporation by reference 17
Sec. 3D-0105. Reserved 17
SECTION 3D-0200. AIR POLLUTION SOURCES 18
Sec. 3D-0201. Classification of air pollution sources 18
Sec. 3D-0202. Registration of air pollution sources 19
SECTION 3D-0300. AIR POLLUTION EMERGENCIES 20

Sec. 3D-0301. Purpose 20
Sec. 3D-0302. Episode criteria 20
Sec. 3D-0303. Emission reduction plans 21
Sec. 3D-0304. Preplanned abatement program 22
Sec. 3D-0305. Emission reduction plan: alert level 22
Sec. 3D-0306. Emission reduction plan: warning level 23
Sec. 3D-0307. Emission reduction plan: emergency level 24
SECTION 3D-0400. AMBIENT AIR QUALITY STANDARDS 26
Sec. 3D-0401. Purpose 26
Sec. 3D-0402. Sulfur oxides 26
Sec. 3D-0403. Total suspended particulates 26
Sec. 3D-0404. Carbon Monoxide 27
Sec. 3D-0405. Ozone 27
Sec. 3D-0406. Hydrocarbons – REPEALED 27
Sec. 3D-0407. Nitrogen Dioxide 27
Sec. 3D-0408. Lead 28
Sec. 3D-0409. PM10 particulate matter 28
Sec. 3D-0410. PM2.5 particulate matter 29
SECTION 3D-0500. EMISSION CONTROL STANDARDS 30
Sec. 3D-0501. Compliance with emission control standards 30
Sec. 3D-0502. Purpose 32
Sec. 3D-0503. Particulates from fuel burning indirect heat exchangers 32
Sec. 3D-0504. Particulates from wood burning indirect heat exchangers 34
Sec. 3D-0505. Repealed 35
Sec. 3D-0506. Particulates from hot mix asphalt plants 35
Sec. 3D-0507. Particulates from chemical fertilizer manufacturing plants 36
Sec. 3D-0508. Particulates from pulp and paper mills 36
Sec. 3D-0509. Particulates from mica or feldspar processing plants 36
Sec. 3D-0510. Particulates from sand, gravel, or crushed stone operations 37
Sec. 3D-0511. Particulates from lightweight aggregate processes 37
Sec. 3D-0512. Particulates from wood products finishing plants 38
Sec. 3D-0513. Particulates from portland cement plants 38
Sec. 3D-0514. Particulates from ferrous jobbing foundries 38
Sec. 3D-0515. Particulates from miscellaneous industrial processes 39
Sec. 3D-0516. Sulfur dioxide emissions from combustion sources 39
Sec. 3D-0517. Emissions from plants producing sulfuric acid 40
Sec. 3D-0518. Repealed 40
Sec. 3D-0519. Control of nitrogen dioxide and nitrogen oxides emissions 40
Sec. 3D-0520. Repealed 41
Sec. 3D-0521. Control of visible emissions 41
Sec. 3D-0522. Control and prohibition of odorous emissions 42
Sec. 3D-0523. Repealed 43
Sec. 3D-0524. New source performance standards 43
Sec. 3D-0525. Repealed 44
Sec. 3D-0526. Repealed 44

Sec. 3D-0527. Emissions from spodumene ore roasting 44
Sec. 3D-0528. Total reduced sulfur from kraft pulp mills..... 44
Sec. 3D-0529. Fluoride emissions from primary aluminum reduction plants..... 46
Sec. 3D-0530. Prevention of significant deterioration..... 47
Sec. 3D-0531. Sources in nonattainment areas..... 52
Sec. 3D-0532. Sources contributing to an ambient violation 57
Sec. 3D-0533. Stack height..... 59
Sec. 3D-0534. Fluoride emissions from phosphate fertilizer industry 62
Sec. 3D-0535. Excess emissions reporting and malfunctions 63
Sec. 3D-0536. Particulate emissions from electric utility boilers (repealed) 66
Sec. 3D-0537. Control of mercury emissions..... 66
Sec. 3D-0538. Control of ethylene oxide emissions..... 66
Sec. 3D-0539. Odor control of feed ingredient manufacturing plants..... 68
Sec. 3D-0540. Particulates from fugitive non-process dust emission sources 70
Sec. 3D-0541. Control of emissions from abrasive blasting 72
Sec. 3D-0542. Control of particulate emissions from cotton ginning operations 73
Sec. 3D-0543. Best available retrofit technology 77
Sec. 3D-0544. Prevention of significant deterioration requirements for greenhouse gases..... 78
Sec. 3D-0545. Reserved..... 81
SECTION 3D-0600. MONITORING: RECORDKEEPING: REPORTING..... 82
Sec. 3D-0601. Purpose and scope..... 82
Sec. 3D-0602. Definitions..... 82
Sec. 3D-0603. Repealed..... 83
Sec. 3D-0604. Exceptions to monitoring and reporting requirements..... 83
Sec. 3D-0605. General recordkeeping and reporting requirements..... 83
Sec. 3D-0606. Sources covered by Appendix P of 40 CFR Part 51 84
Sec. 3D-0607. Large wood and wood-fossil fuel combination units..... 86
Sec. 3D-0608. Other large coal or residual oil burners..... 87
Sec. 3D-0609. Repealed..... 89
Sec. 3D-0610. Federal monitoring requirements..... 89
Sec. 3D-0611. Monitoring emissions from other sources..... 89
Sec. 3D-0612. Alternative monitoring and reporting procedures..... 90
Sec. 3D-0613. Quality assurance program 92
Sec. 3D-0614. Compliance assurance monitoring..... 93
Sec. 3D-0615. Delegation..... 96
SECTION 3D-0700. REPEALED..... 97
Sec. 3D-0701. - Sec. 3D-0707. Repealed 97
SECTION 3D-0800. REPEALED..... 98
Sec. 3D-0801. – Sec. 3D-0806. Repealed..... 98
SECTION 3D-0900. VOLATILE ORGANIC COMPOUNDS 99
Sec. 3D-0901. Definitions..... 99
Sec. 3D-0902. Applicability 101
Sec. 3D-0903. Recordkeeping: reporting: monitoring..... 102
Sec. 3D-0904. Repealed..... 102

Sec. 3D-0905. Repealed 102
Sec. 3D-0906. Circumvention 103
Sec. 3D-0907. Repealed 103
Sec. 3D-0908. Repealed 103
Sec. 3D-0909. Compliance schedules for sources in new nonattainment areas 103
Sec. 3D-0910. Repealed 105
Sec. 3D-0911. Repealed 105
Sec. 3D-0912. General provisions on test methods and procedures 105
Sec. 3D-0913. Repealed 105
Sec. 3D-0914. Repealed 106
Sec. 3D-0915. Repealed 106
Sec. 3D-0916. Repealed 106
Sec. 3D-0917. Repealed 106
Sec. 3D-0918. Can coating 106
Sec. 3D-0919. Coil coating 107
Sec. 3D-0920. Repealed 108
Sec. 3D-0921. Repealed 108
Sec. 3D-0922. Metal furniture coating 108
Sec. 3D-0923. Surface coating of large appliances 109
Sec. 3D-0924. Magnet wire coating 110
Sec. 3D-0925. Petroleum liquid storage in fixed roof tanks 110
Sec. 3D-0926. Bulk gasoline plants 111
Sec. 3D-0927. Bulk gasoline terminals 114
Sec. 3D-0928. Gasoline service stations stage I 117
Sec. 3D-0929. Repealed 120
Sec. 3D-0930. Solvent metal cleaning 120
Sec. 3D-0931. Cutback asphalt 124
Sec. 3D-0932. Gasoline truck tanks and vapor collection systems 124
Sec. 3D-0933. Petroleum liquid storage in external floating roof tanks 127
Sec. 3D-0934. Repealed 129
Sec. 3D-0935. Factory surface coating of flat wood paneling 129
Sec. 3D-0936. Repealed 130
Sec. 3D-0937. Manufacture of pneumatic rubber tires 130
Sec. 3D-0938. Repealed 131
Sec. 3D-0939. Repealed 131
Sec. 3D-0940. Repealed 131
Sec. 3D-0941. Repealed 131
Sec. 3D-0942. Repealed 131
Sec. 3D-0943. Synthetic organic chemical and polymer manufacturing 131
Sec. 3D-0944. Manufacture of polyethylene, polypropylene and polystyrene .. 133
Sec. 3D-0945. Petroleum dry cleaning 135
Sec. 3D-0946. Repealed 137
Sec. 3D-0947. Manufacture of synthesized pharmaceutical products 137
Sec. 3D-0948. VOC emissions from transfer operations 139
Sec. 3D-0949. Storage of miscellaneous volatile organic compounds 139

Sec. 3D-0950. Repealed 140
Sec. 3D-0951. RACT for sources of volatile organic compounds 140
Sec. 3D-0952. Petition for alternative controls for ract 140
Sec. 3D-0953. Vapor return piping for stage ii vapor recovery 142
Sec. 3D-0954. Stage ii vapor recovery 142
Sec. 3D-0955. Thread bonding manufacturing 142
Sec. 3D-0956. Glass christmas ornament manufacturing 143
Sec. 3D-0957. Commercial bakeries 144
Sec. 3D-0958. Work practices for sources of volatile organic compounds 144
Sec. 3D-0959. Petition for superior alternative controls 145
Sec. 3D-0960. Certification of leak tightness tester 146
Sec. 3D-0961. Offset lithographic printing and letterpress printing 148
Sec. 3D-0962. Industrial cleaning solvents 152
Sec. 3D-0963. Fiberglass boat manufacturing materials 153
Sec. 3D-0964. Miscellaneous industrial adhesives 159
Sec. 3D-0965. Flexible package printing 161
Sec. 3D-0966. Paper, film and foil coatings 162
Sec. 3D-0967. Miscellaneous metal and plastic parts coatings 164
Sec. 3D-0968. Automobile and light duty truck assembly coatings 169
SECTION 3D-1000. MOTOR VEHICLE EMISSION CONTROL STANDARD 173
Sec. 3D-1001. Reserved 173
Sec. 3D-1002. Reserved 173
Sec. 3D-1003. Reserved 173
Sec. 3D-1004. Reserved 173
Sec. 3D-1005. Reserved 173
Sec. 3D-1006. Reserved 173
Sec. 3D-1007. Reserved 173
Sec. 3D-1008. Reserved 173
Sec. 3D-1009. Reserved 173
Sec. 3D-1010. Heavy-duty vehicle idling restrictions 173
SECTION 3D-1100. CONTROL OF TOXIC AIR POLLUTANTS 176
Sec. 3D-1101. Purpose 176
Sec. 3D-1102. Applicability 176
Sec. 3D-1103. Definitions 176
Sec. 3D-1104. Toxic air pollutant guidelines 177
Sec. 3D-1105. Facility reporting, recordkeeping 181
Sec. 3D-1106. Determination of ambient air concentration 181
Sec. 3D-1107. Multiple facilities 183
Sec. 3D-1108. Multiple pollutants 184
Sec. 3D-1109. 112(j) case -by-case maximum achievable control technology 184
Sec. 3D-1110. National emission standards for hazardous air pollutants 187
Sec. 3D-1111. Maximum achievable control technology 187
Sec. 3D-1112. 112(g) case-by-case maximum achievable control technology 188
SECTION 3D-1200. CONTROL OF EMISSIONS FROM INCINERATORS 195
Sec. 3D-1201. Purpose and scope 195

Sec. 3D-1202. Definitions 195
Sec. 3D-1203. Repealed 196
Sec. 3D-1204. Repealed 196
Sec. 3D-1205. Repealed 196
Sec. 3D-1206. Repealed 196
Sec. 3D-1207. Repealed 196
Sec. 3D-1208. Other incinerators 196
Sec. 3D-1209. Repealed 199
Sec. 3D-1210. Repealed 199
Sec. 3D-1211. Repealed 199
Sec. 3D-1212. Repealed 199
SECTION 3D-1300. OXYGENATED GASOLINE STANDARD 200
(NCDAQ RETAINED JURISDICTION OVER OXYGENATED GASOLINE STANDARDS) 200
SECTION 3D-1400. NITROGEN OXIDES 201
Sec. 3D-1401. Definitions 201
Sec. 3D-1402. Applicability 204
Sec. 3D-1403. Compliance schedules 205
Sec. 3D-1404. Recordkeeping: reporting: monitoring: 207
Sec. 3D-1405. Circumvention 209
Sec. 3D-1406. Repealed 209
Sec. 3D-1407. Boilers and indirect-fired process heaters 209
Sec. 3D-1408. Stationary combustion turbines 211
Sec. 3D-1409. Stationary internal combustion engines 211
Sec. 3D-1410. Emissions averaging 212
Sec. 3D-1411. Seasonal fuel switching 213
Sec. 3D-1412. Petition for alternative limitations 214
Sec. 3D-1413. Sources not otherwise listed in this section 215
Sec. 3D-1414. Tune-up requirements 215
Sec. 3D-1415. Test methods and procedures 216
Sec. 3D-1416. Reserved 217
Sec. 3D-1417. Reserved 217
Sec. 3D-1418. New electric generating units, large boilers, and large i/c engines 217
Sec. 3D-1419. Reserved. 218
Sec. 3D-1420. Reserved 218
Sec. 3D-1421. Reserved 218
Sec. 3D-1422. Reserved. 218
Sec. 3D-1423. Large internal combustion engines 218
SECTION 3D-1500. REPEALED 221
Sec. 3D-1501. - Sec. 3D-1504. Repealed 221
SECTION 3D-1600. GENERAL CONFORMITY 222
Sec. 3D-1601. Purpose, scope and applicability 222
Sec. 3D-1602. Definitions 222
Sec. 3D-1603. General conformity determination 222

SECTION 3D-1700. MUNICIPAL SOLID WASTE LANDFILLS 224
Sec. 3D-1701. Definitions 224
Sec. 3D-1702. Applicability 224
Sec. 3D-1703. Emission standards 224
Sec. 3D-1704. Test methods and procedures 225
Sec. 3D-1705. Operational standards 225
Sec. 3D-1706. Compliance provisions 226
Sec. 3D-1707. Monitoring provisions 226
Sec. 3D-1708. Reporting requirements 226
Sec. 3D-1709. Recordkeeping requirements 228
Sec. 3D-1710. Compliance schedules 229
SECTION 3D-1800. CONTROL OF ODORS 230
Sec. 3D-1801. Definitions 230
Sec. 3D-1802. Control of odors from animal operations using liquid animal waste management systems 231
Sec. 3D-1803. Best management plans for animal operations 236
Sec. 3D-1804. Reporting requirements for animal operations 237
Sec. 3D-1805. Reserved 238
Sec. 3D-1806. Reserved 238
Sec. 3D-1807. Reserved 238
Sec. 3D-1808. Reserved 238
SECTION 3D-1900. OPEN BURNING 239
Sec. 3D-1901. Open burning: purpose: scope 239
Sec. 3D-1902. Definitions 239
Sec. 3D-1903. Permissible open burning 241
Sec. 3D-1904. Air curtain burners 244
Sec. 3D-1905. Office location 247
Sec. 3D-1906. Reserved. 247
Sec. 3D-1907. Multiple violations and multiple penalties 247
SECTION 3D-2000. TRANSPORTATION CONFORMITY 248
Sec. 3D-2001. Purpose, scope and applicability 248
Sec. 3D-2002. Definitions 248
Sec. 3D-2003. Transportation conformity determination 249
Sec. 3D-2004. Determining transportation-related emissions 251
Sec. 3D-2005. Memorandum of agreement 251
SECTION 3D-2100. RISK MANAGEMENT PROGRAM 252
Sec. 3D-2101. Applicability 252
Sec. 3D-2102. Definitions 252
Sec. 3D-2103. Requirements 252
Sec. 3D-2104. Implementation 253
SECTION 3D-2200. SPECIAL ORDERS 254
Sec. 3D-2201. Purpose 254
Sec. 3D-2202. Definitions 254
Sec. 3D-2203. Public notice 254
Sec. 3D-2204. Final action on consent orders 255

Sec. 3D-2205. Notification of right to contest special orders issued without consent 255
Sec. 3D-2206. Compliance bonds 256
SECTION 3D-2300. BANKING EMISSION REDUCTION CREDITS 257
Sec. 3D-2301. Purpose 257
Sec. 3D-2302. Definitions 257
Sec. 3D-2303. Applicability and eligibility 258
Sec. 3D-2304. Qualification of emission reduction credits 259
Sec. 3D-2305. Creating and banking emission reduction credits 259
Sec. 3D-2306. Duration of emission reduction credits 260
Sec. 3D-2307. Use of emission reduction credits 261
Sec. 3D-2308. Certificates and registry 262
Sec. 3D-2309. Transferring emission reduction credits 262
Sec. 3D-2310. Revocation and changes of emission reduction credits 263
Sec. 3D-2311. Monitoring 263
SECTION 3D-2400. CLEAN AIR INTERSTATE RULES 264
Sec. 3D-2401. Purpose and applicability 264
Sec. 3D-2402. Definitions 265
Sec. 3D-2403. Nitrogen oxide emissions 266
Sec. 3D-2404. Sulfur Dioxide 267
Sec. 3D-2405. Nitrogen oxide emissions during ozone season 267
Sec. 3D-2406. Permitting 269
Sec. 3D-2407. Monitoring, reporting, and recordkeeping 269
Sec. 3D-2408. Trading program and banking 269
Sec. 3D-2409. Designated representative 270
Sec. 3D-2410. Computation of time 271
Sec. 3D-2411. Opt-in provisions 272
Sec. 3D-2412. New unit growth 272
Sec. 3D-2413. Periodic review and reallocations 273
SECTION 3D-2500. MERCURY RULES FOR ELECTRIC GENERATORS 274
Section .2500 was not adopted because Forsyth County has no electric generators. 274
SECTION 3D-2600. SOURCE TESTING 275
Sec. 3D-2601. Purpose and scope 275
Sec. 3D-2602. General provisions on test methods and procedures 275
Sec. 3D-2603. Testing protocol 276
Sec. 3D-2604. Number of test points 276
Sec. 3D-2605. Velocity and volume flow rate 277
Sec. 3D-2606. Molecular weight 277
Sec. 3D-2607. Determination of moisture content 277
Sec. 3D-2608. Number of runs and compliance determination 277
Sec. 3D-2609. Particulate testing methods 277
Sec. 3D-2610. Opacity 279
Sec. 3D-2611. Sulfur Dioxide testing methods 279
Sec. 3D-2612. Nitrogen oxide testing methods 281

Sec. 3D-2613. Volatile organic compound testing methods 281
Sec. 3D-2614. Determination of voc emission control system efficiency 282
Sec. 3D-2615. Determination of leak tightness and vapor leaks 282
Sec. 3D-2616. Fluorides 283
Sec. 3D-2617. Total reduced Sulfur 283
Sec. 3D-2618. Mercury 283
Sec. 3D-2619. Arsenic, Beryllium, Cadmium, hexavalent Chromium 283
Sec. 3D-2620. Dioxins and furans 283
Sec. 3D-2621. Determination of fuel heat content using F-factor 284
SUBCHAPTER 3H - REPEALED 285
SUBCHAPTER 3Q - AIR QUALITY PERMITS 286
SECTION 3Q-0100. GENERAL PROVISIONS 286
Sec. 3Q-0101. Required air quality permits 286
Sec. 3Q-0102. Activities exempted from permit requirements 287
Sec. 3Q-0103. Definitions 291
Sec. 3Q-0104. Where to obtain and file permit applications 295
Sec. 3Q-0105. Copies of referenced documents 295
Sec. 3Q-0106. Incorporation by reference 295
Sec. 3Q-0107. Confidential information 296
Sec. 3Q-0108. Delegation of authority 296
Sec. 3Q-0109. Compliance schedule for previously exempted activities 296
Sec. 3Q-0110. Retention of permit at permitted facility 297
Sec. 3Q-0111. Applicability determinations 297
Sec. 3Q-0112. Reserved. 297
Sec. 3Q-0113. Reserved. 297
SECTION 3Q-0200. PERMIT FEES 298
Sec. 3Q-0201. Applicability 298
Sec. 3Q-0202. Definitions 298
Sec. 3Q-0203. Permit and application fees 299
Sec. 3Q-0204. Fee adjustment 302
Sec. 3Q-0205. Other adjustments 302
Sec. 3Q-0206. Payment of fees 303
Sec. 3Q-0207. Annual emissions reporting 303
SECTION 3Q-0300. CONSTRUCTION AND OPERATION PERMIT 305
Sec. 3Q-0301. Applicability 305
Sec. 3Q-0302. Repealed 305
Sec. 3Q-0303. Definitions 305
Sec. 3Q-0304. Applications 305
Sec. 3Q-0305. Application submittal content 307
Sec. 3Q-0306. Permits requiring public participation 308
Sec. 3Q-0307. Public participation procedures 309
Sec. 3Q-0308. Final action on permit applications 310
Sec. 3Q-0309. Termination, modification and revocation of permits 311
Sec. 3Q-0310. Permitting of numerous similar facilities 312
Sec. 3Q-0311. Permitting of facilities at multiple temporary sites 312

Sec. 3Q-0312. Application processing schedule 312
Sec. 3Q-0313. Reserved. 315
Sec. 3Q-0314. General permit requirements 315
Sec. 3Q-0315. Synthetic minor facilities 316
Sec. 3Q-0316. Administrative permit amendments 316
Sec. 3Q-0317. Avoidance conditions 317
Sec. 3Q-0318. Changes not requiring permit revisions 317
SECTION 3Q-0400. ACID RAIN PROCEDURES 319
Sec. 3Q-0401. Purpose and applicability 319
Sec. 3Q-0402. Acid rain permitting procedures 319
Sec. 3Q-0403. - Sec. 3Q-0418. Reserved. 319
SECTION 3Q-0500. TITLE V PROCEDURES 320
Sec. 3Q-0501. Purpose of section and requirement for a permit 320
Sec. 3Q-0502. Applicability 321
Sec. 3Q-0503. Definitions 321
Sec. 3Q-0504. Option for obtaining construction and operation permit 324
Sec. 3Q-0505. Application submittal content 324
Sec. 3Q-0506. Initial permit application submittal (repealed) 325
Sec. 3Q-0507. Application 325
Sec. 3Q-0508. Permit content 327
Sec. 3Q-0509. Permitting of numerous similar facilities 330
Sec. 3Q-0510. Permitting of facilities at multiple temporary sites 331
Sec. 3Q-0511. Repealed 331
Sec. 3Q-0512. Permit shield and application shield 331
Sec. 3Q-0513. Permit renewal and expiration 332
Sec. 3Q-0514. Administrative permit amendments 333
Sec. 3Q-0515. Minor permit modifications 334
Sec. 3Q-0516. Significant permit modification 335
Sec. 3Q-0517. Reopening for cause 336
Sec. 3Q-0518. Final action 337
Sec. 3Q-0519. Termination, modification, revocation of permits 338
Sec. 3Q-0520. Certification by responsible official 338
Sec. 3Q-0521. Public participation 339
Sec. 3Q-0522. Review by EPA and affected states 340
Sec. 3Q-0523. Changes not requiring permit revisions 340
Sec. 3Q-0524. Ownership change 342
Sec. 3Q-0525. Application processing schedule 342
Sec. 3Q-0526. 112(j) case-by-case mact procedures 343
Sec. 3Q-0527. Reserved. 351
Sec. 3Q-0528. 112(g) case-by-case mact procedures 351
SECTION 3Q-0600. REPEALED 353
Sec. 3Q-0601. – 3Q-0607 Repealed 353
SECTION 3Q-0700. TOXIC AIR POLLUTANT PROCEDURES 354
Sec. 3Q-0701. Applicability 354
Sec. 3Q-0702. Exemptions 354

Sec. 3Q-0703. Definitions 357
Sec. 3Q-0704. New facilities 360
Sec. 3Q-0705. Existing facilities and sic calls (Repealed) 360
Sec. 3Q-0706. Modifications 360
Sec. 3Q-0707. Previously permitted facilities 361
Sec. 3Q-0708. Compliance schedule for previously unknown toxic air pollutant emissions 361
Sec. 3Q-0709. Demonstrations 362
Sec. 3Q-0710. Public notice and opportunity for public hearing 364
Sec. 3Q-0711. Emission rates requiring a permit 364
Sec. 3Q-0712. Calls by the director 372
Sec. 3Q-0713. Pollutants with otherwise applicable federal standards or requirements 373
Sec. 3Q-0714. Wastewater treatment systems at pulp and paper mills 373
SECTION 3Q-0800. EXCLUSIONARY RULES 375
Sec. 3Q-0801. Purpose and scope 375
Sec. 3Q-0802. Gasoline service stations and dispensing facilities 375
Sec. 3Q-0803. Coating, solvent cleaning, graphic arts operations 376
Sec. 3Q-0804. Dry cleaning facilities 379
Sec. 3Q-0805. Grain elevators 379
Sec. 3Q-0806. Cotton gins 380
Sec. 3Q-0807. Emergency generators 380
Sec. 3Q-0808. Peak shaving generators 382
Sec. 3Q-0809. Concrete batch plants 383
Sec. 3Q-0810. Reserved 383
SECTION 3Q-0900. PERMIT EXEMPTIONS 384
Sec. 3Q-0901. Purpose and scope 384
Sec. 3Q-0902. Temporary crushers 384
Sec. 3Q-0903. Emergency generators and stationary reciprocating internal combustion engines 385

This Page Intentionally Left Blank

FORSYTH COUNTY, NC - AIR QUALITY CONTROL

CHAPTER 3 AIR QUALITY CONTROL

SECTION 3-0100. IN GENERAL

Sec. 3-0101. Office established

There is hereby established an Office of the County, under the administration of the County Manager, to be known as the Office of Environmental Assistance and Protection, such Office to administer the County air quality control program, under the direction and supervision of the Forsyth County Board of Commissioners and the Forsyth County Manager. (Res. of 7-6-71; Ord. No. 8-77, ''l, 2, 8-1-77; Ord. No. 9-94, 12-19-94)

Sec. 3-0102. Enforcement of chapter

The Office of Environmental Assistance and Protection is charged with the duty of investigating, preventing and abating causes of air pollution and enforcing the provisions of the standards and regulations contained in this chapter. Responsibility for the enforcement of these standards and regulations shall rest with the Director. (Ord. of 1-24-72, '2.01; Ord. No.8-77, ''1, 2, 8-1-77; Ord. No. 5-85, 5-13-85; Ord. No. 9-94, 12-19-94)

Sec. 3-0103. General powers and duties of director

(a) The Director shall have the following powers and duties:

(1) Supervise the implementation of the standards and regulations contained in this chapter.

(2) Issue Notices of Violation and institute actions against any and all persons violating any provision of this chapter and institute necessary criminal and/or civil legal proceedings in the name of the County; prosecute violators of this chapter; compel the prevention and abatement of air pollution or nuisances arising from violations of this chapter; and assure compliance with applicable standards.

(3) Examine and approve or disapprove plans for fuel- and refuse-burning equipment, process equipment and control equipment to be installed, constructed, reconstructed, added to or altered, to assure that they are in accordance with the requirements of the standards and regulations contained in this chapter.

(4) Gather information for the consideration of the granting of temporary permits for variances from applicable standards and regulations, for the purpose of allowing time for sources to be brought into compliance with such standards and regulations.

(5) Make inspections and tests of existing and newly installed, constructed, reconstructed or altered fuel- or refuse-burning equipment, process equipment and control equipment, to determine if there is compliance with applicable standards and regulations.

(6) Investigate complaints of violations of this chapter and make inspections and

observations of air pollution sources, and record such investigations, complaints, inspections and observations.

(7) Administer the issuance of certificates of operation, notices or other materials required under the provisions of this chapter.

(8) Prepare and submit to the Board of County Commissioners for its consideration, through the County Manager and after receiving recommendations of the Advisory Board, proposals, additions or revisions of the standards and regulations prescribed by this chapter or any other regulations pertaining to air pollution abatement.

(9) Encourage voluntary cooperation by persons or affected groups in air quality control.

(10) Collect and disseminate information on air quality control to the public, civic groups, community organizations and others, subject to the approval of the County Manager.

(11) Work with planning and zoning agencies for the purpose of coordinating activities under provisions of this chapter to foster and encourage the best possible management and conservation of the air resources of the County.

(12) Cooperate and work with federal, State, County, municipal and other agencies concerned with air quality control in regard to aerometric studies, abatement programs, public complaints and other matters to the end that the air resources of the County shall best be conserved and improved.

(13) Declare an emergency when it is found that a generalized condition of air pollution is causing imminent danger to the health or safety of the public, and issue orders, in the name of the County, to responsible persons to reduce or discontinue immediately the emission of contaminants.

(14) Adopt required procedural modifications as set forth in the Code of Federal Regulations for evaluating standards contained in this chapter after notice and public hearing before the Environmental Assistance and Protection Advisory Board.

(15) Perform such other acts which may be necessary for the successful enforcement of and compliance with the standards and regulations contained in this chapter or which may be required by the County Manager on behalf of the Board of Commissioners.

(b) The Board of Commissioners may, by resolution, delegate to the Director such other duties and responsibilities, consistent with the provisions of Article 21 of Chapter 143 of the North Carolina General Statutes, as are deemed appropriate, including but not limited to, the determination of facts based upon standards contained in this chapter. (Ord. of 1-24-72, ''2.02, 2.03; Ord. No. 8-77, ''l, 2, 8-l-77; Ord. No. 7-86, 3-10-86; Ord. No. 9-94, 12-19-94)

Sec. 3-0104. Authority of director to establish administrative procedures

The Director may establish administrative procedures relating to the submission of requests for permits under this chapter, including such information as is needed, and such other procedures deemed necessary in order to fulfill his responsibilities and not inconsistent with this chapter. (Ord. No. 9-94, 12-19-94)

Sec. 3-0105. Fees for inspections, permits, and certificates required by chapter

Fees for inspections and the issuance of permits and certificates required by this chapter shall be made payable to the County. The amount of such fees shall be established by the Director, following the review and recommendation of the Environmental Assistance and Protection Advisory Board. The Board of County Commissioners shall be notified and may change or revise the fee schedule. (Ord. of 1-24-72, '23.00; Ord. of 9-17-73; Ord. No. 14-88, 12-19-88; Ord. No. 3-92, 4-13-92; Ord. No. 9-94, 12-19-94)

Sec. 3-0106. Penalties for violation of chapter

The violation of this chapter is punishable by fine and imprisonment as follows:

(1) Civil Penalties.

(A) A civil penalty of not more than twenty-five thousand dollars ($25,000) may be assessed for each violation against any person who:

(i) Violates any classification, standard or limitation established pursuant to this Chapter;

(ii) Is required but fails to apply for or to secure a permit required by this Chapter or who violates or fails to act in accordance with the terms, conditions, or requirements of such permit;

(iii) Violates or fails to act in accordance with the terms, conditions, or requirements of any Special Order or other appropriate document issued pursuant to this Chapter for compliance with pollution control requirements;

(iv) Fails to file, submit, or make available, as the case may be, any documents, data or reports required by this Chapter;

(v) Violates any duly adopted regulation of the Forsyth County Commissioners implementing the provisions of this Chapter.

(vi) Commits the offenses set out in Subparagraph (2) of this Rule.

(B) Each day of continuing violation shall be considered a separate offense.

(C) In determining the amount of the penalty, the Director shall consider, but is not limited to, the degree and extent of harm caused by the violation, the cost of rectifying the damage, and the amount of money the violator saved by not having made the necessary expenditures to comply with the appropriate pollution control requirements.

(D) The Director may assess the penalties provided for in this subsection. Any person assessed shall be notified of the assessment by registered or certified mail, and the notice shall specify the reasons for the assessment. The assessment may be appealed to the Forsyth County Environmental Assistance and Protection Advisory Board in accordance with Sec. 3-0205. If the person assessed fails to pay the amount of the assessment to the Forsyth County General Fund within 30 days after receipt of notice, or such longer period, not to exceed 180 days, as the Director may specify, the Director may institute a

civil action in the Superior Court of Forsyth County to recover the amount of the assessment.

(2) Criminal Penalties.

(A) Any person who willfully or negligently violates any classification, standard or limitation established pursuant to this Chapter; any term, condition or requirement of a permit or of a Special Order or other appropriate document or any regulation of the Board of Commissioners implementing any of this Chapter; shall be guilty of a misdemeanor punishable by a fine not to exceed fifteen thousand dollars ($15,000.00) per day of violation, provided that such fine shall not exceed a cumulative total of two hundred thousand dollars ($200,000.00) for each period of thirty (30) days during which a violation continues, or imprisonment not to exceed six (6) months, or by both.

(B) Any person who knowingly makes any false statement, representation or certification in any application, record, report, plan or other document filed or required to be maintained under this Chapter, or who falsifies, tampers with or knowingly renders inaccurate any recording or monitoring device or method required to be operated or maintained under the provisions of this Chapter, shall be guilty of a misdemeanor punishable by a fine not to exceed ten thousand dollars ($10,000) or by imprisonment not to exceed six (6) months, or both.

(C) Any person convicted of an offense under this subsection following a previous conviction there under shall be subject to a fine or imprisonment, or both, not exceeding twice the amount of the fine, or twice the term of imprisonment provided above, under which the second or subsequent conviction occurs. (Ord. of 1-24-72, '25.01; Ord. of 9-17-73; Ord. No. 8-77, ''1, 2, 8-1-77; Ord. No. 3-88, 2-22-88; Ord. No. 7-90, 6-11-90; Ord. No. 3-92, 4-13-92; Ord. No. 9-94, 12-19-94, 9-14-98)

Sec. 3-0107. Civil relief for violations of chapter

The Director may, on behalf of the County, institute civil actions for injunctive or other relief to restrain any violation or threatened violation of this Chapter. Whenever the County Office of Environmental Assistance and Protection has reasonable cause to believe that any person has violated or is threatening to violate any of the provisions of this Chapter, the Office, either before or after the institution of any other action or proceeding authorized by this Chapter, may request the County Attorney to institute a civil action for injunctive relief to restrain the violation or threatened violation and for such other and further relief on the premises as the court shall deem proper. Upon a determination by the court that the alleged violation of the provisions of this Chapter has occurred or is threatened, the court shall grant the relief necessary to prevent or abate the violation. Neither the institution of the action nor any of the proceedings thereon shall relieve any party to such proceedings from any penalty prescribed for violation of this Chapter. (Ord. of 1-24-72, '25.02; Ord. of 9-17-73; Ord. No. 5-85, 5-13-85; Ord. No. 9-94, 12-19-94)

Sec. 3-0108. Chapter does not prohibit private actions for relief

Nothing contained in this Chapter shall be construed as intended to prohibit any private right of action for damages, injunctive relief, or other appropriate relief by any person who has suffered, or is exposed to the immediate threat of damage or injury by reason of the violation or threatened violation of this Chapter or by reason of the emission into the atmosphere of air contaminants in sufficient quantities as to constitute a nuisance. (Ord. of 1-24-72, ' 27.01; Ord. No. 9-94, 12-19-94)

Sec. 3-0109. Judicial review of administrative decisions rendered under chapter

Any final administrative decision rendered pursuant to the standards and regulations contained in this Chapter shall be subject to judicial review as provided by Chapter 150B of the North Carolina General Statutes. (Ord. of 1-24-72, ' 26.00; Ord. No. 4-93, 10-11-93; Ord. No. 9-94, 12-19-94)

Sec. 3-0110. Reserved

(Ord. No. 7-90, 6-11-90; Ord. No. 4-93, 10-11-93; Ord. No. 9-94, 12-19-94, 11-11-96, 7-28-97, 9-14-98, 5-24-99)

Sec. 3-0111. Copies of referenced federal regulations

Copies of applicable Code of Federal Regulations referred to in this Chapter are available for public inspection at the Office of Environmental Assistance and Protection located at Forsyth County Government Center, 201 N. Chestnut Street, Winston-Salem, N.C., 27101-4120. (Ord. No. 3-92, 4-13-92; Ord. No. 9-94, 12-19-94, 11-11-96)

Sec. 3-0112. Reserved

(Ord. No. 9-94, 12-19-94, 7-28-97, 9-14-98, 5-24-99)

SECTION 3-0200. ADVISORY BOARD

Sec. 3-0201. Established; composition; terms of members

Under provisions of a resolution adopted by the Board of Commissioners, there is established the Forsyth County Environmental Assistance and Protection Advisory Board, such Board consisting of seven (7) members. The Board is hereinafter referred to as the Advisory Board. The initial terms of the members shall be as indicated in the resolution establishing the Advisory Board, with their successors to be appointed for terms of three (3) years. Each member shall be subject to reappointment and the privilege of serving for successive terms. The Advisory Board shall have such duties and responsibilities as are set forth in the resolution establishing said Board and the Code, including but not limited to air quality matters. (Ord. of 1-24-72, '2.041; Ord. No. 7-76, '1, 6-7-76; Ord. No. 9-94, 12-19-94)

Sec. 3-0202. Secretary

The Director of the Office of Environmental Assistance and Protection shall be the secretary of the Advisory Board. (Ord. of 1-24-72, '2.041; Ord. No. 7-76, '1, 6-7-76; Ord. No. 9-94, 12-19-94)

Sec. 3-0203. Meetings

The Advisory Board shall meet at the call of its chairman or the Director, or at the written request of four (4) members of such Board. (Ord. of 1-24-72, '2.041; Ord. No. 7-76, '1, 6-7-76; Ord. No. 9-94, 12-19-94)

Sec. 3-0204. To serve in advisory capacity; general functions

The Advisory Board shall serve in an advisory capacity to the Board of County Commissioners and the Director. It shall be its function to conduct public hearings on all matters brought before it, and subsequent to such hearings to present recommendations to the Board of County Commissioners or the Director, whichever is appropriate. (Ord. of 1-24-72, '2.042; Ord. No. 9-94, 12-19-94)

Sec. 3-0205. Appeals to and other appearances before board

(a) Any person taking exception to any decision, ruling, violation notice, civil penalty, permit or Special Order issued by the Director may appeal to the Advisory Board. The appeal must be made within 30 days of notice of the decision, ruling, violation notice, civil penalty, permit or Special Order. Any person wishing to bring a matter before the Advisory Board shall notify the Director, in writing, and furnish all facts necessary to enable the Advisory Board to consider the matter. To that end, any person is privileged to appear before the Advisory Board and bring representatives, consultants and witnesses to be heard relative to the matter concerning which he seeks action by the Advisory Board, provided advance notice is given to the Director of the subject matter to be considered.

(b) Any person taking exception to any decision, ruling, violation notice, civil penalty, permit or

Special Order issued by the Director, after an appeal to the Advisory Board, may request judicial review of the administrative decision as provided by Sec. 3-0109. (Ord. of 1-24-72, ' 2.042; Ord. No. 3-92, 4-13-92; Ord. No. 4-93, 10-11-93; Ord. No. 9-94, 12-19-94)

Sec. 3-0206. Opinions not binding

Opinions rendered by the Advisory Board are not binding, but shall be recommendatory only to the Board of County Commissioners and the Director. (Ord. of 1-24-72, ' 2.042; Ord. No. 9-94, 12-19-94)

FORSYTH COUNTY, NC - AIR QUALITY CONTROL

SECTION 3-0300. ASBESTOS HAZARD MANAGEMENT PROGRAM

Sec. 3-0301. Definitions

Unless a different meaning is required by the context, the following definitions apply throughout this Section:

(a) "Asbestos" means asbestiform varieties of chrysotile (serpentine), crocidolite (riebeckite), amosite (cummingtonite-grunerite), anthophyllite, tremolite and actinolite.

(b) "Asbestos containing material" means material which contains more than one percent (1%) asbestos, including friable asbestos containing material and nonfriable asbestos containing material.

(c) "Asbestos NESHAP for demolition and renovation" means that portion of the National Emission Standards for Hazardous Air Pollutants for asbestos that governs demolition and renovation as set out in 40 CFR §§ 61.141, 61.145, 61.150, and 61.154 (1 July 1993 edition).

(d) "Abatement" means work performed to repair, maintain, remove, isolate, or encapsulate asbestos containing material. The term does not include inspections, preparation of management plans, abatement project design, taking of samples, or project overview.

(e) "Completion Date" means the date on which all activities on a permitted asbestos removal requiring the use of State of North Carolina accredited workers and supervisors are complete, including the disassembly of all removal area barriers.

(f) "Emergency Renovation Operation" means the same as defined in 40 CFR Part 61.141.

(g) "Friable" means any material that when dry can be broken, crumbled, pulverized, or reduced to powder by hand pressure, and includes previously nonfriable material after such material becomes damaged to the extent that when dry it can be crumbled, pulverized, or reduced to powder by hand pressure.

(h) "Installation" means any building or structure or group of buildings or structures at a single site under the control of the same owner or operator.

(i) "Management" means all activities related to asbestos containing material, including inspections, preparation of management plans, abatement project design, abatement, project overview, and taking of samples.

(j) "Nonscheduled Asbestos Removal" means the same as nonscheduled renovation operation, as defined in 40 CFR Part 61.141, of asbestos containing material.

(k) "Person" means an individual, a corporation, a company, an association, a partnership, a unit of local government, a State or Federal agency, or any other legal entity.

(l) "Public area" means those areas in any building other than a residence that are not covered under the Occupational Safety and Health Act of 1970, Pub. L. 91-596, 84 Stat. 1590, 29 U.S.C. § 651, et seq., as amended.

(m) "Regulated Asbestos Containing Material" means the same as defined in 40 CFR Part 61.141.

(n) "Removal" means stripping, chipping, sanding, sawing, drilling, scraping, sucking, and other methods of separating material from its installed location in a building.

(o) "Residence" means any single family dwelling or any multi-family dwelling of fewer than 10 units.

(p) "Start Date" means the date on which activities begin on an asbestos removal project that is permitted pursuant to this Section and that requires the use of workers and supervisors who are accredited by the State of North Carolina, including removal area isolation and preparation or any other activity which may disturb asbestos containing materials.

(q) "Working day" means Monday through Friday, including any holidays. (Ord. No. 2025-705)

Sec. 3-0302. Asbestos Containing Materials Removal Permit

(a) No person shall remove more than 35 cubic feet (1 cubic meter), 160 square feet (15 square meters) or 260 linear feet (80 linear meters) of regulated asbestos containing material, without a permit issued by the Forsyth County Office of Environmental Assistance and Protection (Office). This permitting requirement is applicable to:

(1) individual removals that exceed the threshold amounts addressed in this Paragraph;

(2) nonscheduled asbestos removals conducted at an installation that exceed the threshold amounts addressed in this Paragraph in a calendar year of January 1 through December 31. Other asbestos abatement activities are exempt from the permit requirements of this Section.

(b) All applications shall be made on a form provided or approved by the Office. The application submittal shall include at least all of the information specified under the notification requirements in Section 3D–1110. Applications for asbestos containing material removal permits shall adhere to the following schedule.

(1) Applications for individual asbestos removals shall be postmarked or received by the Office at least 10 working days prior to the scheduled removal start date. For emergency renovation operations involving asbestos removal, the 10 working days notice shall be waived. An application for a permit for the emergency renovation operation shall be postmarked or received by the Office as early as possible before, but not later than, the following working day. Permit applications for emergency renovation operations shall be accompanied by a letter from the owner or his representative explaining the cause of the emergency;

(2) Applications for nonscheduled asbestos removals shall be postmarked or received by the Office at least 10 working days before the start of the calendar year and shall expire on or before the last day of the same calendar year. Reports of the amount of regulated asbestos containing material removed shall be made at least quarterly to the Office.

(c) Application for revision to an issued asbestos removal permit shall be made by the applicant in writing on a form provided by the Office and shall be received by the Office in accordance with the following:

(1) Revision to a start date for a project that will begin after the start date stated in the approved permit shall be received on or before the previously stated start date or previously revised start date;
(2) Revision to a start date for a project that will begin before the start date stated in the approved permit shall be received at least 10 working days before the new start date;
(3) Revision to a completion date that will be extended beyond the completion date stated in the approved permit shall be received by the original or previously revised completion date;
(4) Revision to a completion date that will be earlier than the completion date stated in the approved permit shall be received by the new completion date; and
(5) Revisions to permits other than start or completion dates shall be submitted to the Office prior to initiating the activity which the revision addresses.

(d) The following shall be maintained on site during removal activities and be immediately available for review by the Office:
(1) a copy of the removal permit issued by the Office and all revisions with the Office's confirmation of receipt;
(2) a copy of applicable asbestos abatement design and project monitoring plan; and
(3) photo identification cards issued by the State of North Carolina for all accredited personnel performing asbestos management activities.

(e) All permitted removal activities shall be conducted in accordance with 40 CFR Parts 61 and 763, Subpart E, where applicable.

(f) All permitted removals shall be conducted under the direct supervision of a State of North Carolina accredited supervisor, except that permitted removals of roofing products may be conducted under the direct supervision of a State of North Carolina accredited roofing supervisor. The supervisor or roofing supervisor, as applicable, shall be on-site at all times when removal activities are being performed. For the purpose of this Rule, removal activities for roofing products, means the tear off and disposal activities associated with these products, and does not include the roof replacement.

(g) An asbestos abatement design shall be prepared by a State of North Carolina accredited abatement designer for each individually permitted removal of more than 3000 square feet (281 square meters), 1500 linear feet (462 meters) or 656 cubic feet (18 cubic meters), of regulated asbestos containing materials conducted in public areas.

(h) The Office may suspend or revoke the permit for any violation of any of the rules of this Section. The Office may also revoke the permit upon a finding that its issuance was based upon incorrect or inadequate information that materially affected the decision to issue the permit. Notwithstanding permit suspension or revocation for violation of the rules of this Section, an asbestos removal permit shall also be subject to suspension or revocation if the removal activities are in violation of the following provisions with regard to asbestos abatement, as determined by the agencies which administer these Rules:
(1) Department of Labor rules found at Chapter 7, Title 13 of the North Carolina Administrative Code;

(2) Department of Transportation rules found at Title 19A, of the North Carolina Administrative Code; and

(3) Solid Waste Management rules found at Chapter 19 of County Code of Ordinances.

(i) All waste shipment records shall be submitted to the Office by the building owner or a representative of the owner for all asbestos removal projects permitted under this Rule. This submittal shall be made on a form provided or approved by the Office. This form shall include at least all of the information specified under the waste shipment record in Section 3D–1110.

(j) The following schedule shall be adhered to in the submittal of waste shipment records:

(1) For individually permitted asbestos removals, the waste shipment records shall be postmarked or received by the Office within 45 days from the completion date provided on the permit; and

(2) For nonscheduled asbestos removals, the waste shipment records shall be postmarked or received by the Office within 30 days after the end of each quarter. (Ord. No. 2025-705)

Sec.3-0303. Asbestos Containing Material Removal Permit Fees

The fee required by this Section shall be submitted with an application for the asbestos containing material removal permit. A permit shall not be issued until the required fee is paid. The fees shall be as follows:

(a) Fees for the removal of nonfriable asbestos containing material, including but not limited to, ceiling tiles, floor tiles, cementitious asbestos containing wallboard or panels and asbestos containing roofing material shall be one percent of the contract price or ten cents ($0.10) per square foot, whichever is greater;

(b) Fees for the removal friable asbestos containing material, including but not limited to, surfacing material, thermal system insulation and other asbestos containing materials shall be one percent of the contract price or twenty cents ($0.20) per square or linear foot, whichever is greater; and

(c) If the asbestos is to be removed as part of a demolition, the fee is the greater of Section. 3-0303.(a) or (b), not to exceed one thousand five hundred dollars ($1500). Removal of regulated asbestos containing material from any undemolished portion of a building or structure shall be permitted as an individual asbestos removal. (Ord. No. 2025-705)

FORSYTH COUNTY, NC - AIR QUALITY CONTROL

SECTION 3-0400. FORSYTH COUNTY AIR QUALITY TECHNICAL CODE

Sec. 3-0401. Adopted

The technical standards and regulations relating to air quality control are adopted and published as a technical code which has the force of law in the County. It is entitled "Forsyth County Air Quality Technical Code" and is adopted by reference. This technical ordinance is incorporated herein by reference and published as a separate book or pamphlet. Copies of this published technical Code shall be available for public inspection in the office of the Clerk to the Board, the County Office of Environmental Assistance and Protection, and other offices as provided by law. (Ord. No. 1-84, ' 3, 1-23-84; Ord. No. 9-94, 12-19-94)

FORSYTH COUNTY, NC - AIR QUALITY CONTROL

SUBCHAPTER 3B – REPEALED

FORSYTH COUNTY, NC - AIR QUALITY CONTROL

SUBCHAPTER 3D AIR POLLUTION CONTROL REQUIREMENTS

SECTION 3D-0100. DEFINITIONS AND REFERENCES

Sec. 3D-0101. Definitions

The definition of any word or phrase used in Rules of this Subchapter is the same as given in Article 21, Chapter 143 of the General Statutes of North Carolina, as amended. The following words and phrases, which are not defined in the article, have the following meaning:

(1) "Act" means "The North Carolina Water and Air Resources Act."

(2) “Administrator” means when it appears in any Code of Federal Regulations incorporated by reference in this Subchapter, the Director of the Office of Environmental Assistance and Protection unless:
   (A) a specific rule in this Subchapter specifies otherwise, or
   (B) the U.S. Environmental Protection Agency in its delegation or approval specifically states that a specific authority of the Administrator of the Environmental Protection Agency is not included in its delegation or approval.

(3) "Air pollutant" means an air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive substance or matter emitted into or otherwise entering the ambient air.

(4) "Ambient air" means that portion of the atmosphere outside buildings or other enclosed structures, stacks or ducts, and that surrounds human, animal or plant life, or property.

(5) "Approved" means approved by the Director of the Office of Environmental Assistance and Protection according to these rules..

(6) "Capture system" means the equipment (including hoods, ducts, fans, etc.) used to contain, capture, or transport a pollutant to a control device.

(7) "CFR" means "Code of Federal Regulations."

(8) "Combustible material" means any substance that, when ignited, will burn in air.

(9) "Construction" means change in method of operation or any physical change, including on-site fabrication, erection, installation, replacement, demolition, or modification of a source, that results in a change in emissions or affects the compliance status.

(10) "Control device" means equipment (fume incinerator, adsorber, absorber, scrubber, filter media, cyclone, electrostatic precipitator, or the like) used to destroy or remove air pollutant(s) before discharge to the ambient air.

(11) "Day" means a 24-hour period beginning at midnight.

(12) "Director" means the Director of the Forsyth County Office of Environmental Assistance and Protection unless otherwise specified.

(13) Reserved.

(14) "Dustfall" means particulate matter which settles out of the air and is expressed in units of grams per square meter per 30-day period.

(15) "Emission" means the release or discharge, whether directly or indirectly, of any air pollutant into the ambient air from any source.

(16) "Facility" means all of the pollutant emitting activities, except transportation facilities as defined under Sec. 3D-0802, that are located on one or more adjacent properties under common control.

(17) "FR" means Federal Register.

(18) "Fugitive emission" means those emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

(19) "Fuel burning equipment" means equipment whose primary purpose is the production of energy or power from the combustion of any fuel. The equipment is generally used for, but not limited to, heating water, generating or circulating steam, heating air as in warm air furnace, or furnishing process heat by transferring energy by fluids or through process vessel walls.

(20) "Garbage" means any animal and vegetable waste resulting from the handling, preparation, cooking and serving of food.

(21) "Incinerator" means a device designed to burn solid, liquid, or gaseous waste material.

(21a) “Office” means Forsyth County Office of Environmental Assistance and Protection.

(22) "Opacity" means that property of a substance tending to obscure vision and is measured as percent obscuration.

(23) "Open burning" means any fire whose products of combustion are emitted directly into the outdoor atmosphere without passing through a stack or chimney, approved incinerator, or other similar device.

(24) "Owner or operator" means any person who owns, leases, operates, controls, or supervises a facility, source, or air pollution control equipment.

(25) "Particulate matter" means any material except uncombined water that exists in a finely divided form as a liquid or solid at standard conditions.

(26) "Particulate matter emissions" means all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by methods specified in this Subchapter.

(27) "Permitted" means any source subject to a permit under this Subchapter or Subchapter 3Q.

(28) "Person" means any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, political subdivision, or any other legal entity, or its legal representative, agent or assigns.

(29) "PM10" means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by methods specified in this Subchapter.

(30) "PM10 emissions" means finely divided solid or liquid material, with an aerodynamic diameter less than or equal to a nominal 10 micrometers emitted to the ambient air as measured by methods specified in this Subchapter.

(31) “PM2.5" means particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measured by methods specified in this Subchapter.

(32) "Refuse" means any garbage, rubbish, or trade waste.

(33) "Rubbish" means solid or liquid wastes from residences, commercial establishments, or institutions.

(34) "Rural area" means an area that is primarily devoted to, but not necessarily limited to, the following uses: agriculture, recreation, wildlife management, state park, or any area of natural cover.

(35) "Salvage operation" means any business, trade, or industry engaged in whole or in part in salvaging or reclaiming any product or material, including, but not limited to, metal, chemicals, motor vehicles, shipping containers, or drums.

(36) "Smoke" means small gas-borne particles resulting from incomplete combustion, consisting predominantly of carbon, ash, and other burned or unburned residue of combustible materials that form a visible plume.

(37) "Source" means any stationary article, machine, process equipment, or other contrivance; or any combination; or any tank-truck, trailer, or railroad tank car; from which air pollutants emanate or are emitted, either directly or indirectly.

(38) "Sulfur oxides" means sulfur dioxide, sulfur trioxide, their acids and the salts of their acids. The concentration of sulfur dioxide is measured by the methods specified in this Subchapter.

(39) "Transportation facility" means a complex source as defined in G.S. 143-213(22).

(40) "Total suspended particulate" means any finely divided solid or liquid material, except water in uncombined form, that is or has been airborne as measured by methods specified in this Subchapter.

(41) "Trade wastes" means all solid, liquid, or gaseous waste materials or rubbish resulting from combustion, salvage operations, building operations, or the operation of any business, trade, or industry including, but not limited to, plastic products, paper, wood, glass, metal, paint, grease, oil and other petroleum products, chemicals, and ashes.

(42) "ug" means micrograms. (Ord. No. 9-94, 12-19-94, 11-11-96, 9-14-98, 11-22-04, 5-8-06)

Sec. 3D-0102. Repealed

(12-19-94)

Sec. 3D-0103. Copies of referenced federal regulations

(a) Copies of applicable Code of Federal Regulations sections referred to in this Subchapter are available for public inspection at the Office of Environmental Assistance and Protection located at Forsyth County Government Center, 201 North Chestnut Street, Winston-Salem, NC 27101-4120.

(b) Copies of such Rules can be made at the Office of Environmental Assistance and Protection for ten cents ($0.10) per page. (Ord. No. 9-94, 12-19-94)

Sec. 3D-0104. Incorporation by reference

(a) Anywhere there is a reference to Rules contained in the Code of Federal Regulations (CFR) or to an American Society for Testing and Materials method (ASTM) in this Subchapter, those Rules and methods are incorporated by reference.

(b) The Code of Federal Regulations and American Society for Testing and Materials methods incorporated by reference in this Subchapter shall automatically include any later amendments thereto unless a specific rule specifies otherwise.

(c) The Code of Federal Regulations may be purchased from the Superintendent of Documents, P. O. Box 371954, Pittsburgh, PA 15250. The cost of the referenced documents are as follows:

(1) 40 CFR Parts 1 to 51: fifty dollars ($50.00).
(2) 40 CFR Part 52: thirty-nine dollars ($39.00).
(3) 40 CFR Parts 53 to 59: eleven dollars ($11.00).
(4) 40 CFR Part 60: thirty-six dollars ($36.00).
(5) 40 CFR Parts 61 to 71: thirty-six dollars ($36.00).
(6) 40 CFR Parts 72 to 85: forty-one dollars ($41.00).
(7) 40 CFR Part 86: forty dollars ($40.00).
(8) 40 CFR Parts 87 to 135: five dollars ($5.00)
(9) 40 CFR Parts 260 to 299: forty dollars ($40.00).

These prices are October 15, 1996 prices.

(d) The American Society for Testing and Materials methods may be purchased from the Air Quality Division, PO Box 29580, Raleigh, North Carolina 27626-0580 at a price of twenty cents ($0.20) per page.

(Ord. No. 9-94, 12-19-94; 11-13-95, 9-14-98, 5-24-99)

Sec. 3D-0105. Reserved

(8-14-95)

FORSYTH COUNTY, NC - AIR QUALITY CONTROL

SECTION 3D-0200. AIR POLLUTION SOURCES

Sec. 3D-0201. Classification of air pollution sources

(a) Purpose. This Regulation establishes a system for classifying air pollution sources. The Director shall use this classification system to classify air pollution sources which the Director believes to be of sufficient importance to justify classification or control.

(b) Scope. This Regulation shall apply to all air pollution sources, both combustion and non-combustion. The following system for classifying air pollution sources shall be used:

(1) "Class I-C" includes all sources of air pollution using fuel burning equipment for the production of heat to generate electricity for public use.

(2) "Class II-C" includes all sources of air pollution using fuel burning equipment for the production of steam, and for other process uses at commercial and industrial establishments.

(3) "Class III-C" includes all sources of air pollution using fuel burning equipment for comfort heating at institutional, commercial or industrial establishments, or apartment houses having a central heating system serving more than four apartments.

(4) "Class IV-C" includes all sources of air pollution burning trash, rubbish, refuse, or similar materials in incinerators, teepee burners, or similar devices.

(5) "Class V-C" includes all sources of air pollution using fuel burning equipment for comfort heating that are not included in Class III-C.

(6) "Class VI-C" includes all sources of air pollution using internal combustion engines.

(7) "Class I-I" includes all sources of air pollution resulting from industrial plants engaged in the manufacture of chemicals or allied products whose processes depend on the chemical reaction of two or more elements or compounds and includes plants producing acids, fertilizer materials, dyestuff, synthetic fibers and industrial gases.

(8) "Class II-I" includes all sources of air pollution resulting from industrial plants engaged in the production of pulp and paper.

(9) "Class III-I" includes all sources of air pollution resulting from the mining and processing of minerals, stone, clay and cement products, and includes phosphate ore, mica and feldspar operations, stone quarries and crushers, cement plants, concrete mixing plants, and masonry block plants.

(10) "Class IV-I" includes all sources of air pollution resulting from industrial operations products storage areas.

(11) "Class V-I" includes all sources of air pollution resulting from furniture, lumber, or wood product plants.

(12) "Class VI-I" includes all sources of air pollution resulting from textile manufacturing, textile dyeing or finishing plants.

(13) "Class VII-I" includes all sources of air pollution resulting from the shelling, drying, storage, ginning and processing of tobacco, corn, soybeans, peanuts, cotton, fruits, vegetables, or other agricultural products.

(14) "Class VIII-I" includes all sources of air pollution resulting from industries engaged in the processing of metals, and includes smelting, casting foundries, metal working, and other similar operations.

(15) "Class IX-I" includes all sources of air pollution resulting from slaughtering and processing of meat, poultry, fish, and similar products and from rendering or the recovering of by-products of these operations.

(16) "Class X-I" includes all sources of air pollution resulting from industries which do not fall within the classifications described in Subparagraphs (b) (7) through (b) (15) of this Regulation.

These sources shall be controlled pursuant to the requirements of regulations and other provisions of law. (Ord. No. 9-94, 12-19-94)

Sec. 3D-0202. Registration of air pollution sources

(a) The Director may require the owner or operator of a source of air pollution to register that source.

(b) Any person required to register a source of air pollution with the Office of Environmental Assistance and Protection shall register the source on forms provided by the Office of Environmental Assistance and Protection and shall provide the following information:

(1) the name of the person, company, or corporation operating the sources;
(2) the address, location, and county;
(3) principal officer of the company;
(4) quantities and kinds of raw materials used;
(5) process flow sheets;
(6) operating schedules;
(7) total weights and kinds of air pollution released;
(8) types and quantities of fuels used;
(9) stack heights; and
(10) other information considered essential in evaluating the potential of the source to cause air pollution.

The forms shall be completed and returned to the Office of Environmental Assistance and Protection within 60 days following their receipt. (Ord. No. 9-94, 12-19-94)

FORSYTH COUNTY, NC - AIR QUALITY CONTROL

SECTION 3D-0300. AIR POLLUTION EMERGENCIES

Sec. 3D-0301. Purpose

Notwithstanding any other provisions of air pollution control regulations or standards, this Section is designed to prevent the excessive buildup of air contaminants during air pollution episodes thereby preventing the occurrence of an emergency due to the effects of these contaminants on the public health. (Ord. No. 9-94, 12-19-94)

Sec. 3D-0302. Episode criteria

Conditions justifying the proclamation of an air pollution alert, air pollution warning, or air pollution emergency shall be deemed to exist whenever the Director determines that the accumulation of air contaminants in any place is attaining or has attained levels that could, if such levels are sustained or exceeded, lead to a threat to the health of the public. In making this determination, the Director shall be guided by the following criteria:

(1) Air Pollution Forecast. An internal watch by the N.C. Division of Air Quality and the Office of Environmental Assistance and Protection shall be activated by a National Weather Service advisory that an atmospheric stagnation advisory is in effect, or the equivalent local forecast of stagnant atmospheric conditions.

(2) Alert. The alert level is that concentration of pollutants at which first stage control actions are to begin. The Director shall proclaim an alert when any of the following levels is reached at any monitoring site:

- (A) sulfur dioxide -- 800 ug/m^3 (0.3 p.p.m.), 24-hour average;
- (B) particulate -- 375 ug/m^3, 24-hour average;
- (C) sulfur dioxide and particulate combined -- product of sulfur dioxide ug/m^3, 24-hour average, and particulate ug/m^3, 24-hour average, equal to 65,000;
- (D) carbon monoxide -- 17 mg/m^3 (15 p.p.m.), eight-hour average;
- (E) ozone -- 400 ug/m^3 (0.2 p.p.m.), one-hour average;
- (F) nitrogen dioxide -- 1130 ug/m^3 (0.6 p.p.m.), one-hour average; 282 ug/m^3 (0.15 p.p.m.), 24-hour average;
- (G) PM10--350 ug/m^3, 24-hour average;

and meteorological conditions are such that pollutant concentrations can be expected to remain at these levels for 12 or more hours or increase or, for ozone, the situation is likely to recur within the next 24- hours unless control actions are taken.

(3) Warning. The warning level indicates that air quality is continuing to degrade and that additional abatement actions are necessary. The Director shall proclaim a warning when any one of the following levels is reached at any monitoring site:

- (A) sulfur dioxide -- 1600 ug/m^3(0.6 p.p.m.), 24-hour average;
- (B) particulate -- 625 ug/m^3, 24-hour average;
- (C) sulfur dioxide and particulate combined -- product of sulfur dioxide ug/m^3, 24-hour average, and particulate ug/m^3, 24-hour average, equal to 261,000;
- (D) carbon monoxide -- 34 mg/m^3 (30 p.p.m.), eight-hour average;

(E) ozone -- 800 ug/m^3 (0.4 p.p.m.), one-hour average;
(F) nitrogen dioxide -- 2260 ug/m^3 (1.2 p.p.m.), one-hour average; 565 ug/m^3 (0.3 p.p.m.), 24-hour average;
(G) PM10--420 ug/m^3; 24-hour average;
and meteorological conditions are such that pollutant concentrations can be expected to remain at these levels for 12 or more hours or increase or, for ozone, the situation is likely to recur within the next 24 hours unless control actions are taken.

(4) Emergency. The emergency level indicates that air quality is continuing to degrade to a level that should never be reached and that the most stringent control actions are necessary. The Secretary of the Department of Environment and Natural Resources with the concurrence of the Governor shall declare an emergency when any one of the following levels is reached at any monitoring site:
(A) sulfur dioxide -- 2100 ug/m^3 (0.8 p.p.m.), 24-hour average;
(B) particulate -- 875 ug/m^3, 24-hour average;
(C) sulfur dioxide and particulate combined -- product of sulfur dioxide ug/m^3, 24-hour average, and particulate ug/m^3, 24-hour average, equal to 393,000;
(D) carbon monoxide -- 46 mg/m; (40 p.p.m.), eight-hour average;
(E) ozone -- 1000 ug/m^3 (0.5 p.p.m.), one-hour average;
(F) nitrogen dioxide -- 3000 ug/m^3 (1.6 p.p.m.), one-hour average; 750 ug/m^3 (0.4 p.p.m.), 24-hour average;
(G) PM10--500 ug/m^3, 24-hour average.

(5) Termination. Once declared any level reached by application of these criteria shall remain in effect until the criteria for that level are no longer met. At that time the next lower level shall be assumed. (Ord. No. 9-94, 12-19-94, 9-14-98)

Sec. 3D-0303. Emission reduction plans

(a) Air Pollution Alert. Any person responsible for the operation of a source of air pollution described in Sec. 3D-0305 , shall take all air pollution alert actions required for that source and shall put into effect the preplanned program for an air pollution alert.

(b) Air Pollution Warning. Any person responsible for the operation of a source of air pollution described in Sec. 3D-0306 , shall take all air pollution warning actions required for that source and shall put into effect the preplanned program for an air pollution warning.

(c) Air Pollution Emergency. Any person responsible for the operation of a source of air pollution described in Sec.3D-0307 , shall take all air pollution emergency actions required for that source and shall put into effect the preplanned program for an air pollution emergency. (Ord. No. 9-94, 12-19-94)

Sec. 3D-0304. Preplanned abatement program

(a) Any person who is responsible for the operation of a source of air pollution that is described in Sec. 3D-0305, 0306 or 0307, or that emits 100 tons per year or more of any one pollutant shall prepare a plan to reduce the emissions of air pollutants into the outdoor atmosphere during periods of an air pollution episode. The plan shall be consistent with good industrial practices and safe operating procedures. When the Director requests that the plan be submitted for his review, the owner or operator of the source shall submit the plan within 30 days of the Director's request.

(b) When requested by the Director in writing, any person responsible for the operation of a source not described in Sec. 3D-0305, 0306 or 0307, shall prepare a plan to reduce the emissions of air pollutants into the outdoor atmosphere during periods of air pollution alert, air pollution warning, and air pollution emergency. The plan shall be consistent with good industrial practices and safe operating procedures. (Ord. No. 9-94, 12-19-94)

Sec. 3D-0305. Emission reduction plan: alert level

(a) General

(1) There shall be no open burning by any person of trade waste, vegetation, refuse, or debris in any form.

(2) The use of incinerators for the disposal of any form of solid waste shall be limited to the hours between 12- noon and 4:00 p.m.

(3) Persons operating fuel burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12-noon and 4:00 p.m.

(4) Persons operating motor vehicles should eliminate all unnecessary operations.

(b) Source Curtailment. Any person responsible for the operation of a source of air pollution shall take all required control actions for the alert level that are listed below:

(1) Operators of coal or oil fired electric power generating facilities shall:

(A) use fuels having low ash and sulfur content,

(B) perform boiler lancing and soot blowing between 12-noon and 4:00 p.m., and

(C) divert electric power generation to facilities outside of alert area;

(2) Operators of coal or oil fired process steam generating facilities shall:

(A) use fuels having low ash and sulfur content,

(B) perform boiler lancing and soot blowing between 12-noon and 4:00 p.m., and

(C) reduce steam load demands consistent with continuing plant operation;

(3) Operators of manufacturing industries of the following classifications: primary metals industry; petroleum refining and related industries; chemical and allied products industries; paper and allied products industries; glass, clay, and concrete products industries shall:

(A) reduce air pollutants from manufacturing operations by curtailing, postponing or deferring production and related operations;

(B) defer trade waste disposal operations which emit particles, gases, vapors, or malodorous substances;
(C) reduce heat load demands for processing; and
(D) perform boiler lancing or soot blowing between 12-noon to 4:00 p.m.;

(4) Municipal and commercial refuse disposal operations shall limit burning of refuse in incinerators to hours between 12-noon to 4:00 p.m.;

(5) Other persons requested by the commission to prepare a preplanned abatement plan shall take all required control actions for the alert level contained in their plan. (Ord. No. 9-94, 12-19-94)

Sec. 3D-0306. Emission reduction plan: warning level

(a) General

(1) There shall be no open burning by any person of trade waste, refuse, vegetation, or debris in any form.

(2) The use of incinerators for the disposal of solid waste or liquid waste shall be prohibited.

(3) Persons operating fuel burning equipment which requires boiler lancing or soot blowing shall perform such operations only between 12-noon and 4:00 p.m.

(4) Persons operating motor vehicles should minimize their use through car pools and increased use of public transportation.

(b) Source Curtailment. Any person responsible for the operation of a source of air pollution shall take all required control actions for the warning level that are listed below:

(1) Operators of coal or oil fired electric power generating facilities shall:
(A) use fuels having the lowest ash and sulfur content,
(B) perform boiler lancing and soot blowing between 12-noon to 4:00 p.m., and
(C) divert electric power generating to facilities outside of warning area;

(2) Operators of coal or oil fired process steam generating facilities shall:
(A) use fuels having the lowest ash and sulfur content,
(B) perform boiler lancing and soot blowing between 12-noon to 4:00 p.m.,
(C) reduce steam load demands consistent with continuing plant operations, and
(D) prepare to use the plan of action to be taken if an emergency develops;

(3) Operators of manufacturing industries of the following classifications: primary metal industries; petroleum refining and related industries; chemical and allied products industries; paper and allied products industries; glass, clay and concrete products industries shall:
(A) reduce air pollutants from manufacturing operations by, if necessary, assuming reasonable economic hardship by postponing production and related operations;
(B) defer trade waste disposal operations which emit particles, gases, vapors, or malodorous substances;

(C) reduce heat load demands for processing consistent with continuing plant operations; and

(D) perform boiler lancing or soot blowing between 12- noon to 4:00 p.m.;

(4) Municipal and commercial refuse disposal operations shall stop incinerating waste;

(5) Other persons requested by the commission to prepare a preplanned abatement plan shall take all required control actions for the warning level contained in their plan. (Ord. No. 9-94, 12-19-94)

Sec. 3D-0307. Emission reduction plan: emergency level

(a) General

(1) There shall be no open burning by any person of trade waste, vegetation, refuse, or debris in any form.

(2) The use of incinerators for the disposal of any form of solid or liquid waste shall be prohibited.

(3) All places of employment described below shall immediately cease operations:

(A) mining and quarrying of nonmetallic minerals;

(B) all manufacturing establishments except those required to have in force an air pollution emergency plan;

(C) all construction work involving grading or other operations which generate dust;

(D) all wholesale and retail establishments except pharmacies and stores primarily engaged in the sale of food;

(E) all commercial and manufacturing establishments, automobile repair services and garages, laundries, barbershops, beauty shops and motion picture theaters; and

(F) elementary and secondary schools, colleges, universities and professional schools.

(4) The use of motor vehicles is prohibited except in emergencies with the approval of local or state police.

(b) Source Curtailment. Any person responsible for the operation of a source of air pollution shall take all required control actions for the emergency level that are listed below:

(1) Operators of coal or oil fired electric power generating facilities shall:

(A) use fuels having lowest ash and sulfur content,

(B) perform boiler lancing or soot blowing between 12-noon to 4:00 p.m.,

(C) divert electric power generating to facilities outside of emergency area;

(2) Operators of coal or oil fired process steam generating facilities shall:

(A) reduce heat and steam demands to that absolutely necessary to prevent equipment damage,

(B) perform boiler lancing and soot blowing between 12-noon and 4:00 p.m.,

(C) take the action called for in the abatement plan;

(3) Operators of manufacturing industries of the following classifications: primary metals industries; petroleum refining and related industries; chemical and allied products industries; paper and allied products industries; glass, clay and concrete products industries shall:

(A) eliminate air pollutants from manufacturing operations by ceasing, curtailing, postponing or deferring production and related operations to the extent possible without causing injury to persons or damage to equipment;

(B) eliminate air pollution from trade waste disposal processes which emit particles, gases, vapors, or malodorous substances;

(C) reduce heat load demands for processing to the minimum;

(D) perform boiler lancing or soot blowing between 12-noon to 4:00 p.m.;

(4) Municipal and commercial refuse disposal operations shall stop incinerating waste;

(5) Other persons requested by the commission to prepare a preplanned abatement plan shall take all required control actions for the emergency level contained in their plan. (Ord. No. 9-94, 12-19-94)

FORSYTH COUNTY, NC - AIR QUALITY CONTROL

SECTION 3D-0400. AMBIENT AIR QUALITY STANDARDS

Sec. 3D-0401. Purpose

(a) The purpose of the ambient air quality standards set out in this Section is to establish certain maximum limits on parameters of air quality considered desirable for the preservation and enhancement of the quality of the state's air resources. Furthermore, the objective of the Forsyth County Board of Commissioners, consistent with the North Carolina Air Pollution Control Law, shall be to prevent significant deterioration in ambient air quality in any substantial portion of the state where existing air quality is better than the standards. An atmosphere in which these standards are not exceeded should provide for the protection of the public health, plant and animal life, and property.

(b) Ground level concentrations of pollutants will be determined by sampling at fixed locations in areas beyond the premises on which a source is located. The standards are applicable at each such sampling location in the state.

(c) No facility or source of air pollution shall cause any ambient air quality standard in this Section to be exceeded or contribute to a violation of any ambient air quality standard in this Section except as allowed by Sec. 3D-0531 or 0532. (Ord. No. 9-94, 12-19-94)

Sec. 3D-0402. Sulfur oxides

(a) The ambient air quality standards for sulfur oxides measured as sulfur dioxide are:

(1) 80 micrograms per cubic meter (0.03 ppm) annual arithmetic mean,

(2) 365 micrograms per cubic meter (0.14 ppm) maximum 24-hour concentration not to be exceeded more than once per year,

(3) 1300 micrograms per cubic meter (0.5 ppm) maximum three-hour concentration not to be exceeded more than once per year.

(b) Sampling and analysis shall be in accordance with procedures in Appendix A or A-1 40 CFR Part 50 or by a Federal Equivalent Method (FEM) designated in accordance with 40 CFR Part 53.

(c) Applicability of the standards listed in Paragraph (a)(1) and (2) of this rule is in effect until one year after the effective date of initial designations under Section 107(d) of the Clean Air Act for the sulfur dioxide standard in Paragraph (d) of this Rule.

(d) The primary one-hour annual ambient air quality standard for oxides of sulfur is 75 parts per billion (ppb, which is 1 part in 1,000,000,000), measured in the ambient air as sulfur dioxide.

(e) The one-hour primary standard is met at an ambient air quality monitoring site when the three-year average of the annual (99th percentile) of the daily maximum one-hour average concentrations is less than or equal to 75 ppb, as determined in accordance with Appendix T of 40 CFR Part 50.

(Ord. No. 9-94, 12-19-94)

Sec. 3D-0403. Total suspended particulates

(a) The ambient air quality standards for total suspended particulate matter are:

(1) 75 micrograms per cubic meter annual geometric mean,

(2) 150 micrograms per cubic meter maximum 24-hour concentration not to be exceeded more than once per year.

(b) Sampling and analysis shall be in accordance with procedures in Appendix B of 40 CFR Part 50 or equivalent methods established under 40 CFR Part 53. (Ord. No. 9-94, 12-19-94)

Sec. 3D-0404. Carbon Monoxide

(a) The ambient air quality standards for carbon monoxide are:

(1) 9 parts per million (10 milligrams per cubic meter) maximum eight-hour average concentration not to be exceeded more than once per year,

(2) 35 parts per million (40 milligrams per cubic meter) maximum one-hour average concentration not to be exceeded more than once per year.

(b) Sampling and analysis shall be in accordance with procedures in Appendix C 40 CFR Part 50 or equivalent methods established under 40 CFR Part 53.

(c) An eight-hour average shall be considered valid if at least 75 percent of the hourly averages for the eight-hour period are available. In the event that only six or seven hourly averages are available, the eight-hour average shall be computed on the basis of the hours available using six or seven as the divisor.

(d) When summarizing data for comparison with the standards, averages shall be stated to one decimal place. Comparison of the data with the levels of the standards in parts per million shall be made in terms of integers with fractional parts of 0.5 or greater rounding up. (Ord. No. 9-94, 12-19-94)

Sec. 3D-0405. Ozone

The ambient air quality standard for ozone measured by a reference method based on Appendix D of 40 CFR Part 50 and designated according to 40 CFR Part 53 is 0.075 parts per million (ppm), daily maximum 8-hour average. The standard is attained at an ambient air quality monitoring site when the average of the fourth-highest daily maximum 8-hour average ozone concentration is less than or equal to 0.075 parts per million (ppm) as determined by Appendix P of 40 CFR Part 50 or equivalent methods established under 40 CFR Part 53. (Ord. No. 9-94, 12-19-94, 5-24-99)

Sec. 3D-0406. Hydrocarbons – REPEALED

(12-19-94)

Sec. 3D-0407. Nitrogen Dioxide

(a) The primary ambient air quality standard for oxides of nitrogen is 53 parts per billion annual average concentration measured in the ambient air as nitrogen dioxide.

(b) The primary one hour ambient air quality standard for oxides of nitrogen is 100 parts per billion one hour annual average concentration measured in the ambient air as nitrogen dioxide.

(c) The secondary ambient air quality standard for nitrogen dioxide is 0.053 parts per million (100 micrograms per cubic meter) annual arithmetic mean concentration.

(d) Sampling and analysis shall be in accordance with:

(1) procedures in Appendix F 40 CFR Part 50;

(2) by a Federal Equivalent Method (FEM) designated in accordance with 40 CFR 53.

(e) The annual primary standard is attained when the annual average concentration in a calendar year is less than or equal to 53 parts per billion, as determined in accordance with Appendix S of 40 CFR Part 50 for the annual standard.

(f) The one hour primary standard is attained when the three-year average of the annual 98th percentile of the daily maximum one-hour average concentration is less than or equal to 100 ppb, as determined in accordance with Appendix S of 40 CFR Part 50 for one hour standard.

(g) The secondary standard is attained when the annual arithmetic mean concentration in a calendar year is less than or equal to 0.053 parts per million, rounded to three decimal places (fractional parts equal to or greater than 0.0005 parts per million are rounded up). To demonstrate attainment, an annual mean must be based on hourly data that are at least 75 percent complete or on data derived from manual methods that are at least 75 percent complete for the scheduled sampling days in each calendar quarter. (Ord. No. 9-94, 12-19-94)

Sec. 3D-0408. Lead

The ambient air quality standard for lead and its compounds, measured as elemental lead by a reference method based on Appendix G of 40 CFR Part 50 or by an equivalent method established under 40 CFR Part 53, is 0.15 micrograms per cubic meter. The Standard is met when the maximum arithmetic three month mean concentration for a three year period, as determined in accordance with Appendix R of 40 CFR Part 50, is less than or equal to 0.15 micrograms per cubic meter. (Ord. No. 9-94, 12-19-94)

Sec. 3D-0409. PM10 particulate matter

(a) The ambient air quality standard for PM10 particulate matter is 150 micrograms per cubic meter (ug/m^3), 24-hour average concentration. This standard is attained when 150 ug/m^3, as determined according to Appendix N of 40 CFR Part 50 is not exceeded more than once per year on average over a three-year period.

(b) For the purpose of determining attainment of the standards in Paragraph (a) of this Rule, particulate matter shall be measured in the ambient air as PM10 (particles with an aerodynamic diameter less than or equal to a nominal 10 micrometers) by either:

(1) a reference method based on Appendix M of 40 CFR Part 50 and designated according to 40 CFR Part 53; or

(2) an equivalent method designated according to 40 CFR Part 53. (Ord. No. 9-94, 12-19-94, 5-24-99)

Sec. 3D-0410. PM2.5 particulate matter

(a) The national primary ambient air quality standards for PM2.5 are 12.0 micrograms per cubic meter (µg/m3) annual arithmetic mean concentration and 35 µg/m3 24-hour average Concentration measured in the ambient air as PM2.5 (particles with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers) by either:

(1) A reference method based on appendix L to 40 C.F.R. Part 50 and designated in accordance with 40 C.F.R. Part 53; or

(2) An equivalent method designated in accordance with 40 C.F.R. Part 53.

(b) The primary annual PM2.5 standard is met when the annual arithmetic mean concentration, as determined in accordance with appendix N of 40 C.F.R. Part 50, is less than or equal to 12.0 µg/m3.

(c) The primary 24-hour PM2.5 standard is met when the 98th percentile 24-hour concentration, as determined in accordance with appendix N of 40 C.F.R. Part 50, is less than or equal to 35 µg/m3.

SECTION 3D-0500. EMISSION CONTROL STANDARDS

Sec. 3D-0501. Compliance with emission control standards

(a) Purpose and Scope. The purpose of this Rule is to assure orderly compliance with emission control standards found in this Section. This Rule shall apply to all air pollution sources, both combustion and non-combustion.

(b) All new sources shall be in compliance prior to beginning operations.

(c) In addition to any control or manner of operation necessary to meet emission standards in this Section, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards of Section 3D-0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this Section are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

(d) The Bubble Concept. A facility with multiple emission sources or multiple facilities within the same area may choose to meet the total emission limitation for a given pollutant through a different mix of controls than that required by the Rules in this Section or Section 3D-0900.

(1) In order for this mix of alternative controls to be permitted the Director shall determine that the following conditions are met:

(A) Sources to which Sec. 3D-0524, 0530, 0531, 1110 or 1111, the federal New Source Performance Standards (NSPS), the federal National Emission Standards for Hazardous Air Pollutants (NESHAP), regulations established pursuant to Section 111 (d) of the federal Clean Air Act, or state or federal Prevention of Significant Deterioration (PSD) requirements apply, shall have emissions no larger than if there were not an alternative mix of controls;

(B) The facility (or facilities) is located in an attainment area or an unclassified area or in an area that has been demonstrated to be attainment by the statutory deadlines (with reasonable further progress toward attainment) for those pollutants being considered;

(C) All of the emission sources affected by the alternative mix are in compliance with applicable regulations or are in compliance with established compliance agreements; and

(D) The review of an application for the proposed mix of alternative controls and the enforcement of any resulting permit will not require expenditures on the part of the County in excess of five times that which would otherwise be required.

(2) The owner(s) or operator(s) of the facility (facilities) shall demonstrate to the satisfaction of the Director that the alternative mix of controls is equivalent in total allowed emissions, reliability, enforceability, and environmental impact to the aggregate of the otherwise applicable individual emission standards; and

(A) that the alternative mix approach does not interfere with attainment and maintenance of ambient air quality standards and does not interfere with the

PSD program; this demonstration shall include modeled calculations of the amount, if any, of PSD increment consumed or created;

(B) that the alternative mix approach conforms with reasonable further progress requirements in any non-attainment area;

(C) that the emissions under the alternative mix approach are in fact quantifiable, and trades among them are even;

(D) that the pollutants controlled under the alternative mix approach are of the same criteria pollutant categories, except that emissions of some criteria pollutants used in alternative emission control strategies are subject to the limitations as defined in 44 FR 71784 (December 11, 1979), Subdivision D.1.c.ii. The Federal Register referenced in this Part is hereby incorporated by reference and does not include subsequent amendments or editions.

The demonstrations of equivalence shall be performed with at least the same level of detail as The North Carolina State Implementation Plan for Air Quality demonstration of attainment for the area in question. Moreover, if the facility involves another facility in the alternative strategy, it shall complete a modeling demonstration to ensure that air quality is protected. Demonstrations of equivalency shall also take into account differences in the level of reliability of the control measures or other uncertainties.

(3) The emission rate limitations or control techniques of each source within the facility (facilities) subjected to the alternative mix of controls shall be specified in the facility's (facilities') permits(s).

(4) Compliance schedules and enforcement actions shall not be affected because an application for an alternative mix of controls is being prepared or is being reviewed.

(5) The Director may waive or reduce requirements in this Paragraph up to the extent allowed by the Emissions Trading Policy Statement published in the Federal Register of April 7, 1982, pages 15076-15086, provided that the analysis required by Paragraph (e) of this Rule supports any waiver or reduction of requirements. The Federal Register referenced in this Paragraph is hereby incorporated by reference and does not include subsequent amendments or editions.

(e) In a permit application for an alternative mix of controls under Paragraph (d) of this Rule, the owner or operator of the facility shall demonstrate to the satisfaction of the Director that the proposal is equivalent to the existing requirements of the SIP in total allowed emissions, enforceability, reliability, and environmental impact. The Director shall provide for public notice with an opportunity for a request for public hearing following the procedures under Forsyth County Code, Section 3Q-0300 or 0500, as applicable.

(1) If and when a permit containing these conditions is issued under Section 3Q-0300 (non-Title V permits), it shall become a part of the state implementation plan (SIP) as an appendix available for inspection at the Office of Environmental Assistance and Protection. Until the U.S. Environmental Protection Agency (EPA) approves the SIP

revision embodying the permit containing an alternative mix of controls, the facility shall continue to meet the otherwise applicable existing SIP requirements.

(2) If and when a permit containing these conditions is issued under Section 3Q-0500 (Title V permits), it shall be available for inspection at the Office. Until the EPA approves the Title V permit containing an alternative mix of controls, the facility shall continue to meet the otherwise applicable existing SIP requirements.

The revision shall be approved by EPA on the basis of the revision's consistency with EPA's "Policy for Alternative Emission Reduction Options Within State Implementation Plans" as promulgated in the Federal Register of December 11, 1989, pages 71780-71788, and subsequent rulings.

(f) If owner or operator of any combustion and non-combustion source or control equipment subject to the requirements of this Section is required to demonstrate compliance with a rule in this Section, the source testing procedures of Section 3D-2600 shall be used. (Ord. No. 9-94, 12-19-94; 8-14-95, 11-11-96, 7-28-97, 5-24-99, 5-14-01)

Sec. 3D-0502. Purpose

The purpose of the emission control standards set out in this Section is to establish maximum limits on the rate of emission of air contaminants into the atmosphere. All sources shall be provided with the maximum feasible control. (Ord. No. 9-94, 12-19-94)

Sec. 3D-0503. Particulates from fuel burning indirect heat exchangers

(a) For the purpose of this Rule the following definitions shall apply:

(1) "Functionally dependent" means that structures, buildings or equipment are interconnected through common process streams, supply lines, flues, or stacks.

(2) "Indirect heat exchanger" means any equipment used for the alteration of the temperature of one fluid by the use of another fluid in which the two fluids are separated by an impervious surface such that there is no mixing of the two fluids.

(3) "Plant site" means any single or collection of structures, buildings, facilities, equipment, installations, or operations which:

(A) are located on one or more adjacent properties,

(B) are under common legal control, and

(C) are functionally dependent in their operations.

(b) The definition contained in Subparagraph (a)(3) of this Rule does not affect the calculation of the allowable emission rate of any indirect heat exchanger permitted prior to April 1, 1999.

(c) With the exceptions in Sec. 3D-0536, emissions of particulate matter from the combustion of a fuel that are discharged from any stack or chimney into the atmosphere shall not exceed:

Maximum Heat Input In Million Btu/Hour	Allowable Emission Limit For Particulate Matter In Lb/Million Btu
Up to and Including 10	0.60
100	0.33
1,000	0.18
10,000 and Greater	0.10

For a heat input between any two consecutive heat inputs stated in the preceding table, the allowable emissions of particulate matter shall be calculated by the equation E=1.090 times Q to the -0.2594 power. E=allowable emission limit for particulate matter in lb/million Btu. Q=maximum heat input in million Btu/hour.

(d) This Rule applies to installations in which fuel is burned for the purpose of producing heat or power by indirect heat transfer. Fuels include those such as coal, coke, lignite, peat, natural gas, and fuel oils, but exclude wood and refuse not burned as a fuel. When any refuse, products, or by-products of a manufacturing process are burned as a fuel rather than refuse, or in conjunction with any fuel, this allowable emission limit shall apply.

(e) For the purpose of this Rule, the maximum heat input shall be the total heat content of all fuels which are burned in a fuel burning indirect heat exchanger, of which the combustion products are emitted through a stack or stacks. The sum of maximum heat input of all fuel burning indirect heat exchangers at a plant site which are in operation, under construction, or permitted pursuant to Forsyth County Code, Subchapter 3Q, shall be considered as the total heat input for the purpose of determining the allowable emission limit for particulate matter for each fuel burning indirect heat exchanger. Fuel burning indirect heat exchangers constructed or permitted after February 1, 1983, shall not change the allowable emission limit of any fuel burning indirect heat exchanger whose allowable emission limit has previously been set. The removal of a fuel burning indirect heat exchanger shall not change the allowable emission limit of any fuel burning indirect heat exchanger whose allowable emission limit has previously been established. However, for any fuel burning indirect heat exchanger constructed after, or in conjunction with, the removal of another fuel burning indirect heat exchanger at the plant site, the maximum heat input of the removed fuel burning indirect heat exchanger shall no longer be considered in the determination of the allowable emission limit of any fuel burning indirect heat exchanger constructed after or in conjunction with the removal. For the purposes of this Paragraph, refuse not burned as a fuel and wood shall not be considered a fuel. For residential facilities or institutions (such as military and educational) whose primary fuel burning capacity is for comfort heat, only those fuel burning indirect heat exchangers located in the same power plant or building or otherwise physically interconnected (such as common flues, steam, or power distribution line) shall be used to determine the total heat input.

(f) The emission limit for fuel burning equipment that burns both wood and other fuels in combination, or for wood and other fuel burning equipment that is operated such that emissions are measured on a combined basis, shall be calculated by the equation Ec = [(EW) (Qw) + (Eo) (Qo)] /Qt.

(1) Ec = the emission limit for combination or combined emission source(s) in lb/million Btu.

(2) Ew = plant site emission limit for wood only as determined by Sec. 3D-0504 of this Section in lb/million Btu.

(3) Eo = the plant site emission limit for other fuels only as determined by Paragraphs (a), (b) and (c) of this Rule in lb/million Btu.

(4) Qw = the actual wood heat input to the combination or combined emission source(s) in Btu/hr.

(5) Qo = the actual other fuels heat input to the combination or combined emission source(s) in Btu/hr.

(6) Qt = Qw + Qo and is the actual total heat input to combination or combined emission source(s) in Btu/hr. (Ord. No. 9-94, 12-19-94, 5-24-99)

Sec. 3D-0504. Particulates from wood burning indirect heat exchangers

(a) For the purpose of this Rule the following definitions shall apply:

(1) “Functionally dependent” means that structures, buildings or equipment are interconnected through common process streams, supply lines, flues, or stacks.

(2) "Indirect heat exchanger" means any equipment used for the alteration of the temperature of one fluid by the use of another fluid in which the two fluids are separated by an impervious surface such that there is no mixing of the two fluids.

(3) “Plant site” means any single or collection of structures, buildings, facilities, equipment, installations, or operations which:

(A) are located on one or more adjacent properties,

(B) are under common legal control, and

(C) are functionally dependent in their operations.

(b) The definition contained in Subparagraph (a)(3) of this Rule does not affect the calculation of the allowable emission rate of any indirect heat exchanger permitted prior to April 1, 1999.

(c) Emissions of particulate matter from the combustion of wood shall not exceed:

Maximum Heat Input In Million Btu/Hour	Allowable Emission Limit For Particulate Matter In Lb/Million Btu
Up to and Including 10	0.70
100	0.41
1,000	0.25
10,000 and Greater	0.15

For a heat input between any two consecutive heat inputs stated in the preceding table, the allowable emissions of particulate matter shall be calculated by the equation E = 1.1698 (Q to the -0.2230 power). E=allowable emission limit for particulate matter in lb/million Btu. Q=Maximum heat input in million Btu/hour.

(d) This Rule applies to installations in which wood is burned for the primary purpose of producing heat or power by indirect heat transfer.

(e) For the purpose of this Rule, the heat content of wood shall be 8,000 Btu per pound (dry-weight basis). The total of maximum heat inputs of all wood burning indirect heat exchangers at a plant site in operation, under construction, or with a permit shall be used to determine the allowable emission limit of a wood burning indirect heat exchanger. Wood burning indirect heat exchangers constructed or permitted after February 1, 1983, shall not change the allowable emission limit of any wood burning indirect heat exchanger whose allowable emission limit has previously been set.

(f) The emission limit for fuel burning equipment that burns both wood and other fuels in combination or for wood and other fuel burning equipment that is operated such that emissions are measured on a combination basis shall be calculated by the procedure described in Paragraph (f) of Sec. 3D-0503. (Ord. No. 9-94, 12-19-94, 5-24-99, 7-22-02)

Sec. 3D-0505. Repealed

(12-19-94)

Sec. 3D-0506. Particulates from hot mix asphalt plants

(a) The allowable emission rate for particulate matter resulting from the operation of a hot mix asphalt plant that are discharged from any stack or chimney into the atmosphere shall not exceed the level calculated with the equation $E = 4.9445(P)^{0.4376}$ calculated to three significant figures, for process rates less than 300 tons per hour where "E" equals the maximum allowable emission rate for particulate matter in pounds per hour and "P" equals the maximum process rate in tons per hour. The allowable emission rate shall be 60.0 pounds per hour for process rates equal to or greater than 300 tons per hour.

(b) Visible emissions from stacks or vents at a hot mix asphalt plant shall be less than 20 percent opacity when averaged over a six-minute period.

(c) All hot mix asphalt batch plants shall be equipped with a scavenger process dust control system for the drying, conveying, classifying, and mixing equipment. The scavenger process dust control system shall exhaust through a stack or vent and shall be operated and maintained in such a manner as to comply with Paragraph (a) and (b) of this Rule.

(d) Fugitive non-process dust emissions shall be controlled by Sec. 3D-0540.

(e) Fugitive emissions for sources at a hot mix asphalt plant not covered elsewhere under this Rule shall not exceed 20 percent opacity averaged over six minutes.

(f) Any asphalt batch plant that was subject to the 40-percent opacity standard before August 1, 2004 shall be in compliance with the 20-percent opacity standard by January 1, 2005. (Ord. No. 9-94, 12-19-94, 9-14-98, 11-22-04)

Sec. 3D-0507. Particulates from chemical fertilizer manufacturing plants

(a) The allowable emissions rate for particulate matter resulting from the manufacture, mixing, handling, or other operations in the production of chemical fertilizer materials that are discharged from any stack or chimney into the atmosphere shall not exceed the level calculated with the equation $E = 9.377(P)^{0.3067}$ calculated to three significant figures, where "E" equals the maximum allowable emission rate for particulate matter in pounds per hour and "P" equals the process rate (the sum of the production rate and the recycle rate) in tons per hour. (Ord. No. 9-94, 12-19-94, 9-14-98, 07-28-03)

Sec. 3D-0508. Particulates from pulp and paper mills

(a) Emissions of particulate matter from the production of pulp and paper that are discharged from any stack or chimney into the atmosphere shall not exceed:

(1) 3.0 pounds per equivalent ton of air dried pulp from a recovery furnace stack;

(2) 0.6 pounds per equivalent ton of air dried pulp from a dissolving tank vent; and

(3) 0.5 pounds per equivalent ton of air dried pulp from a lime kiln stack.

(b) Emissions from any kraft pulp recovery boiler established after July 1, 1971, shall not exceed an opacity of 35 percent when averaged over a six-minute period. However, six-minute averaging periods may exceed 35 percent opacity if:

(1) no six-minute period exceeds 89 percent opacity;

(2) no more than one six-minute period exceeds 35 percent opacity in any one hour; and

(3) no more than four six-minute periods exceed 35 percent opacity in any 24-hour period.

Where the presence of uncombined water vapor is the only reason for failure to meet this opacity limitation, this opacity limitation shall not apply. (Ord. No. 9-94, 12-19-94, 9-14-98)

Sec. 3D-0509. Particulates from mica or feldspar processing plants

(a) The allowable emission rate for particulate matter resulting from the processing of mica or feldspar that are discharged from any chimney, stack, vent, or outlet into the atmosphere shall not exceed the level calculated with the equation $E = 4(P)^{0.677}$ calculated to three significant figures for process rates

less than or equal to 30 tons per hour. For process rates greater than 30 tons per hour but less than 1,000 tons per hour, the allowable emission rate for particulate matter shall not exceed the level calculated with the equation $E = 20.421(P)^{0.1977}$ calculated to three significant figures. For process rates greater than or equal to 1,000 tons per hour but less than 3,000 tons per hour, the allowable emission rate for particulate matter shall not exceed the level calculated with the equation $E = 38.147(P)^{0.1072}$ calculated to three significant figures. The allowable emission rate shall be 90.0 pounds per hour for process weight rates equal to or greater than 3,000 tons per hour. For the purpose of these equations, "E" equals the maximum allowable emission rate for particulate matter in pounds per hour and "P" equals the process weight rate in tons per hour.

(b) Fugitive non-process dust emissions shall be controlled by Sec. 3D-0540.

(c) The owner or operator of any mica or feldspar plant shall control process-generated emissions:

(1) from crushers with wet suppression, and

(2) from conveyors, screens, and transfer points,

such that the applicable opacity standards in Sec. 3D-0521 or 0524 are not exceeded. (Ord. No. 9-94, 12-19-94, 9-14-98, 7-28-03)

Sec. 3D-0510. Particulates from sand, gravel, or crushed stone operations

(a) The owner or operator of a sand, gravel, or crushed stone operation shall not cause, allow, or permit any material to be produced, handled, transported or stockpiled without taking measures to reduce to a minimum any particulate matter from becoming airborne to prevent exceeding the ambient air quality standards beyond the property line for particulate matter, both PM10 and total suspended particulates.

(b) Fugitive non-process dust emissions from sand, gravel, or crushed stone operations shall be controlled by Sec. 3D-0540.

(c) The owner or operator of any sand, gravel, or crushed stone operation shall control process-generated emissions:

(1) from crushers with wet suppression, and

(2) from conveyors, screens, and transfer points,

such that the applicable opacity standards in Sec. 3D-0521 or 0524 are not exceeded. (Ord. No. 9-94, 12-19-94, 9-14-98)

Sec. 3D-0511. Particulates from lightweight aggregate processes

(a) The owner or operator of a lightweight aggregate process shall not cause, allow, or permit any material to be produced, handled, transported or stockpiled without taking measures to reduce to a minimum any particulate matter from becoming airborne to prevent the ambient air quality standards for particulate matter, both PM10 and total suspended particulates, from being exceeded beyond the property line.

(b) Fugitive non-process dust emissions from lightweight aggregate processes subject to this Rule shall be controlled by Sec. 3D-0540.

(c) The owner or operator of any lightweight aggregate process shall control process-generated emissions:

(1) from crushers with wet suppression, and

(2) from conveyors, screens, and transfer points,

such that the applicable opacity standards in Sec. 3D-0521 or 0524 are not exceeded.

(d) Particulate matter from any stack serving any lightweight aggregate kiln or lightweight aggregate dryer shall be reduced by at least 95 percent by weight before being discharged to the atmosphere. The 95-percent reduction shall be by air pollution control devices. (Ord. No. 9-94, 12-19-94, 9-14-98)

Sec. 3D-0512. Particulates from wood products finishing plants

A person shall not cause, allow, or permit particulate matter caused by the working, sanding, or finishing of wood to be discharged from any stack, vent, or building into the atmosphere without providing, as a minimum for its collection, adequate duct work and properly designed collectors, or such other devices as approved by the Director, and in no case shall the ambient air quality standards be exceeded beyond the property line. Collection efficiency shall be determined on the basis of weight. (Ord. No. 9-94, 12-19-94, 7-28-97, 9-14-98)

Sec. 3D-0513. Particulates from portland cement plants

(a) Particulate matter from any Portland cement kiln shall:

(1) be reduced by at least 99.7 percent by weight before being discharged to the atmosphere; the 99.7-percent reduction shall be by air pollution control devices; and

(2) shall not exceed 0.327 pounds per barrel.

(b) The emissions of particulate matter from any stacks, vent or outlets from all processes except Portland cement kilns shall be controlled by Sec. 3D-0515. (Ord. No. 9-94, 12-19-94, 9-14-98)

Sec. 3D-0514. Particulates from ferrous jobbing foundries

Particulate emissions from any ferrous jobbing foundry cupola existing before January 2, 1972 shall not exceed:

Process Weight In Lb/Hour	Maximum Allowable Emission Rate For Particulate In Lb/Hour
1,000	3.05
2,000	4.70

3,000	6.35
4,000	8.00
5,000	9.65
6,000	11.30
7,000	12.90
8,000	14.30
9,000	15.50
10,000	16.65
12,000	18.70
16,000	21.60
18,000	23.40
20,000	25.10

Any foundry existing before January 2, 1972, having a capacity greater than shown in the table and any new foundry, regardless of size, shall comply with the emission limits specified in paragraph (a) of Sec. 3D-0515. (Ord. No. 9-94, 12-19-94, 9-14-98)

Sec. 3D-0515. Particulates from miscellaneous industrial processes

(a) The allowable emission rates for particulate matter from any stack, vent, or outlet of any industrial process for which no other emission control standards are applicable shall not exceed the level calculated with the equation $E = 4.10(P)^{0.67}$ calculated to three significant figures for process rates less than or equal to 30 tons per hour. For process rates greater than 30 tons per hour, the allowable emission rates for particulate matter shall not exceed the level calculated with the equation $E = 55.0(P)^{0.11} - 40$ calculated to three significant figures. For the purpose of these equations "E" equals the maximum allowable emission rate for particulate matter in pounds per hour and "P" equals the process rate in tons per hour.

(b) Process rate means the total weight of all materials introduced into any specific process that may cause any emission of particulate matter. Solid fuels charged are considered as part of the process weight, but liquid and gaseous fuels and combustion air are not. For a cyclical or batch operation, the process rate is derived by dividing the total process weight by the number of hours in one complete operation from the beginning of any given process to the completion thereof, excluding any time during which the equipment is idle. For a continuous operation, the process rate is derived by dividing the process weight for a typical period of time by the number of hours in that typical period of time. (Ord. No. 9-94, 12-19-94, 9-14-98, 7-28-03)

Sec. 3D-0516. Sulfur dioxide emissions from combustion sources

(a) Emission of sulfur dioxide from any source of combustion, including air pollution control devices, that is discharged from any vent, stack, chimney,or flare shall not exceed 2.3 pounds of sulfur dioxide per million Btu input.

(b) When determining compliance with this standard:

(1) the sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included;

(2) the sulfur dioxide formed or reduced as a result of treating flue gases with sulfur trioxide or other materials shall also be accounted for in the determination of emissions; and

(3) the determination of Btu input shall not include the contribution from any portion of fuels used exclusively to inflate the heat input value used to demonstrate compliance with the emission standard in Paragraph (a) of this Rule.

(c) The standard set forth in paragraph (a) of this rule shall not apply to sulfur dioxide emissions sources subject to an emission standard for sulfur dioxide in Sec. 3D-0524, 0527, 1110, 1111, 1205, 1206 or 1210.

Sec. 3D-0517. Emissions from plants producing sulfuric acid

Emissions of sulfur dioxide or sulfuric acid mist from the manufacture of sulfuric acid shall not exceed:

(1) 27 pounds of sulfur dioxide per ton of sulfuric acid produced;

(2) 0.5 pounds of acid mist (expressed as sulfuric acid) per ton of sulfuric acid produced.

(Ord. No. 9-94, 12-19-94)

Sec. 3D-0518. Repealed

(Ord. No. 9-94, 12-19-94; 8-14-95, 11-11-96, 7-28-97, 7-24-00)

Sec. 3D-0519. Control of nitrogen dioxide and nitrogen oxides emissions

(a) The emissions of nitrogen dioxide shall not exceed 5.8 pounds per ton of acid produced from any sulfuric acid manufacturing plant.

(b) The emissions of nitrogen oxides shall not exceed:

(1) 0.8 pounds per million Btu of heat input from any oil or gas-fired boiler with a capacity of 250 million Btu per hour or more,

(2) 1.8 pounds per million Btu of heat input from any coal-fired boiler with a capacity of 250 million Btu per hour or more.

(c) The emission limit for a boiler that burns both coal and oil or gas in combination shall be calculated by the equation $E = [(Ec)(Qc) + (Eo)(Qo)] / Qt$.

(1) E = the emission limit for combination in pounds per million Btu.

(2) Ec = emission limit for coal only as determined by Paragraph (a) or (b) of this Rule in pounds per million Btu.

(3) Eo = emission limit for oil or gas as determined by Paragraph (a) or (b) of this Rule in pounds per million Btu.

(4) Qc = the actual coal heat input to the combination in Btu per hour.

(5) Qo = the actual oil and gas heat input to the combination in Btu per hour.

(6) Qt = Qc + Qo and is the actual total heat input to the combination in Btu per hour. (Ord. No. 9-94, 12-19-94, 11-11-96)

(d) A boiler subject to an emission standard for nitrogen oxides under Sec. 3D-0524 (New Source Performance Standards) or Sec 3D-1418 (New Generating Units, Large Boilers, and Large I/C Engines) shall meet the standard in that particular rule.

Sec. 3D-0520. Repealed

(Ord. No. 9-94, 12-19-94, 11-11-96)

Sec. 3D-0521. Control of visible emissions

(a) Purpose. The intent of this Rule is to prevent, abate and control emissions generated from fuel burning operations and industrial processes where an emission can reasonably be expected to occur, except during startup, shutdowns and malfunctions approved according to procedures set out in Sec. 3D-0535.

(b) Scope. This Rule shall apply to all fuel burning sources and to other processes that may have a visible emission. However, sources subject to a visible emission standard in Sec. 3D-0506, 0508, 0524, 0543, 0544, 1110, 1111, 1205, 1206, 1210, 1211 or 1212 shall meet that standard instead of the standard contained in this Rule. This rule does not apply to engine maintenance, rebuild, and testing activities where controls are infeasible, except it does apply to the testing of peak shaving and emergency generators. (In deciding if controls are infeasible, the Director shall consider emissions, capital cost of compliance, annual incremental compliance cost, and environmental and health impacts.)

(c) For sources manufactured as of July 1, 1971, visible emissions shall not be more than 40 percent opacity when averaged over a six-minute period. However, except for sources required to comply with Paragraph (g) of this Rule, six-minute averaging periods may exceed 40 percent opacity if:

(1) No six-minute period exceeds 90 percent opacity;

(2) No more than one six-minute period exceeds 40 percent opacity in any hour; and

(3) No more than four six-minute periods exceed 40 percent opacity in any 24-hour period.

(d) For sources manufactured after July 1, 1971, visible emissions shall not be more than 20 percent opacity when averaged over a six-minute period. However, except for sources required to comply with Paragraph (g) of this Rule, six-minute averaging periods may exceed 20 percent opacity if:

(1) No six-minute period exceeds 87 percent opacity;

(2) No more than one six-minute period exceeds 20 percent opacity in any hour; and

(3) No more than four six-minute periods exceed 20 percent opacity in any 24-hour period.

(e) Where the presence of uncombined water is the only reason for failure of an emission to meet the limitations of Paragraph (c) or (d) of this Rule, those requirements shall not apply.

(f) Exception from Opacity Standard in Paragraph (d) of this Rule. Sources subject to Paragraph (d) of this Rule shall be allowed to comply with Paragraph (c) of this Rule if:

(1) The owner or operator of the source demonstrates compliance with applicable particulate mass emissions standards; and

(2) The owner or operator of the source submits data necessary to show that emissions up to those allowed by Paragraph (c) of this Rule will not violate any national ambient air quality standard.

The burden of proving these conditions shall be on the owner or operator of the source and shall be approached in the following manner. The owner or operator of a source seeking an exception shall apply to the Director requesting this modification in its permit. The applicant shall submit the results of a source test within 90 days of application. Source testing shall be by the appropriate procedure as designated by rules in this Subchapter. During this 90-day period the applicant shall submit data necessary to show that emissions up to those allowed by Paragraph (c) of this Rule will not contravene ambient air quality standards. This evidence shall include an inventory of past and projected emissions from the facility. In its review of ambient air quality, the Office of Environmental Assistance and Protection may require additional information that it considers necessary to assess the resulting ambient air quality. If the applicant can thus show that it will be in compliance both with particulate mass emissions standards and ambient air quality standards, the Director shall modify the permit to allow emissions up to those allowed by Paragraph (c) of this Rule.

(g) For sources required to install, operate, and maintain continuous opacity monitoring systems (COMS), compliance with the numerical opacity limits in this Rule shall be determined as follows excluding startups, shutdowns, maintenance periods when fuel is not being combusted and malfunctions approved as such according to procedures approved under Sec. 3D-0535:

(1) No more than four six-minute periods shall exceed the opacity standards in any one day; and

(2) The percent of excess emissions (defined as the percentage of monitored operating time in a calendar quarter above the opacity limit) shall not exceed 0.8 percent of the total operating hours. If a source operates less than 500 hours during a calendar quarter, the percent of excess emissions shall be calculated by including hours operated immediately previous to this quarter until 500 operational hours are obtained.

In no instance shall excess emissions exempted under this Paragraph cause or contribute to a violation of any emission standard in this Subchapter or 40 CFR Part 60, 61, or 63 or any ambient air quality standard in Section 3D-0400 or 40 CFR Part 50. (Ord. No. 9-94, 12-19-94, 11-11-96, 9-14-98, 5-14-01, 7-28-03)

Sec. 3D-0522. Control and prohibition of odorous emissions

(a) Purpose. The purpose of this Rule is to provide for the control and prohibition of certain odorous emissions.

(b) Prohibited Odorous Emissions. No person shall cause or permit the emission of odors beyond his property lines which odors are harmful, irritating or which unreasonably interfere with the use and enjoyment of any person's properties or living conditions, or any public properties or facilities. Such odors are prohibited by this Rule.

(c) Determination of Violation. Upon receipt of a complaint, the Director shall make an investigation of the complaint. Any sampling of ambient air to establish that prohibited odor(s) exist shall be at or beyond the property line of the emission source or at or near a location of human habitation.

(d) Control of Prohibited Odors. No violation shall be cited, provided that the best practical treatment, maintenance, and control of odor(s) currently available is used.

(e) Resolving Disputes. In the event there is any dispute as to any findings of the Director that an odor is prohibited by this Rule, the Environmental Assistance and Protection Advisory Board shall make a determination and advise the Director of that determination.

(f) Exception. This regulation does not apply to normal agricultural practices, nor to accidental emissions of odors which are not normally produced during routine operations and activities as determined by the Director. (Ord. of 1-24-72, ' 7.01; Ord. No. 9-94, 12-19-94, 11-11-96, 5-14-01)

Sec. 3D-0523. Repealed

(Ord. No. 9-94, 12-19-94, 7-24-00)

Sec. 3D-0524. New source performance standards

(a) With the exception of Paragraph (b) or (c) of this Rule, sources subject to new source performance standards promulgated in 40 CFR Part 60 shall comply with the emission standards, monitoring and reporting requirements, maintenance requirements, notification and record keeping requirements, performance test requirements, test method and procedure provisions, and any other provisions, as required therein, rather than with any otherwise applicable Rule in this Section which would be in conflict therewith.

(b) The following is not included under this Rule:

(1) 40 CFR Part 60, Subpart AAA (new residential wood heaters);

(2) 40 CFR Part 60, Subpart B (adoption and submittal of state plans for designated facilities);

(3) 40 CFR Part 60, Subpart C (emission guidelines and compliance times);

(4) 40 CFR Part 60, Subpart Cb (guidelines for municipal waste combustors constructed on or before September 20, 1994;

(5) 40 CFR Part 60, Subpart Cc (guidelines for municipal solid waste landfills); or

(6) 40 CFR Part 60, Subpart Cd (guidelines for sulfuric acid production units).

(7) 40 CFR Part 60, Subpart Ce (guidelines for hospital, medical, infectious waste incinerators);

(8) 40 CFR Part 60, Subpart BBBB (guidelines for small municipal waste combustion units constructed on or before August 30, 1999);

(9) 40 CFR Part 60, Subpart DDDD (guidelines for commercial and industrial solid waste incinerators constructed on or before November 30, 1999);

(10) 40 CFR Part 60, Subpart FFFF (guidelines for other solid waste incinerators constructed on or before December 9, 2004); or

(11) 40 CFR Part 60, Subpart HHHH (guidelines for coal-fired electric steam generating unit.

(c) Reserved.

(d) New sources of volatile organic compounds that are located in an area designated in 40 CFR 81.334 as nonattainment for ozone or an area identified in accordance with Sec. 3D-0902 (d) as being in violation of the ambient air quality standard for ozone shall comply with the requirements of 40 CFR Part 60 that are not excluded by this Rule, as well as with any applicable requirements in Section 3D-0900.

(e) All requests, reports, applications, submittals, and other communications to the administrator required under Paragraph (a) of this Rule shall be submitted to the Director of the Office of Environmental Assistance and Protection rather than to the Environmental Protection Agency.

(f) In the application of this Rule, definitions contained in 40 CFR Part 60 shall apply rather than those of Section 3D-0100.

(g) With the exceptions allowed under Sec. 3Q-0102, Activities Exempted from Permit Requirements, the owner or operator of the source shall apply for and receive a permit as required in Forsyth County Code, Section 3Q-0300 or 0500. (Ord. No. 9-94, 12-19-94, 11-11-96, 7-28-97, 7-24-00)

Sec. 3D-0525. Repealed

(11-11-96)

Sec. 3D-0526. Repealed

(12-19-94)

Sec. 3D-0527. Emissions from spodumene ore roasting

Emission of sulfur dioxide and sulfuric acid mist from any one kiln used for the roasting of spodumene ore shall not exceed:

(1) 9.7 pounds of sulfur dioxide per ton of ore roasted.

(2) 1.0 pound of sulfuric acid mist, expressed as H(2)SO(4), per ton of ore roasted. (Ord. No. 9-94, 12-19-94)

Sec. 3D-0528. Total reduced sulfur from kraft pulp mills

(a) For the purpose of this Regulation, the following definitions apply:

(1) "Total reduced sulfur (TRS)" means the sum of the sulfur compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide, that are released during the kraft pulping operation.

(2) "Kraft pulp mill" means any facility that produces pulp from wood by cooking (digesting) wood chips in a water solution of sodium hydroxide and sodium sulfide (white liquor) at high temperature and pressure. Regeneration of cooking chemicals through a recovery process is also considered part of the kraft pulp mill.

(3) "Recovery furnace" means either a straight kraft recovery furnace or a cross recovery furnace and includes the direct-contact evaporator for a direct-contact furnace.

(4) "Cross recovery furnace" means a furnace used to recover chemicals consisting primarily of sodium and sulfur compounds by burning black liquor which on a quarterly basis contains more than seven percent by weight of the total pulp solids from the neutral sulfite semichemical process and has a green liquor sulfidity of more than 28 percent.

(5) "Straight kraft recovery furnace" means a furnace used to recover chemicals consisting primarily of sodium and sulfur compounds by burning black liquor which on a quarterly basis contains seven percent by weight or less of the total pulp solids from the neutral sulfite semichemical process or has green liquor sulfidity of 28 percent or less.

(6) "Old design recovery furnace" means a straight kraft recovery furnace that does not have membrane wall or welded wall construction or emission control designed air systems.

(7) "New design recovery furnace" means a straight kraft recovery furnace that has both membrane wall or welded wall construction and emission control designed air systems.

(8) "Neutral sulfite semichemical pulping operation" means any operation in which pulp is produced from wood by cooking (digesting) wood chips in a solution of sodium sulfite and sodium bicarbonate, followed by mechanical defibrating (grinding).

(9) "Digester system" means each continuous digester or each batch digester used for the cooking of wood in white liquor, and associated flash tanks, blow tanks, chip steamers and condensers.

(10) "Multiple-effect evaporator system" means the multiple-effect evaporators and associated condensers and hot wells used to concentrate the spent cooking liquid that is separated from the pulp (black liquor).

(11) "Lime kiln" means a unit used to calcine lime mud, which consists primarily of calcium carbonate, into quicklime, which is calcium oxide.

(12) "Condensate stripper system" means a column, and associated condensers, used to strip, with air or steam, total reduced sulfur compounds from condensate streams from various processes within a kraft pulp mill.

(13) "Smelt dissolving tank" means a vessel used for dissolving the smelt collected from the recovery furnace.

(14) "Black liquor solids" means the dry weight of the solids which enter the recovery furnace in the black liquor.

(15) "Green liquor sulfidity" means the sulfidity of the liquor which leaves the smelt dissolving tank.

(b) This Regulation shall apply to recovery furnaces, digester systems, multiple-effect evaporator systems, lime kilns, smelt dissolving tanks, and condensate stripping systems of kraft pulp mills not subject to Sec. 3D-0524.

(c) Emissions of total reduced sulfur from any kraft pulp mill subject to this Regulation shall not exceed:

(1) 20 parts per million from any old design recovery furnace;
(2) five parts per million from any new design recovery furnace;
(3) 25 parts per million from any cross recovery furnace;
(4) five parts per million from any digester system;
(5) five parts per million from any multiple-effect evaporator system;
(6) 20 parts per million from any lime kiln;
(7) five parts per million from any condensate stripping system; and
(8) 0.032 pounds per ton of black liquor solids (dry weight) from any smelt dissolving tank.

(d) The emission limitations given in Subparagraphs (c)(1) through (c)(7) of this Rule are measured as hydrogen sulfide on a dry gas basis and are averages of discrete contiguous 12-hour time periods. The emission limitations given in Subparagraphs (c)(1) through (c)(3) of this Rule are corrected to eight percent oxygen by volume. The emission limitations given in Subparagraph (c)(6) of this Rule is corrected to 10 percent oxygen by volume.

(e) One percent of all 12-hour total reduced sulfur averages per quarter year in excess of the limitations given in Subparagraphs (c)(1) through (c)(3) of this Rule, in the absence of start-ups, shut-downs and malfunctions, shall not be considered in violation. Two percent of all 12-hour total reduced sulfur averages per quarter year in excess of the limitation given in Subparagraph (c)(6) of this Rule, in the absence of start-ups, shut-downs, and malfunctions, shall not be considered in violation. (Ord. No. 9-94, 12-19-94)

Sec. 3D-0529. Fluoride emissions from primary aluminum reduction plants

(a) For the purpose of this Rule, the following definitions apply:
(1) "Fluoride" means elemental fluorine and all fluoride compounds as measured by the methods specified in Sec. 3D-2616 or by equivalent or alternative methods approved by the Director or his delegate. The Director may approve equivalent or alternative methods on an individual basis for sources or pollutants if equivalent or alternative methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
(2) "Prebake cell" is an aluminum reduction pot which uses carbon anodes that are formed, pressed, and baked prior to their placement in the pot.
(3) "Primary aluminum reduction plant" means any facility manufacturing aluminum by electrolytic reduction.

(b) This Rule shall apply to prebake cells at all primary aluminum reduction plants not subject to Sec. 3D-0524.

(c) An owner or operator of a primary aluminum reduction plant subject to this Rule shall not cause, allow, or permit the use of the prebake cells unless:
(1) 95 percent of the fluoride emissions are captured; and
(2) 98.5 percent of the captured fluoride emissions are removed before the exhaust gas is discharged into the atmosphere.

(d) The owner or operator of a primary aluminum reduction plant subject to this Rule shall:

(1) ensure that hood covers are in good repair and properly positioned over the prebake cells;

(2) minimize the amount of time that hood covers are removed during pot working operations;

(3) if the hooding system is equipped with a dual low and high hood exhaust rate, use the high rate whenever hood covers are removed and return to the normal exhaust rate when the hood covers are replaced;

(4) minimize the occurrence of fuming pots and correct the cause of a fuming pot as soon as practical; and

(5) if the tapping crucibles are equipped with hoses which return aspirator air under the hood, ensure that the hoses are in good repair and that the air return system is functioning properly. (Ord. No. 9-94, 12-19-94)

Sec. 3D-0530. Prevention of significant deterioration

(a) The purpose of the Rule is to implement a program for the prevention of significant deterioration of air quality as required by 40 CFR 51.166.

(b) For the purposes of this Rule the definitions contained in 40 CFR 51.166(b) and 40 CFR 51.301 apply except the definition of "baseline actual emissions." For the purposes of this Rule:

(1) "Baseline actual emissions" means the rate of emissions, in tons per year, of a regulated new source review (NSR) pollutant, as determined in accordance with Parts (A) through (C) of this Subparagraph:

(A) For an existing emissions unit, baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding the date that a complete permit application is received by the Division for a permit required under this Rule. The Director shall allow a different time period, not to exceed 10 years immediately preceding the date that a complete permit application is received by the Division, if the owner or operator demonstrates that it is more representative of normal source operation. For the purpose of determining baseline actual emissions, the following apply:

(i) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions;

(ii) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period;

(iii) For an existing emission unit (other than an electric utility steam generating unit), the average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply. However, if the State has taken credit in an attainment demonstration or maintenance plan consistent with the requirements of 40 CFR 51.165(a)(3)(ii)(G) for an emission limitation that is part of a maximum achievable control technology standard that the Administrator proposed or promulgated under part 63 of the Code of Federal Regulations, the baseline actual emissions shall be adjusted to account for such emission reductions;

(iv) For an electric utility steam generating unit, the average rate shall be adjusted downward to reflect any emissions reductions under G. S. 143-215.107D and for which cost recovery is sought pursuant to G. S. 62-133.6;

(v) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period shall be used to determine the baseline actual emissions for all the emissions units being changed. A different consecutive 24-month period for each regulated NSR pollutant can be used for each regulated NSR pollutant; and

(vi) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by Subparts (ii) and (iii) of this Part;

(B) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit; and

(C) For a plantwide applicability limit (PAL) for a stationary source, the baseline actual emissions shall be calculated for existing emissions units in accordance with the procedures contained in Part (A) of this Subparagraph, and for a new emissions unit in accordance with the procedures contained in Part (B) of this Subparagraph;

(2) In the definition of "net emissions increase," the reasonable period specified in 40 CFR 51.166(b)(3)(ii) is seven years;

(3) The limitation specified in 40 CFR 51.166(b)(15)(ii) does not apply; and

(4) Particulate matter PM2.5 significant levels in 40 CFR 51.166(b)(23)(i) are incorporated by reference except as otherwise provided in this Rule. A net emission increase or the potential of a source to emit nitrogen oxide emissions shall be significant if the rate of emissions would equal or exceed 140 tons per year. Sulfur dioxide and nitrogen oxides are precursor to PM2.5 in all attainment and

unclassifiable areas. Volatile organic compounds and ammonia are not significant precursors to PM2.5.

(c) All areas of the State are classified as Class II except that the following areas are Class I:

(1) Great Smoky Mountains National Park;

(2) Joyce Kilmer Slickrock National Wilderness Area;

(3) Linville Gorge National Wilderness Area;

(4) Shining Rock National Wilderness Area; and

(5) Swanquarter National Wilderness Area.

(d) Redesignations of areas to Class I or II may be submitted as state proposals to the Administrator of the Environmental Protection Agency (EPA), if the requirements of 40 CFR 51.166(g)(2) are met. Areas may be proposed to be redesignated as Class III, if the requirements of 40 CFR 51.166(g)(3) are met. Redesignations may not, however, be proposed which would violate the restrictions of 40 CFR 51.166(e). Lands within the boundaries of Indian Reservations may be redesignated only by the appropriate Indian Governing Body.

(e) In areas designated as Class I, II, or III, increases in pollutant concentration over the baseline concentration shall be limited to the values set forth in 40 CFR 51.166(c). However, concentration of the pollutant shall not exceed standards set forth in 40 CFR 51.166(d).

(f) Concentrations attributable to the conditions described in 40 CFR 51.166(f)(1) shall be excluded in determining compliance with a maximum allowable increase. However, the exclusions referred to in 40 CFR 51.166(f)(1)(I) or (ii) shall be limited to five years as described in 40 CFR 51.166(f)(2).

(g) Major stationary sources and major modifications shall comply with the requirements contained in 40 CFR 51.166(i) and (a)(7) and by extension in 40 CFR 51.166(j) through (o), and (w). The transition provisions allowed by 40 CFR 52.21 (i)(11)(i) and (ii) and (m)(1)(vii) and (viii) are hereby adopted under this Rule. The minimum requirements described in the portions of 40 CFR 51.166 referenced in this Paragraph are hereby adopted as the requirements to be used under this Rule, except as otherwise provided in this Rule. Wherever the language of the portions of 40 CFR 51.166 referenced in this Paragraph speaks of the "plan," the requirements described therein shall apply to the source to which they pertain, except as otherwise provided in this Rule. Whenever the portions of 40 CFR 51.166 referenced in this Paragraph provide that the County plan may exempt or not apply certain requirements in certain circumstances, those exemptions and provisions of nonapplicability are also hereby adopted under this Rule. However, this provision shall not be interpreted so as to limit information that may be requested from the owner or operator by the Director as specified in 40 CFR 51.166(n)(2).

(h) New natural gas-fired electrical utility generating units for which cost recovery is sought pursuant to G.S. 62-133.6 shall install best available control technology for NO_X and SO_2, regardless of applicability of the rest of this rule.

(i) 40 CFR 51.166(w)(10)(iv)(a) is changed to read: “If the emissions level calculated in accordance with Paragraph (w)(6) of this Section is equal to or greater than 80 percent of the PAL [plant wide applicability limitation] level, the Director shall renew the PAL at the same level.” 40 CFR 51.166(w)(10)(iv)(b) is not incorporated by reference.

(j) Forsyth County Code, Sec. 3Q-0102 and 0302 are not applicable to any source to which this Rule applies. The owner or operator of the sources to which this Rule applies shall apply for and receive a permit as required in Forsyth County Code, Section 3Q-0300 or 0500.

(k) When a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification to emit a pollutant, such as a restriction on hours of operation, then the provisions of this Rule shall apply to the source or modification as though construction had not yet begun on the source or modification.

(l) The provisions of 40 CFR 52.21(r)(2) regarding the period of validity of approval to construct are incorporated by reference except that the term "Administrator" is replaced with "Director".

(m) Volatile organic compounds exempted from coverage in 40 CFR 51.100(s) shall be exempted when calculating source applicability and control requirements under this Rule.

(n) The degree of emission limitation required for control of any air pollutant under this Rule shall not be affected by:

(1) that amount of a stack height, not in existence before December 31, 1970, that exceeds good engineering practice; or

(2) any other dispersion technique not implemented before then.

(o) A substitution or modification of a model as provided for in 40 CFR 51.166(l) is subject to public comment procedures in accordance with the requirements of 40 CFR 51.102.

(p) Permits may be issued on the basis of innovative control technology as set forth in 40 CFR 51.166(s)(1) if the requirements of 40 CFR 51.166(s)(2) have been met, subject to the condition of 40 CFR 51.166(s)(3), and with the allowance set forth in 40 CFR 51.166(s)(4).

(q) If a source to which this Rule applies impacts an area designated Class I by requirements of 40 CFR 51.166(e), notice to EPA shall be provided as set forth in 40 CFR 51.166(p)(1). If the Federal Land Manager presents a demonstration described in 40 CFR 51.166(p)(3) during the public comment period or public hearing to the Director and if the Director concurs with this demonstration, the permit application shall be denied. Permits may be issued on the basis that the requirements for variances as set forth in 40 CFR 51.166(p)(4), (p)(5) and (p)(7), or (p)(6) and (p)(7) have been satisfied.

(r) A permit application subject to this Rule shall be processed in accordance with the procedures and requirements of 40 CFR 51.166(q). Within 30 days of receipt of the application, applicants shall be notified if the application is complete as to initial information submitted. Commencement of construction before full prevention of significant deterioration approval is obtained constitutes a violation of this Rule.

(s) Approval of an application with regard to the requirements of this Rule does not relieve the owner or operator of the responsibility to comply with applicable provisions of other Rules of this Subchapter or Subchapter 3Q of this Title and any other requirements under local, state, or federal law.

(t) When a source or modification is subject to this Rule the following procedures apply:

(1) Notwithstanding any other provisions of this paragraph, the Director shall, no later than 60 days after receipt of an application, notify the Federal Land Manager with the U.S. Department of Interior and U.S. Department of Agriculture of an application from a source or modification subject to this Rule;

(2) When a source or modification may affect visibility of a Class I area the Director shall provide written notification to all affected Federal Land Managers within 30 days of receiving the permit application or within 30 days of receiving advance notification of an application. The notification shall be at least 30 days prior to the publication of notice for public comment on the application. The notification shall include a copy of all information relevant to the permit application including an analysis provided by the source of the potential impact of the proposed source on visibility;

(3) The Director shall consider any analysis concerning visibility impairment performed by the Federal Land Manager if the analysis is received within 30 days of notification. If the Director finds that the analysis of the Federal Land Manager fails to demonstrate to his satisfaction that an adverse impact on visibility will result in the Class I area, the Director shall provide in the notice of public hearing on the application, an explanation of his decision or notice as to where the explanation can be obtained; and

(4) The Director may require monitoring of visibility in or around any Class I area by the proposed new source or modification when the visibility impact analysis indicates possible visibility impairment.

(u) If the owner or operator of a source is using projected actual emissions to avoid applicability of prevention of significant deterioration requirements, the owner or operator shall notify the Director of the modification before beginning actual construction. The notification shall include:

(1) a description of the project;

(2) identification of sources whose emissions could be affected by the project;

(3) the calculated projected actual emissions and an explanation of how the projected actual emissions were calculated including identification of emissions excluded by 40 CFR 51.166(b)(40)(ii)(c);

(4) the calculated baseline actual emissions and an explanation of how the baseline actual emissions were calculated; and

(5) any netting calculations if applicable.

If upon reviewing the notification, the Director finds that the project will cause a prevention of significant deterioration evaluation, then the Director shall notify the owner or operator of his findings. The owner or operator shall not make the modification until it has received a permit issued pursuant to this Rule. If a permit revision is not required pursuant to this Rule, the owner or operator shall maintain records of annual emissions in tons per year, on a calendar year basis related to the modifications for 10 years following resumption of regular operations after the change if the project involves increasing the emissions unit's design capacity or its potential to emit the regulated NSR pollutant; otherwise these records shall be maintained for five years following resumption of regular operations after the change. The owner or operator shall submit a report to the Director within 60 days after the end of each year during which these records must be generated. The report shall contain the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c). The owner or operator shall make the information documented and maintained under this Paragraph available to the Director or the general public pursuant to the

requirements in 40 CFR 70.4(b)(3)(viii).

(v) The references to the Code of Federal Regulations (CFR) in this Rule are incorporated by reference unless a specific reference states otherwise. The version of the CFR incorporated in this Rule is that as of May 16, 2008 and does not include any subsequent amendments or editions to the referenced material. (Ord. No. 9-94, 12-19-94; 8-14-95, 7-28-97, 5-8-06)

Sec. 3D-0531. Sources in nonattainment areas

(a) For the purpose of this Rule the definitions contained in 40 CFR 51.165(a)(1) apply except the definition of "baseline actual emissions." For the purposes of this Rule:

(1) "Baseline actual emissions" means the rate of emissions, in tons per year, of a regulated new source review (NSR) pollutant, as determined in accordance with Parts (A) through (C) of this Subparagraph:

(A) For an existing emissions unit, baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding the date that a complete permit application is received by the Division for a permit required under this Rule. The Director shall allow a different time period, not to exceed 10 years immediately preceding the date that a complete permit application is received by the Division, if the owner or operator demonstrates that it is more representative of normal source operation. For the purpose of determining baseline actual emissions, the following apply:

(i) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions;

(ii) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period;.

(iii) For an existing emission unit (other than an electric utility steam generating unit), the average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply. However, if the State has taken credit in an attainment demonstration or maintenance plan consistent with the requirements of 40 CFR 51.165(a)(3)(ii)(G) for an emission limitation that is part of a maximum achievable control technology standard that the Administrator proposed or promulgated under part 63 of the Code of Federal Regulations, the baseline actual emissions shall be adjusted to account for such emission reductions;

(iv) For an electric utility steam generating unit, the average rate shall be adjusted downward to reflect any emissions reductions under G. S. 143-215.107D and for which cost recovery is sought pursuant to G. S. 62-133.6;

(v) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period shall be used to determine the baseline actual emissions for all the emissions units being changed. A different consecutive 24-month period for each regulated NSR pollutant can be used; and

(vi) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by Subparts (ii) and (iii) of this Part;

(B) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit; and

(C) For a plantwide applicability limit (PAL) for a stationary source, the baseline actual emissions shall be calculated for existing emissions units in accordance with the procedures contained in Part (A) of this Subparagraph, and for a new emissions unit in accordance with the procedures contained in Part (B) of this Subparagraph;

(2) In the definition of "net emissions increase," the reasonable period specified in 40 CFR 51.165(a)(1)(vi)(C)(1) is seven years; and

(3) Particulate matter PM2.5 significant levels in 40 CFR 51.165(a)(1)(x)(A) are incorporated by reference except as otherwise provided in this Rule. A net emission increase or the potential of a source to emit nitrogen oxide emissions shall be significant if the rate of emissions would equal or exceed 140 tpy. Sulfur dioxide and nitrogen oxides are precursor to PM2.5 in all nonattainment areas. Volatile organic compounds and ammonia are not significant precursors to PM2.5.

(b) Redesignation to Attainment. If any county or part of a county to which this Rule applies is later designated in 40 CFR 81.334 as attainment, all sources in that county subject to this Rule before the redesignation date shall continue to comply with this Rule.

(c) Applicability. 40 CFR 51.165(a)(2) is incorporated by reference. This Rule applies to areas designated as nonattainment in 40 CFR 81.334, including any subsequent amendments or editions

(d) This Rule is not applicable to:

(1) complex sources of air pollution regulated only under Section 3D-0800 and not under any other Rule in this Subchapter;

(2) emission of pollutants at the new major stationary source or major modification located in the nonattainment area that are pollutants other than the pollutant or

pollutants for which the area is nonattainment (A major stationary source or major modification that is major for volatile organic compounds or nitrogen oxides is also major for ozone.);

(3) emission of pollutants for which the source or modification is not major;

(4) a new source or modification that qualifies for exemption under the provision of 40 CFR 51.165(a)(4); or

(5) emission of compounds listed under 40 CFR 51.100(s) as having been determined to have negligible photochemical reactivity except carbon monoxide.

(e) Forsyth County Code, Sec. 3Q-0102 and Sec. 3Q-0302 are not applicable to any source to which this Rule applies. The owner or operator of the source shall apply for and receive a permit as required in Forsyth County Code, Sec. 3Q-0300 or Sec. 3Q-0500.

(f) To issue a permit to a source to which this Rule applies, the Director shall determine that the source will meet the following requirements:

(1) The new major stationary source or major modification will emit the nonattainment pollutant at a rate no more than the lowest achievable emission rate;

(2) The owner or operator of the proposed new major stationary source or major modification has demonstrated that all major stationary sources in the State that are owned or operated by this person (or any entity controlling, controlled by, or under common control with this person) are subject to emission limitations and are in compliance, or on a schedule for compliance that is federally enforceable or contained in a court decree, with all applicable emission limitations and standards of this Subchapter that EPA has authority to approve as elements of the North Carolina State Implementation Plan for Air Quality;

(3) The owner or operator of the proposed new major stationary source or major modification will obtain sufficient emission reductions of the nonattainment pollutant from other sources in the nonattainment area so that the emissions from the new major source and associated new minor sources will be less than the emissions reductions by a ratio of at least 1.00 to 1.15 for volatile organic compounds and nitrogen oxides and by a ratio of less than one to one for carbon monoxide. The baseline for this emission offset shall be the actual emissions of the source from which offset credit is obtained. Emission reductions shall not include any reductions resulting from compliance (or scheduled compliance) with applicable Rules in effect before the application. The difference between the emissions from the new major source and associated new minor sources of carbon monoxide and the emission reductions shall be sufficient to represent reasonable further progress toward attaining the Ambient Air Quality Standards. The emissions reduction credits shall also conform to the provisions of 40 CFR 51.165(a)(3)(ii)(A) through (G) and (J); and

(4) The North Carolina State Implementation Plan for Air Quality is being carried out for the nonattainment area in which the proposed source is located.

(g) New natural gas-fired electrical utility generating units for which cost recovery is sought pursuant to G.S. 62-133.6 shall install lowest achievable emission rate technology for NO_X and SO_2 regardless of the applicability of the rest of this Rule.

(h) 40 CFR51.165(f) is incorporated by reference except that 40 CFR 51.165(f)(10)(iv)(A) is changed to read: "If the emissions level calculated in accordance with Paragraph (f)(6) of this Section is equal to or greater than 80 percent of the PAL level, the Director shall renew the PAL at the same level." 40 CFR 51.165(f)(10)(iv)(B) is not incorporated by reference.

(i) When a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation established after August 7, 1980, on the capacity of the source or modification to emit a pollutant, such as a restriction on hours of operation, then the provisions of this Rule shall apply to the source or modification as though construction had not yet begun on the source or modification.

(j) To issue a permit to a source of a nonattainment pollutant, the Director shall determine, in accordance with Section 173(a)(5) of the Clean Air Act and in addition to the other requirements of this Rule, that an analysis (produced by the permit applicant) of alternative sites, sizes, production processes, and environmental control techniques for the source demonstrates that the benefits of the source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.

(k) The provisions of 40 CFR 52.21(r)(2) regarding the period of validity of approval to construct are incorporate by reference except that the term "Administrator" is replaced with "Director".

(l) Approval of an application regarding the requirements of this Rule does not relieve the owner or operator of the responsibility to comply with applicable provisions of other Rules of this Chapter and any other requirements under local, state, or federal law.

(m) Except as provided in 40 CFR 52.28(c)(6) for a source or modification subject to this Rule, the following procedures shall be followed:

(1) Notwithstanding any other provisions of this Paragraph, the Director shall, no later than 60 days after receipt of an application, notify the Federal Land Manager with the U.S. Department of Interior and U.S. Department of Agriculture of an application from a source or modification subject to this Rule;

(2) The owner or operator of the source shall provide an analysis of the impairment to visibility that would occur because of the source or modification and general commercial, industrial and other growth associated with the source or modification;

(3) When a source or modification may affect the visibility of a Class I area the Director shall provide written notification to all affected Federal Land Managers within 30 days of receiving the permit application or within 30 days of receiving advance notification of an application. The notification shall be at least 30 days before the publication of the notice for public comment on the application. The notification shall include a copy of all information relevant to the permit application including an analysis provided by the source of the potential impact of the proposed source on visibility;

(4) The Director shall consider any analysis concerning visibility impairment performed by the Federal Land Manager if the analysis is received within 30 days of notification. If the Director finds that the analysis of the Federal Land Manager fails to demonstrate to his satisfaction that an adverse impact on visibility will result in the Class I area, the Director shall provide in the notice of public hearing on the application, an explanation of his decision or notice where the explanation can be obtained;

(5) The Director shall issue permits only to those sources whose emissions will be consistent with making reasonable progress, as defined in Section 169A of the Clean Air Act, towards the national goal of preventing any future, and remedying any existing, impairment of visibility in mandatory Class I areas when the impairment results from manmade air pollution. In making the decision to issue a permit, the Director shall consider the cost of compliance, the time necessary for compliance, the energy and non-air quality environmental impacts of compliance, and the useful life of the source; and

(6) The Director may require monitoring of visibility in or around any Class I area by the proposed new source or modification when the visibility impact analysis indicates possible visibility impairment.

The requirements of this Paragraph do not apply to nonprofit health or nonprofit educational institutions.

(n) If the owner or operator of a source is using projected actual emissions to avoid applicability of nonattainment new source review, the owner or operator shall notify the director of the modification before beginning actual construction. The notification shall include:

(1) a description of the project;

(2) identification of sources whose emissions could be affected by the project;

(3) the calculated projected actual emissions and an explanation of how the projected actual emissions were calculated including identification of emissions excluded by 40 CFR 51.165(a)(1)(xxviii)(B)(3);,

(4) the calculated baseline actual emissions and an explanation of how the baseline actual emissions were calculated; and

(5) any netting calculations if applicable.

If upon reviewing the notification, the Director finds that the project will cause a nonattainment new source review evaluation, then the Director shall notify the owner or operator of his findings. The owner or operator shall not make the modification until it has received a permit issued pursuant to this Rule. If a permit revision is not required pursuant to this Rule, the owner or operator shall maintain records of annual emissions in tons per year on a calendar year basis related to the modifications for 10 years following resumption of regular operations after the change if the project involves increasing the emissions unit's design capacity or its potential to emit the regulated NSR pollutant; otherwise these records shall be maintained for five years following resumption of regular operations after the change. The owner or operator shall submit a report to the Director within 60 days after the end of each year during which these records must be generated. The report shall contain the items listed in 40 CFR 51.165(a)(6)(v)(A) through (C). The owner or operator shall make the information documented and

maintained under this Paragraph available to the Director or the general public pursuant to the requirements in 40 CFR 70.4(b)(3)(viii).

(o) The references to the Code of Federal Regulations (CFR) in this Rule are incorporated by reference unless a specific reference states otherwise. Except for 40 CFR 81.334, the version of the CFR incorporated in this Rule is that as of May 16, 2008 and does not include any subsequent amendments or editions to the referenced material. (Ord. No. 9-94, 12-19-94; 11-13-95, 11-11-96, 9-14-98, 5-8-06)

Sec. 3D-0532. Sources contributing to an ambient violation

(a) This Rule applies to new major stationary sources and major modifications which are located in an area which is designated by the U.S. Environmental Protection Agency (EPA) to be an attainment or unclassifiable area as of May 1, 1983, and which would contribute to a violation of a national ambient air quality standard but which would not cause a new violation.

(b) For the purpose of this Rule the definitions contained in Section II.A. of Appendix S of 40 CFR Part 51 shall apply.

(c) The Rule is not applicable to:

(1) complex sources of air pollution that are regulated only under Section 3D-0800 and not under any other Rule of this Subchapter;

(2) emission of pollutants for which the area in which the new or modified source is located is designated as nonattainment;

(3) emission of pollutants for which the source or modification is not major;

(4) emission of pollutants other than sulfur dioxide, total suspended particulates, nitrogen oxides, and carbon monoxide;

(5) a new or modified source whose impact will increase not more than:

(A) 1.0 ug/m^3 of SO_2 on an annual basis,

(B) 5 ug/m^3 of SO_2 on a 24-hour basis,

(C) 25 ug/m^3 of SO_2 on a 3-hour basis,

(D) 1.0 ug/m^3 of total suspended particulates on an annual basis,

(E) 5 ug/m^3 of total suspended particulates on a 24-hour basis,

(F) 1.0 ug/m^3 of NO_2 on an annual basis,

(G) 0.5 mg/m^3 of carbon monoxide on an 8-hour basis,

(H) 2 mg/m^3 of carbon monoxide on a one-hour basis,

(I) 1.0 ug/m^3 of PM10 on an annual basis, or

(J) 5 ug/m^3 of PM10 on a 24-hour basis,

at any locality that does not meet a national ambient air quality standard;

(6) sources which are not major unless secondary emissions are included in calculating the potential to emit;

(7) sources which are exempted by the provision in Section II.F. of Appendix S of 40 CFR Part 51;

(8) temporary emission sources which will be relocated within two years; and

(9) emissions resulting from the construction phase of the source.

(d) Forsyth County Code, Sec. 3Q-0102 and Sec. 3Q-0302 are not applicable to any source to which this Rule applies. The owner or operator of the source shall apply for and receive a permit as required in Forsyth County Code, Section 3Q-0300 or 0500.

(e) To issue a permit to a new or modified source to which this Rule applies, the Director shall determine that the source will meet the following conditions:

(1) The sources will emit the nonattainment pollutant at a rate no more than the lowest achievable emission rate.

(2) The owner or operator of the proposed new or modified source has demonstrated that all major stationary sources in the County which are owned or operated by this person (or any entity controlling, controlled by, or under common control with this person) are subject to emission limitations and are in compliance, or on a schedule for compliance which is federally enforceable or contained in a court decree, with all applicable emission limitations and standards of this Subchapter which EPA has authority to approve as elements of the North Carolina State Implementation Plan for Air Quality.

(3) The source will satisfy one of the following conditions:

(A) The source will comply with Part (e)(3) of Sec. 3D-0531 when the source is evaluated as if it were in the nonattainment area; or

(B) The source will have an air quality offset, i.e., the applicant will have caused an air quality improvement in the locality where the national ambient air quality standard is not met by causing reductions in impacts of other sources greater than any additional impact caused by the source for which the application is being made. The emissions reductions creating the air quality offset shall be placed as a condition in the permit for the source reducing emissions. The requirements of this Part may be partially waived if the source is a resource recovery facility burning municipal solid waste, the source must switch fuels due to lack of adequate fuel supplies, or the source is required to be modified as a result of EPA regulations and no exemption from such regulations is available and if:

(i) the permit applicant demonstrates that it made its best efforts to obtain sufficient air quality offsets to comply with this Part;

(ii) the applicant has secured all available air quality offsets; and

(iii) the applicant will continue to seek the necessary air quality offsets and apply them when they become available.

(f) At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation established after August 7, 1980, on the capacity of the source or modification to emit a pollutant, such as a restriction on hours of operation, then the provisions of this Rule shall apply to the source or modification as though construction had not yet begun on the source or modification.

(g) The version of the Code of Federal Regulations incorporated in this Rule is that as of January 1, 1989, and does not include any subsequent amendments or editions to the referenced material. (Ord. No. 9-94, 12-19-94)

Sec. 3D-0533. Stack height

(a) For the purpose of this Rule, the following definitions apply:

(1) "Stack" means any point in a source designed to emit solids, liquids, or gases into the air, including a pipe or duct but not including flares.

(2) "A stack in existence" means that the owner or operator had:

(A) begun, or caused to begin, a continuous program of physical on-site construction of the stack; or

(B) entered into binding agreements or contractual obligations, which could not be canceled or modified without substantial loss to the owner or operator, to undertake a program of construction of the stack to be completed in the time that is normally required to construct such a stack.

(3) "Dispersion technique"

(A) "Dispersion technique" means any technique which attempts to affect the concentration of a pollutant in the ambient air by:

(i) using that portion of a stack which exceeds good engineering practice stack height,

(ii) varying the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant, or

(iii) increasing final exhaust gas plume rise by manipulating source process parameters, exhaust gas parameters, stack parameters, or combining exhaust gases from several existing stacks into one stack; or other selective handling of exhaust gas streams so as to increase the exhaust gas plume rise.

(B) "Dispersion technique" does not include:

(i) the reheating of a gas stream, following use of a pollution control system, for the purpose of returning the gas to the temperature at which it was originally discharged from the facility generating the gas stream;

(ii) the using of smoke management in agricultural or silvicultural prescribed burning programs;

(iii) the merging of exhaust gas streams where:

(I) The facility owner or operator demonstrates that the source was originally designed and constructed with such merged gas streams;

(II) After July 8, 1985, such merging is part of a change in operation at the facility that includes the installation of pollution controls and is accompanied by a net reduction in the allowable emissions of a pollutant. This exclusion from the definition of "dispersion

techniques" shall apply only to the emission limitation for the pollutant affected by such change in operation; or

(III) Before July 8, 1985, such merging was part of a change in operation at the source that included the installation of emissions control equipment or was carried out for sound economic or engineering reasons. Where there was an increase in the emission limitation or in the event that no emission limitation as in existence prior to the merging, an increase in the quantity of pollutants actually emitted prior to the merging, the Director shall presume that merging was significantly motivated by an intent to gain emissions credit for greater dispersion. Absent a demonstration by the source owner or operator that merging was not significantly motivated by such intent, the Director shall deny credit for the effects of such merging in calculating the allowable emissions for the source;

(iv) Episodic restrictions on residential wood burning and open burning or;

(v) Techniques under Subpart (A)(iii) of this Subparagraph which increase final exhaust gas plume rise where the resulting allowable emissions of sulfur dioxide from the facility do not exceed 5,000 tons per year.

(4) "Good engineering practice (GEP) stack height" means the greater of:

(A) 65 meters measured from the ground-level elevation at the base of the stack;

(B) 2.5 times the height of nearby structure(s) measured from the ground-level elevation at the base of the stack for stacks in existence on January 12, 1979 and for which the owner or operator had obtained all applicable permit or approvals required under Forsyth County Code, Subchapter 3Q and 40 CFR Parts 51 and 52, provided the owner or operator produces evidence that this equation was actually relied on in establishing an emission limitation;

(C) for stacks not covered under Part (B) of this Subparagraph, the height of nearby structure(s) measured from the ground-level elevation at the base of the stack plus 1.5 times the lesser dimension (height or projected width) of nearby structure(s) provided that the Director may require the use of a field study or fluid model to verify GEP stack height for the source; or

(D) the height demonstrated by a fluid model or a field study approved by the Director, which ensures that the emissions from a stack do not result in excessive concentrations of any air pollutant as a result of atmospheric downwash, wakes, or eddy effects created by the source itself, nearby structures or nearby terrain features.

(5) "Nearby" means, for a specific structure or terrain feature:

(A) under Parts (4)(B) and (C) of this Paragraph, that distance up to five times the lesser of the height or the width dimension of a structure but not greater than

one-half mile. The height of the structure is measured from the ground-level elevation at the base of the stack.

(B) under Part (4)(D) of this Paragraph, not greater than one-half mile, except that the portion of a terrain feature may be considered to be nearby which falls within a distance of up to 10 times the maximum height [H_t] of the feature, not to exceed two miles if such feature achieves a height [h_t] one-half mile from the stack that is at least 40 percent of the GEP stack height determined by Part (4)(C) of this Paragraph or 26 meters, whichever is greater, as measured from the ground-level elevation at the base of the stack. The height of the structure or terrain feature is measured from the ground-level elevation at the base of the stack.

(6) "Excessive concentrations" means, for the purpose of determining good engineering practice stack height under Part (4)(D) of this Paragraph:

(A) for sources seeking credit for stack height exceeding that established under Part (4)(B) or (C) of this Paragraph, a maximum ground-level concentration due to emissions from a stack due in whole or part to downwash, wakes, and eddy effects produced by nearby structures or nearby terrain features which individually is at least 40 percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects and which contributes to a total concentration due to emissions from all sources that is greater than an ambient air quality standard. For sources subject to Sec. 3D-0530, an excessive concentration alternatively means a maximum ground-level concentration due to emissions from a stack due in whole or part to downwash, wakes, or eddy effects produced by nearby structures or nearby terrain features which individually is at least 40 percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects and greater than a prevention of significant deterioration increment. The allowable emission rate to be used in making demonstrations under this part shall be prescribed by the new source performance standard that is applicable to the source category unless the owner or operator demonstrates that this emission rate is infeasible. Where such demonstrations are approved by the Director, an alternative emission rate shall be established in consultation with the source owner or operator;

(B) for sources seeking credit after October 11, 1983, for increases in existing stack heights up to the heights established under Part (4)(B) or (C) of this Paragraph:

(i) a maximum ground-level concentration due in whole or part to downwash, wakes or eddy effects as provided in Part (A) of this Subparagraph, except that the emission rate specified by any applicable Rule in this Subchapter (or, in the absence of such a limit, the actual emission rate) shall be used, or

(ii) the actual presence of a local nuisance (odor, visibility impairment, or pollutant concentration) caused by the existing stack, as determined by the Director; and

(C) for sources seeking credit after January 12, 1979, for a stack height determined under Part (4)(B) or (C) of this Paragraph where the Director requires the use of a field study or fluid model to verify GEP stack height, for sources seeking stack height credit after November 9, 1984 based on the aerodynamic influence of cooling towers, and for sources seeking stack height credit after December 31, 1970 based on the aerodynamic influence of structures not adequately represented by Part (4)(B) or (C) of this Paragraph, a maximum ground-level concentration due in whole or part to downwash, wakes, or eddy effects that is at least 40 percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects.

(7) "Emission limitation" means a requirement established by this Subchapter that limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirements that limit the level of opacity, prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures for a source to assure continuous emission reduction.

(b) With the exception stated in Paragraphs (c) and (d) of this Rule, the degree of emission limitations required by any Rule in this Subchapter shall not be affected by:

(1) that amount of a stack height that exceeds good engineering practice; or

(2) any other dispersion technique.

(c) Paragraph (b) shall not apply to:

(1) stack heights in existence or dispersion techniques implemented before December 31, 1970, except where pollutants are being emitted from such stacks or using such dispersion techniques by sources, as defined in Section 111(a)(3) of the Clean Air Act, which were constructed, or reconstructed, or for which major modifications, as defined in Sec. 3D-0530 (b) and 0531 (b) were carried out after December 31, 1970; or

(2) coal-fired steam electric generating units, subject to provisions of Section 118 of the federal Clean Air Act, which began operation before July 1, 1957, and whose stacks were constructed under a construction contract awarded before February 8, 1974.

However, these exemptions shall not apply to a new stack that replaces a stack that is exempted by Subparagraphs (1) and (2) of this Paragraph. These exemptions shall not apply to a new source using a stack that is exempted by Subparagraphs (1) and (2) of this Paragraph.

(d) This Rule shall not restrict the actual stack height of any source. (Ord. No. 9-94, 12-19-94)

Sec. 3D-0534. Fluoride emissions from phosphate fertilizer industry

(a) Emissions of total fluorides shall not exceed:

(1) 0.020 pounds per ton of phosphorus-bearing material fed to any wet-process phosphoric acid plant;

(2) 0.010 pounds per ton of phosphorus-bearing material fed to any superphosphoric acid plant;

(3) 0.40 pounds per ton of phosphorus-bearing material fed to any granular diammonium phosphate plant;

(4) 0.20 pounds per ton of phosphorus-bearing material fed to any run-of-pile triple superphosphate plant including curing and storing process;

(5) 0.20 pounds per ton of phosphorus-bearing material fed to any granular triple superphosphate plant that began operating after December 31, 1969;

(6) 0.40 pounds per ton of phosphorus-bearing material fed to any granular triple superphosphate plant that began operating before January 1, 1970; and

(7) 0.00050 pounds per hour per ton of phosphorus-bearing material cured or stored at any curing or storage facility associated with a granular triple superphosphate plant.

(b) The phosphorus-bearing material mentioned in Paragraph (a) of this Regulation shall be expressed as phosphorus pentoxide. (Ord. No. 9-94, 12-19-94)

Sec. 3D-0535. Excess emissions reporting and malfunctions

(a) For the purposes of this Rule the following definitions apply:

(1) "Excess Emissions" means an emission rate that exceeds any applicable emission limitation or standard allowed by any Rule in Sections 3D-0500, 0900, 1200 or 1400; or by a permit condition; or that exceeds an emission limit established in a permit issued under Forsyth County Code, Section 3Q-0700.

(2) "Malfunction" means any unavoidable failure of air pollution control equipment, process equipment, or process to operate in a normal and usual manner that results in excess emissions. Excess emissions during periods of routine start-up and shut-down of process equipment shall not be considered a malfunction. Failures caused entirely or in part by poor maintenance, careless operations or any other upset condition within the control of the emission source are not considered a malfunction.

(3) "Start-up" means the commencement of operation of any source that has shut-down or ceased operation for a period of time sufficient to cause temperature, pressure, process, chemical, or pollution control device imbalance that would result in excess emissions.

(4) "Shut-down" means the cessation of the operation of any source for any purpose.

(b) This Rule does not apply to sources to which Sec. 3D-0524, 1110 or 1111 applies unless excess emissions exceed an emission limit established in a permit issued under Forsyth County Code, Section 3Q-0700 that is more stringent than the emission limit set by Sec. 3D-0524, 1110 or 1111.

(c) Any excess emissions that do not occur during start-up or shut-down are considered a violation of the appropriate rule unless the owner or operator of the source of excess emissions demonstrates to the Director, that the excess emissions are the result of a malfunction. To determine if

the excess emissions are the result of a malfunction, the Director shall consider, along with any other pertinent information, the following:

(1) the air cleaning device, process equipment, or process has been maintained and operated, to the maximum extent practicable, consistent with good practice for minimizing emissions;
(2) repairs have been made expeditiously when the emission limits have been exceeded;
(3) the amount and duration of the excess emissions, including any bypass, have been minimized to the maximum extent practicable;
(4) all practical steps have been taken to minimize the impact of the excess emissions on ambient air quality;
(5) the excess emissions are not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
(6) the requirements of Paragraph (f) of this Rule have been met; and
(7) if the source is required to have a malfunction abatement plan, it has followed that plan.

All malfunctions shall be repaired as expeditiously as practicable. However, the Director shall not excuse excess emissions caused by malfunctions from a source for more than 15 percent of the operating time during each calendar year. The owner or operator of a facility shall maintain records of the time that a source operates when it or its air pollution control equipment is malfunctioning or otherwise has excess emissions. (Paragraph (c) is not included in Forsyth County's portion of the State Implementation Plan.)

(d) All electric utility boiler units shall have a malfunction abatement plan approved by the Director as satisfying the requirements of Subparagraphs (1) through (3) of this Paragraph. In addition, the Director may require any other source to have a malfunction abatement plan approved by the Director as satisfying the requirements of Subparagraphs (1) through (3) of this Paragraph. If the Director requires a malfunction abatement plan for a source other than an electric utility boiler, the owner or operator of that source shall submit a malfunction abatement plan within 60 days after receipt of the Director's request. The malfunction abatement plans of electric utility boiler units and of other sources required to have them shall be implemented when a malfunction or other breakdown occurs. The purpose of the malfunction abatement plan is to prevent, detect, and correct malfunctions or equipment failures that could result in excess emissions. A malfunction abatement plan shall contain:

(1) a complete preventive maintenance program including:
    (A) the identification of individuals or positions responsible for inspecting, maintaining and repairing air cleaning devices;
    (B) a description of the items or conditions that will be inspected and maintained;
    (C) the frequency of the inspection, maintenance services, and repairs; and
    (D) an identification and quantities of the replacement parts that shall be maintained in inventory for quick replacement;
(2) an identification of the source and air cleaning operating variables and outlet variables, such as opacity, grain loading, and pollutant concentration, that may be monitored to detect a malfunction or failure; the normal operating range of these variables and a description of the method of monitoring or surveillance procedures

and of informing operating personnel of any malfunctions, including alarm systems, lights or other indicators; and

(3) a description of the corrective procedures that the owner or operator will take in case of a malfunction or failure to achieve compliance with the applicable rule as expeditiously as practicable but no longer than the next boiler or process outage that would provide for an orderly repair or correction of the malfunction or 15 days, whichever is shorter. If the owner or operator anticipates that the malfunction would continue for more than 15 days, a case-by-case repair schedule shall be established by the Director with the source.

The owner or operator shall maintain logs to show that the operation and maintenance parts of the malfunction abatement plan are implemented. These logs are subject to inspection by the Director or his designee upon request during business hours.

(e) The owner or operator of any source required by the Director to have a malfunction abatement plan shall submit a malfunction abatement plan to the Director within six months after it has been required by the Director. The malfunction abatement plan and any amendment to it shall be reviewed by the Director or his designee. If the plan includes the objectives described by Paragraph (d) of this Rule, the Director shall approve it. If the plan does not carry out the objectives described by Paragraph (d) of this Rule, the Director shall disapprove the plan. The Director shall state his reasons for the disapproval. The person who submits the plan shall submit an amendment to the plan to satisfy the reasons for the Director's disapproval within 30 days of receipt of the Director's notification of disapproval. Any person having an approved malfunction abatement plan shall submit to the Director for his approval amendments reflecting changes in any element of the plan required by Paragraph (d) of this Rule or amendments when requested by the Director. The malfunction abatement plan and amendments to it shall be implemented within 90 days upon receipt of written notice of approval.

(f) The owner or operator of a source of excess emissions that last for more than four hours and that results from a malfunction, a breakdown of process or control equipment, or any other abnormal conditions, shall:

(1) notify the Director or his designee of any such occurrence by 9:00 a.m. Eastern time of the Office's next business day of becoming aware of the occurrence and describe:
   (A) name and location of the facility;
   (B) the nature and cause of the malfunction or breakdown;
   (C) the time when the malfunction or breakdown is first observed;
   (D) the expected duration; and
   (E) an estimated rate of emissions;

(2) notify the Director or his designee after the corrective measures have been accomplished;

(3) submit to the Director within 15 days after the request a written report that includes:
   (A) name and location of the facility;
   (B) identification or description of the processes and control devices involved in the malfunction or breakdown;
   (C) the cause and nature of the event;

(D) time and duration of the violation or the expected duration of the excess emissions if the malfunction or breakdown has not been fixed;
(E) estimated quantity of pollutant emitted;
(F) steps taken to control the emissions and to prevent recurrences and if the malfunction or breakdown has not been fixed, steps planned to be taken; and
(G) any other pertinent information requested by the Director.

After the malfunction or breakdown has been corrected, the Director may require the owner or operator of the source to test the source in accordance with Section 3D-2600 to demonstrate compliance.

(g) Start-up and shut-down. Excess emissions during start-up and shut-down are considered a violation of the applicable rule if the owner or operator cannot demonstrate that the excess emissions are unavoidable. To determine if excess emissions are unavoidable during start-up or shut-down the Director shall consider the items listed in Subparagraphs (c)(1), (c)(3), (c)(4), (c)(5), and (c)(7) of this Rule along with any other pertinent information. The Director may specify for a particular source the amount, time, and duration of emissions allowed during start-up or shut-down if necessary to limit excess emissions and protect the NAAQS. The owner or operator shall, to the extent practicable, operate the source and any associated air pollution control equipment or monitoring equipment in a manner consistent with best practicable air pollution control practices to minimize emissions during start-up and shut-down. (Paragraph (g) is not included in Forsyth County's portion of the State Implementation Plan.)

Sec. 3D-0536. Particulate emissions from electric utility boilers (repealed)

Forsyth County has no electric utility boilers within its boundaries. (Ord. No. 9-94, 12-19-94, 5-14-01)

Sec. 3D-0537. Control of mercury emissions

(a) For the purpose of this Rule, the following definitions apply:
(1) "Mercury" means the element mercury, excluding any associated elements, and includes mercury in particulates, vapors, aerosols, and compounds.
(2) "Stationary source" means the total plant site. This includes all emissions (stacks, ducts, vents, openings, fugitives, etc.) to the atmosphere within the property boundary.

(b) This Rule shall apply to all new and existing stationary sources engaged in the handling or processing of mercury and not subject to standards on emissions for mercury in Sec. 3D-0530, 1110 or 1111.

(c) An owner or operator of a stationary source engaged in the handling or processing of mercury shall not cause, allow, or permit particulate or gaseous mercury emissions in excess of 2300 grams per day into the outdoor atmosphere. (Ord. No. 9-94, 12-19-94, 11-11-96)

Sec. 3D-0538. Control of ethylene oxide emissions

(a) For purposes of this Rule, "medical devices" means instruments, apparatus, implements, machines, implants, in vitro reagents, contrivances, or other similar or related articles including their

components, parts, and accessories, intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in man or other animals; or intended to affect the structure or any function of the body of man or other animals.

(b) This Rule applies to emissions of ethylene oxide resulting from use as a sterilant in:

(1) the production and subsequent storage of medical devices; or

(2) the packaging and subsequent storage of medical devices for sale;

at facilities for which construction began after August 31, 1992.

(c) This Rule does not apply to hospital or medical facilities.

(d) Facilities subject to this Rule shall comply with the following standards:

(1) For sterilization chamber evacuation, a closed loop liquid ring vacuum pump, or equipment demonstrated to be as effective at reducing emissions of ethylene oxide shall be used;

(2) For sterilizer exhaust, a reduction in the weight of uncontrolled emissions of ethylene oxide of at least 99.8 percent by weight shall be achieved;

(3) For sterilizer unload and backdraft valve exhaust, a reduction:

(A) in uncontrolled emissions of ethylene oxide of at least 99 percent by weight shall be achieved; or

(B) to no more than one part per million by volume of ethylene oxide shall be achieved.

(4) Sterilized product ethylene oxide residual shall be reduced by:

(A) a heated degassing room to aerate the products after removal from the sterilization chamber; the temperature of the degassing room shall be maintained at a minimum of 95^{o} Fahrenheit during the degassing cycle, and product hold time in the aeration room shall be at least 24 hours; or

(B) a process demonstrated to be as effective as Subparagraph (d)(4)(A) of this Rule.

(5) Emissions of ethylene oxide from the degassing area (or equivalent process) shall be vented to a control device capable of reducing uncontrolled ethylene oxide emissions by at least 99 percent by weight or to no more than one part per million by volume of ethylene oxide. The product aeration room and the product transfer area shall be maintained under a negative pressure;

(e) Before installation of the controls required by Paragraph (d) of this Rule, and annually thereafter, a written description of waste reduction, elimination, or recycling plan shall be submitted to determine if ethylene oxide use can be reduced or eliminated through alternative sterilization methods or process modifications.

(f) The owner or operator of the facility shall conduct a performance test to verify initial efficiency of the control devices. The owner or operator shall maintain temperature records to demonstrate proper operation of the degassing room. Such records shall be retained for a period of at least two calendar years and shall be made available for inspection by Office of Environmental Assistance and Protection personnel.

(g) If the owner or operator of a facility subject to the Rule demonstrates, using the procedures in Sec. 3D-1106, that the emissions of ethylene oxide from all sources at the facility do not cause the acceptable ambient level of ethylene oxide in Sec. 3D-1104 to be exceeded, then the requirements of Paragraphs (d) through (e) of this Rule shall not apply. This demonstration shall be at the option of the owner or operator of the facility. If this option is chosen, the Director shall write the facility's permit to satisfy the requirements of Sec. 3D-1104 (a). (Ord. No. 9-94, 12-19-94,11-22-04)

Sec. 3D-0539. Odor control of feed ingredient manufacturing plants

(a) Applicability. The requirements of this Rule apply to any facility that produces feed-grade animal proteins or feed-grade animal fats and oils, but do not apply to any portions of such facilities that are engaged exclusively in the processing of food for human consumption.

(b) This Rule does not apply to those facilities solely engaged in the processing of marine byproducts. Those facilities, however, shall continue to control their odorous emissions in accordance with Sec. 3D-0522.

(c) A person shall not allow, cause, or permit the operation or use of any device, machine, equipment, or other contrivance to process material to be used in the production of feed-grade animal proteins or feed-grade animal fats and oils unless all gases, vapors, and gas-entrained effluents from these processes are passed through condensers to remove all steam and other condensible materials. All noncondensibles passing through the condensers shall then be incinerated at 1200 degrees Fahrenheit for a period of not less than 0.3 seconds, or treated in an equally effective manner.

(d) Measurement and Recording Requirements. Any person processing or incinerating gases, vapors, or gas-entrained matter as required by Paragraph (c) of this Rule shall install, operate, and maintain in good working order and calibration continuous measuring and recording devices for equipment operational parameters to document equipment operation in accordance with this Rule. In addition, the owner or operator of the facility shall:

(1) demonstrate that the measuring and recording devices are capable of verifying the compliance status of the equipment on a continuous basis;

(2) describe the parameters to be used to determine the compliance status and how these parameters:

(A) are to be measured,

(B) are to be used to determine compliance status; and

(3) provide a quality assurance program approved by the Director for all monitoring devices and systems that includes:

(A) procedures and frequencies for calibration,

(B) standards traceability,

(C) operational checks,

(D) maintenance schedules and procedures,

(E) auditing schedules and procedures,

(F) data validation, and

(G) schedule for implementing the quality assurance program.

These data shall be available to the Director upon request.

(e) A person shall not allow, cause, or permit the installation or operation of expeller units unless they are properly hooded and all exhaust gases are collected or ducted to odor control equipment.

(f) A person subject to this Rule shall not cause or permit any raw material to be handled, transported, or stored, or to undertake the preparation of any raw material without taking reasonable precautions to prevent odors from being discharged. For the purpose of this Rule, such raw material is in "storage" after it has been unloaded at a facility or after it has been located at the facility for at least 24 hours. Reasonable precautions shall include the following:

(1) storage of all raw material before or in the process of preparation, in properly enclosed and vented equipment or areas, together with the use of effective devices and methods to prevent the discharge of odor bearing gases;

(2) use of covered vehicles or containers of watertight construction for the handling and transporting of any raw material; and

(3) use of hoods and fans to enclose and vent the storage, handling, preparation, and conveying of any odorous materials together with effective devices or methods, or both, to prevent emissions of odors or odor bearing gases.

(g) The owner or operator shall notify the Director within two business days after conditions are encountered that cause or may cause release of excessive and malodorous gases or vapors.

(h) Compliance Schedule. The owner or operator of a facility subject to this Rule that begins construction or is in operation before July 1, 1996, shall adhere to the following increments of progress and schedules:

(1) documentation that the facility complies with this Rule or an air permit application containing plans to bring the facility into compliance and a schedule shall be submitted by January 1, 1997;

(2) the compliance schedule shall contain the following increments of progress:

(A) a date by which contracts for the emission control system and process equipment shall be awarded or orders shall be issued for purchase of component parts;

(B) a date by which on-site construction or installation of the emission control and process equipment shall begin;

(C) a date by which on-site construction or installation of the emission control and process equipment shall be completed; and

(D) a date by which final compliance shall be achieved.

(3) The final compliance date under Subparagraph (2)(D) of this Paragraph shall be no later than July 1, 2001.

The owner or operator shall certify to the Director within five days after the deadline, for each increment of progress, whether the required increment of progress has been met.

(i) The owner or operator of a facility that begins construction after June 30, 1996, shall be in compliance with this Rule before beginning operation. (11-11-96)

Sec. 3D-0540. Particulates from fugitive non-process dust emission sources

(a) For the purpose of this Rule the following definitions apply:

(1) "Excess fugitive dust emission" means:

(A) Fugitive dust is visible extending beyond the facility's property line, or

(B) Upon inspection of settle dust on adjacent property, the Office finds that the dust came from the adjacent facility.

(2) "Fugitive dust emissions" means particulate matter that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as unloading and loading areas, process areas, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

(3) "Production of crops" means:

(A) cultivation of land for crop planting;

(B) crop irrigation;

(C) harvesting;

(D) on site curing,

(E) storage or preparation of crops; or

(F) protecting them from damage or disease conducted in according to practices acceptable to the North Carolina Department of Agriculture and Consumer Services.

(4) "Public parking" means an area dedicated to or maintained for the parking of vehicles by the general public.

(5) "Public roads" means any road that is part of the State highway system or any road, street or right-of-way dedicated or maintained for public use.

(6) "Substantive complaints" means complaints that are verified with physical evidence.

(b) This Rule does not apply to:

(1) abrasive blasting covered under Sec. 3D-0541,

(2) cotton ginning operations covered under Sec. 3D-0542,

(3) non-production military base operations,

(4) landing disturbing activities, such as clearing, grading, or digging and related activities such as hauling fill and cut material, building material, or equipment, or

(5) public roads, public parking, timber harvesting, or production of crops.

(c) The owner or operator of a facility required to have a permit under Subchapter 3Q or of a source subject to a requirement under Subchapter 3D shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or visible emissions in excess of that allowed under Paragraph (e) of this Rule.

(d) If fugitive dust emissions from a facility required to comply with this Rule cause or contribute to substantive complaints, the owner or operator of the facility shall:

(1) within 30 days upon receipt of written notification from the Director of a second substantive complaint in a 12-month period, submit to the Director a written report

that includes the identification of the probable source(s) of the fugitive dust emissions causing complaints and what measures can be made to abate the fugitive emissions;

(2) within 60 days of the initial report submitted under Subparagraph (1) of this Paragraph submit to the Director a control plan as described in Paragraph (f) of this Rule; and

(3) within 30 days after the Director approves the plan, be in compliance with the plan.

(e) If there is sufficient environmental benefit to justify a fugitive dust control plan, the Director shall require that the owner or operator of a facility covered by Paragraph (c) of this Rule, develop and submit a fugitive dust control plan as described in Paragraph (f) of this Rule if:

(1) ambient air quality measurements or dispersion modeling as provided in Sec. 3D-1106 (e) show violation or a potential for a violation of an ambient air quality standard for particulates in Section. 3D-0400; or

(2) the Office observes excessive fugitive dust emissions from the facility beyond the property boundaries for six minutes in any one hour using Reference Method 22 in 40 CFR 60, Appendix A.

(f) The fugitive dust control plan shall:

(1) identify the sources of fugitive dust emissions within the facility;

(2) describe how fugitive dust will be controlled from each identified source;

(3) contain a schedule by which the plan will be implemented;

(4) describe how the plan will be implemented, including training of facility personnel; and

(5) describe methods to verify compliance with the plan.

(g) The Director shall approve the plan if he finds that:

(1) the plan contains all required elements in Paragraph (f) of this Rule;

(2) the proposed schedule contained in the plan will reduce fugitive dust emissions in a timely manner;

(3) the methods used to control fugitive dust emissions are sufficient to prevent fugitive dust emissions from causing or contributing to a violation of the ambient air quality standards for particulates; and

(4) the described compliance verification methods are sufficient to verify compliance with the plan.

If the Director finds that the proposed plan does not meet the requirements of this Paragraph he shall notify the owner or operator of the facility of any deficiencies in the proposed plan. The owner or operator shall have 30 days after receiving written notification from the Director to correct the deficiencies or submit a schedule describing actions to be taken and the time by which they will be implemented.

(h) If after a plan has been implemented, the Director finds that the plan inadequately controls fugitive non-process dust emissions, he shall require the owner or operator of the facility to correct the deficiencies in the plan. Within 90 days after receiving written notification from the Director identifying the deficiency, the owner or operator of the facility shall submit a revision to his plan to correct the deficiencies. (9-14-98)

Sec. 3D-0541. Control of emissions from abrasive blasting

(a) For the purpose of this Rule, the following definitions apply:

(1) "Abrasives" means any material used in abrasive blasting operations.

(2) "Abrasive blasting" means the operation of cleaning or preparing a surface by forcibly propelling a stream of abrasive material against the surface. Sandblasting is one form of abrasive blasting.

(3) "Abrasive blasting equipment" means any equipment used in abrasive blasting operations.

(4) “Fugitive dust emissions” means emissions of particulate matter into the outdoor atmosphere that is not vented or captured by a stack or chimney.

(5) "Building" means a structure with four or more sides and a roof that is used, in whole or in part, to house or contain abrasive blasting.

(b) The owner or operator shall ensure that any abrasive blasting operation conducted outside a building or conducted indoors and vented to the atmosphere is performed in accordance with the requirements set forth in Sec. 3D-0521, Control of Visible Emissions. For the purposes of this Rule, the visible emissions reading for abrasive blasting performed outside a building shall be taken at a spot approximately one meter above the point of abrasive blasting with a viewing distance of approximately five meters.

(c) Except as provided in Paragraph (d) of this Rule, all abrasive blasting operations shall be conducted within a building.

(d) An abrasive blasting operation conducted under one or more of the following conditions is not required to be conducted within a building:

(1) when the item to be blasted exceeds eight feet in any dimension,

(2) when the surface being blasted is situated at its permanent location or not further away from its permanent location than is necessary to allow the surface to be blasted, or

(3) when the abrasive blasting operation is conducted at a private residence or farm and the visible emissions created by this abrasive blasting operation do not migrate beyond the property boundary of the private residence or farm on which the abrasive blasting operation is being conducted.

(e) The owner or operator of any abrasive blasting operation conducted in accordance with Subparagraphs (d)(1) and (d)(2) of this Rule, outside a building, shall take appropriate measures to ensure that the fugitive dust emissions created by the abrasive blasting operation do not migrate beyond the property boundaries in which the abrasive blasting operation is being conducted. Appropriate measures include the following:

(1) the addition of a suppressant to the abrasive blasting material,

(2) wet abrasive blasting,

(3) hydroblasting,

(4) vacuum blasting,

(5) shrouded blasting, or

(6) shrouded hydroblasting. (7-24-00)

Sec. 3D-0542. Control of particulate emissions from cotton ginning operations

(a) Purpose. The purpose of this Rule is to establish control requirements for particulate emissions from cotton ginning operations.

(b) Definitions. For the purposes of this Rule the following definitions apply:

(1) "1D-3D cyclone" means any cyclone-type collector of the 1D-3D configuration. This designation refers to the ratio of the cylinder to cone length, where D is the diameter of the cylinder portion. A 1D-3D cyclone has a cylinder length of 1xD and a cone length of 3xD.

(2) "2D-2D cyclone" means any cyclone-type collector of the 2D-2D configuration. This designation refers to the ratio of the cylinder to cone length, where D is the diameter of the cylinder portion. A 2D-2D cyclone has a cylinder length of 2xD and a cone length of 2xD.

(3) "Bale" means a compressed and bound package of cotton lint, nominally weighing 500 pounds.

(4) "Existing facility" means a cotton ginning operation that operated prior to July 1, 2002.

(5) "Ginning operation" means any facility or plant that removes seed, lint, and trash or one or more combination of these from raw cotton or bales of lint cotton.

(6) "Ginning season" means the period of time during which the gin is in operation, which is generally from September of the current year through January of the following year;

(7) "High pressure exhausts" means the exhaust air systems at a cotton gin that are not defined as Alow pressure exhausts.

(8) "Low pressure exhausts" means the exhaust cotton handling systems located at a cotton gin that handle air from the cotton lint handling system and battery condenser.

(c) Applicability. This rule applies to all existing, new, and modified cotton ginning operations. Existing facilities with a maximum rated capacity of less than 20 bales per hour that do not have cyclones on lint cleaners and battery condensers as of July 1, 2002 are not be required to add:

(1) the emission control devices in Paragraph (d)(1) of this Rule to lint cleaning exhausts if emissions from the lint cleaning are controlled by fine mesh screens; and

(2) the emission control devices in Paragraph (d)(2) of this Rule to battery condenser exhausts if the emissions from the battery condenser are controlled by fine mesh screens.

(d) Emission Control Requirements. The owner or operator of each cotton ginning operation shall control particulate emissions from the facility by controlling:

(1) All high pressure exhausts and lint cleaning exhausts with an emission control system that includes:

(A) one or more 1D-3D or 2D-2D cyclones to achieve 95 percent efficiency; or

(B) a device with a minimum of 95 percent efficiency.

(2) Low pressure exhausts, except lint cleaning exhausts, by an emission control system that includes:

(A) one or more 1D-3D or 2D-2D cyclones to achieve 90 percent efficiency; or

(B) a device with at least a 90 percent efficiency.

Efficiency is based on the removal of particulate matter between the cyclone's inlet and outlet; it is measured using test methods in Section 3D-2600.

(e) Raincaps. Exhausts from emission points or control devices shall not be equipped with raincaps or other devices that deflect the emissions downward or outward.

(f) Operation and Maintenance. To ensure that optimum control efficiency is maintained, the owner or operator shall establish, based on manufacturers recommendations, an inspection and maintenance schedule for the control devices, other emission processing equipment, and monitoring devices that are used pursuant to this Rule. The inspection and maintenance schedule shall be followed throughout the ginning season. The results of the inspections and any maintenance performed on the control equipment, emission processing equipment, or monitoring devices shall be recorded in the log book required in Paragraph (k) of this Rule.

(g) Fugitive Emissions. The owner or operator shall minimize fugitive emissions from cotton ginning operations as follows.

(1) The owner or operator of a

(A) trash stacker shall:

(i) install, maintain, and operate a three sided enclosure with a roof whose sides are high enough above the opening of the dumping device to prevent wind from dispersing dust or debris; or

(ii) install, maintain, and operate a device to provide wet suppression at the dump area of the trash cyclone and minimize free fall distance of waste material exiting the trash cyclone; or

(B) trash stacker/trash composting system shall install, maintain, and operate a wet suppression system providing dust suppression in the auger box assembly and at the dump area of the trash stacker system. The owner or operator shall keep the trash material wet and compost it in place until the material is removed from the dump area for additional composting or disposal.

(2) Gin Yard. The owner or operator shall clean and dispose of accumulations of trash or lint on the non-storage areas of the gin yard daily.

(3) Traffic areas. The owner or operator shall clean paved roadways, parking, and other traffic areas at the facility as necessary to prevent re-entrainment of dust or debris. The owner or operator shall treat unpaved roadways, parking, and other traffic areas at the facility with wet or chemical dust suppressant as necessary to prevent dust from leaving the facility's property and shall install and maintain signs limiting vehicle speed to 10 miles per hour where chemical suppression is used and to 15 miles per hour where wet suppression is used.

(4) Transport of Trash Material. The owner or operator shall ensure that all trucks transporting gin trash material are covered and that the trucks are cleaned of over-spill material before trucks leave the trash hopper dump area. The dump area shall be cleaned daily.

(h) Alternative Control Measures. The owner or operator of a ginning operation may petition for use of alternative control measures to those specified in this Rule. The petition shall include:

(1) the name and address of the petitioner;

(2) the location and description of the ginning operation;

(3) a description of the alternative control measure;

(4) a demonstration that the alternative control measure is at least as effective as the control device or method specified in this Rule.

(i) Approval of Alternative Control Measure. The Director shall approve the alternative control measure if he finds that:

(1) all the information required by Paragraph (h) of this Rule has been submitted; and

(2) the alternative control measure is at least as effective as the control device or method specified in this Rule.

(j) Monitoring.

(1) The owner or operator of each ginning operation shall install, maintain, and calibrate monitoring devices that measure pressures, rates of flow, and other operating conditions necessary to determine if the control devices are functioning properly.

(2) Before or during the first week of operation of the 2002-2003 ginning season, the owner or operator of each gin shall conduct a baseline study of the entire dust collection system, without cotton being processed, to ensure air flows are within the design range for each collection device. For 2D-2D cyclones the air flow design range is 2700 to 3600 feet per minute. For 1D-3D cyclones the design range is 2800 to 3600 feet per minute. For other control devices the air flow design range is that found in the manufacturer's specifications. Gins constructed after the 2002-2003 ginning season shall conduct the baseline study before or during the first week of operation of the first ginning season following construction. During the baseline study the owner or operator shall measure or determine according to the methods specified in this Paragraph and record in a logbook:

(A) the calculated inlet velocity for each control device; and

(B) the pressure drop across each control device.

The owner or operator shall use Method 1 and Method 2 of 40 CFR Part 60 Appendix A to measure flow and static pressure and determine inlet velocity or the USDA method for determining duct velocity and static pressure in Agricultural Handbook Number 503, *Cotton Ginners Handbook*, dated December 1994. The Cotton Ginners Handbook method shall only be used where test holes are located a minimum of eight and one-half pipe diameters downstream and one and one-half pipe diameters upstream from elbows, valves, dampers, changes in duct diameter or any other flow disturbances. Where Method 2 is used a standard pitot tube may be used in lieu of the s-pitot specified in Method 2 subject to the conditions specified in Paragraph 2.1 of Method 2.

(3) On a monthly basis following the baseline study, the owner or operator shall measure and record in the logbook the static pressure at each port where the static pressure was measured in the baseline study. Measurements shall be made using a manometer, a Magnahelic 7 gauge, or other device that the Director has approved as being equivalent to a manometer. If the owner or operator measures a change in static pressure of 20 percent or more from that measured in the baseline study, the owner or operator shall initiate corrective action. Corrective action shall be recorded in the logbook. If corrective action will take more than 48 hours to complete, the owner or operator shall notify the regional supervisor of the region in which the ginning operation is located as soon as possible, but by no later than the end of the day such static pressure is measured.

(4) When any design changes to the dust control system are made, the owner or operator shall conduct a new baseline study for that portion of the system and shall record the new values in the logbook required in Paragraph (k) of this Rule. Thereafter monthly static pressure readings for that portion of the system shall be compared to the new values.

(5) During the ginning season, the owner or operator shall daily inspect for structural integrity of the control devices and other emissions processing systems and shall ensure that the control devices and emission processing systems conform to normal and proper operation of the gin. If a problem is found, corrective action shall be taken and recorded in the logbook required in Paragraph (k) of this Rule.

(6) At the conclusion of the ginning season, the owner or operator shall conduct an inspection of the facility to identify all scheduled maintenance activities and repairs needed relating to the maintenance and proper operation of the air pollution control devices for the next season. Any deficiencies identified through the inspection shall be corrected before beginning operation of the gin for the next season.

(k) Recordkeeping. The owner operator shall establish and maintain on-site a logbook documenting the following items:

(1) Results of the baseline study as specified in Paragraph (j)(2) of this Rule;

(2) Results of new baseline studies as specified in Paragraph (j)(4) of this Rule;

(3) Results of monthly static pressure checks and any corrective action taken as specified in Paragraph (j)(3) of this Rule;

(4) Observations from daily inspections of the facility and any resulting corrective actions taken as required in Paragraph (j)(5) of this Rule; and

(5) A copy of the manufacturer's specifications for each type of control device installed.

The logbook shall be maintained on site and made available to Office representatives upon request.

(l) Reporting. The owner or operator shall submit by March 1 of each year a report containing the following:

(1) the name and location of the cotton gin;

(2) the number of bales of cotton produced during the previous ginning season;

(3) a maintenance and repair schedule based on inspection of the facility at the conclusion of the previous cotton ginning season required in Paragraph (j)(6) of this Rule; and

(4) signature of the appropriate official as identified in Sec. 3Q-0304 (j), certifying as to the truth and accuracy of the report.

(m) Compliance Schedule. Existing sources shall comply as specified in Paragraph (d) of this Rule. New and modified sources shall be in compliance upon start-up.

(n) Record retention. The owner or operator shall retain all records required to be kept by this Rule for three years from the date of recording. (7-22-02)

Sec. 3D-0543. Best available retrofit technology

(a) For the purposes of this Rule, the definitions at 40 CFR 51.301 shall apply.

(b) Mandatory Class I Federal areas are identified in 40 CFR Part 81, Subpart D.

(c) The Director shall have the maximum flexibility allowed under 40 CFR 51.308 or 40 CFR Part 51, Appendix Y.

(d) This rule applies to BART-eligible sources as determined using 40 CFR Part 51, Appendix Y that cause or contribute to any visibility impairment in a mandatory Class I Federal area as determined by using 40 CFR Part 51, Subpart P.

(e) Unless exempted under 40 CFR 51.303, the owner or operator of a BART-eligible emission unit subject to this Rule shall perform a best available retrofit technology (BART) evaluation for that emission unit. Pursuant to 40 CFR 51.308, the evaluation shall include:

(1) the technology available,

(2) the cost of compliance,

(3) the energy and non-air quality environmental impacts of compliance,

(4) any pollution control equipment in use at the source,

(5) the remaining useful life of the source, and

(6) the degree of improvement in visibility that may reasonably be anticipated to result from the use of such technology.

(f) The owner or operator of a BART-subject emission unit shall install, operate, and maintain BART as approved by the Director after considering the six items listed in Paragraph (e)of this Rule and incorporated in the unit's permit issued under Subchapter 3Q of the Forsyth County Code.

(g) The owner or operators of a BART-eligible source required to install BART under this Rule shall submit permit applications for the installation and operation of BART by February 1, 2006. The Director shall extend the deadline for submitting a permit application if additional time is needed to complete the evaluation required under Paragraph (e) of this Rule.

(h) BART shall be determined using "Guidelines for Determining Best Available Retrofit Technology for Coal-fired Power Plants and Other Existing Stationary Facilities" (1980), 40 CFR 51.308(e)(1)(ii), and 40 CFR Part 51, Appendix Y. Electric generating units covered under and complying with Forsyth County Code, Subchapter 3D, Section 3D-2400, Clean Air Interstate Rules, are considered to be in compliance with the BART requirements for nitrogen oxides and sulfur dioxide under this Rule.

(i) The owner or operator of a BART-eligible source required to install BART under this Rule shall have installed and begun operation of the BART controls by December 31, 2012.

(j) "Guidelines for Determining Best Available Retrofit Technology for Coal-fired Power Plants and Other Existing Stationary Facilities" is incorporated by reference, exclusive of appendix E, and shall include any later amendments or editions. This document, which was published in the Federal Register on February 6, 1980 (45 FR 8210), is EPA publication No. 450/3–80–009b and can be obtained from the U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161 for $84.00. It is also available for inspection at the National Archives and Records Administration (NARA). Information on the availability of this material at NARA may be found at: *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.*

Sec. 3D-0544. Prevention of significant deterioration requirements for greenhouse gases

(a) The purpose of this Rule is to implement a program for the prevention of significant deterioration of air quality for greenhouse gases as required by 40 CFR 51.166. For purposes of greenhouse gases, the provisions of this Rule shall apply rather than the provisions of Sec. 3D-0530. For all other regulated NSR pollutants, the provisions of Sec. 3D-0530 apply. A major stationary source or major modification shall not be required to obtain a prevention of significant deterioration (PSD) permit on the sole basis of its greenhouse gases emissions. For all other regulated new source review (NSR) pollutants, the provisions of Sec-3D-0530 of this Section apply.

(b) For the purposes of this Rule, the definitions contained in 40 CFR 51.166(b) and 40 CFR 51.301 shall apply except the definition of "baseline actual emissions". "Baseline actual emissions" means the rate of emissions, in tons per year, of a regulated new source review (NSR) pollutant, as determined in accordance with Subparagraphs (1) through (3) of this Paragraph:

(1) For an existing emissions unit, baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding the date that a complete permit application is received by the Office for a permit required under this Rule. The Director shall allow a different time period, not to exceed 10 years immediately preceding the date that a complete permit application is received by the Office, if the owner or operator demonstrates that it is more representative of normal source operation. For the purpose of determining baseline actual emissions, the following shall apply:

(A) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions;

(B) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period;

(C) For an existing emission unit (other than an electric utility steam generating unit), the average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major

stationary source must currently comply. However, if the State has taken credit in an attainment demonstration or maintenance plan consistent with the requirements of 40 CFR 51.165(a)(3)(ii)(G) for an emission limitation that is part of a maximum achievable control technology standard that the Administrator proposed or promulgated under part 63 of the Code of Federal Regulations, the baseline actual emissions shall be adjusted to account for such emission reductions;

(D) For an electric utility steam generating unit, the average rate shall be adjusted downward to reflect any emissions reductions under G. S. 143-215.107D and for which cost recovery is sought pursuant to G. S. 62-133.6;

(E) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period shall be used to determine the baseline actual emissions for all the emissions units being changed. A different consecutive 24-month period for each regulated NSR pollutant can be used for each regulated NSR pollutant; and

(F) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by Parts (B) and (C) of this Subparagraph;

(2) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit; and

(3) For a plantwide applicability limit (PAL) for a stationary source, the baseline actual emissions shall be calculated for existing emissions units in accordance with the procedures contained in Subparagraph (1) of this Paragraph and for a new emissions unit in accordance with the procedures contained in Subparagraph (2) of this Paragraph.

(c) In the definition of "net emissions increase," the reasonable period specified in 40 CFR 51.166(b)(3)(ii) shall be seven years.

(d) The limitation specified in 40 CFR 51.166(b)(15)(ii) shall not apply.

(e) Major stationary sources and major modifications shall comply with the requirements contained in 40 CFR 51.166(i) and (a)(7) and by extension in 40 CFR 51.166(j) through (o) and (w). The transition provisions allowed by 40 CFR 52.21 (i)(11)(i) and (ii) and (m)(1)(vii) and (viii) are hereby adopted under this Rule. The minimum requirements described in the portions of 40 CFR 51.166 referenced in this Paragraph are hereby adopted as the requirements to be used under this Rule, except as otherwise provided in this Rule. Wherever the language of the portions of 40 CFR 51.166 referenced in this Paragraph speaks of the "plan," the requirements described therein shall apply to the source to which they pertain, except as otherwise provided in this Rule Whenever the portions of 40 CFR 51.166 referenced in this Paragraph provide that the State plan may exempt or not apply certain requirements in certain circumstances, those exemptions and provisions of nonapplicability are also hereby adopted under

this Rule. However, this provision shall not be interpreted so as to limit information that may be requested from the owner or operator by the Director as specified in 40 CFR 51.166(n)(2).

(f) 40 CFR 51.166(w)(10)(iv)(a) is changed to read: "If the emissions level calculated in accordance with Paragraph (w)(6) of this Section is equal to or greater than 80 percent of the PAL [plant wide applicability limit] level, the Director shall renew the PAL at the same level." 40 CFR 51.166(w)(10)(iv)(b) is not incorporated by reference.

(g) Sec. 3Q-0102 and 0302 are not applicable to any source to which this Rule applies. The owner or operator of the sources to which this Rule applies shall apply for and receive a permit as required in Sec. 3Q-0300 or 0500.

(h) When a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification to emit a pollutant, such as a restriction on hours of operation, then the provisions of this Rule shall apply to the source or modification as though construction had not yet begun on the source or modification.

(i) The provisions of 40 CFR 52.21(r)(2) regarding the period of validity of approval to construct are incorporated by reference except that the term "Administrator" is replaced with "Director".

(j) Permits may be issued based on innovative control technology as set forth in 40 CFR 51.166(s)(1) if the requirements of 40 CFR 51.166(s)(2) have been met, subject to the condition of 40 CFR 51.166(s)(3), and with the allowance set forth in 40 CFR 51.166(s)(4).

(k) A permit application subject to this Rule shall be processed in accordance with the procedures and requirements of 40 CFR 51.166(q). Within 30 days of receipt of the application, applicants shall be notified if the application is complete as to initial information submitted. Commencement of construction before full prevention of significant deterioration approval is obtained constitutes a violation of this Rule.

(l) Approval of an application with regard to the requirements of this Rule shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of other rules of this Subchapter or Subchapter 3Q and any other requirements under local, state, or federal law.

(m) If the owner or operator of a source is using projected actual emissions to avoid applicability of prevention of significant deterioration requirements, the owner or operator shall notify the Director of the modification before beginning actual construction. The notification shall include:

(1) a description of the project;
(2) identification of sources whose emissions could be affected by the project;
(3) the calculated projected actual emissions and an explanation of how the projected actual emissions were calculated, including identification of emissions excluded by 40 CFR 51.166(b)(40)(ii)(c);
(4) the calculated baseline actual emissions and an explanation of how the baseline actual emissions were calculated; and
(5) any netting calculations if applicable.

If upon reviewing the notification, the Director finds that the project will cause a prevention of significant deterioration evaluation, then the Director shall notify the owner or operator of his findings. The owner or operator shall not make the modification until it has received a permit issued pursuant to this Rule. If a

permit revision is not required pursuant to this Rule, the owner or operator shall maintain records of annual emissions in tons per year, on a calendar year basis related to the modifications for 10 years following resumption of regular operations after the change if the project involves increasing the emissions unit's design capacity or its potential to emit the regulated NSR pollutant; otherwise these records shall be maintained for five years following resumption of regular operations after the change. The owner or operator shall submit a report to the Director within 60 days after the end of each year during which these records must be generated. The report shall contain the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c). The owner or operator shall make the information documented and maintained under this Paragraph available to the Director or the general public pursuant to the requirements in 40 CFR 70.4(b)(3)(viii).

(n) The references to the Code of Federal Regulations (CFR) in this Rule are incorporated by reference unless a specific reference states otherwise. The version of the CFR incorporated in this Rule is that as of July 20, 2011 and does not include any subsequent amendments or editions to the referenced material. This Rule is applicable as of its effective date in accordance with 40 CFR 51.166(b)(48) and (b)(49)(iv) and (v).

Sec. 3D-0545. Reserved

SECTION 3D-0600. MONITORING: RECORDKEEPING: REPORTING

Sec. 3D-0601. Purpose and scope

(a) The purpose of this Section is to set forth the requirements of the Forsyth County Board of Commissioners for monitoring air pollution emissions and filing reports covering their discharge into the outdoor atmosphere of the state.

(b) This Section shall apply to all persons subject to the provisions of this Subchapter or Subchapter 3Q.

(c) Monitoring, recordkeeping, and reporting may also be required by other Rules including Sec. 3D-0524, 0536, 1110 or 1111 of this Subchapter. (Ord. No. 9-94, 12-19-94, 11-11-96, 5-24-99)

Sec. 3D-0602. Definitions

For the purpose of this Section, the following definitions apply:

(1) “Applicable requirement” means any rule, standard, or requirement of this Subchapter, or Subchapter 3Q of this Chapter .

(2) “Calendar quarter” means:
- (A) the time period from January 1 through March 31;
- (B) the time period from April 1 through June 30;
- (C) the time period from July 1 through September 30; or
- (D) the time period from October 1 through December 31.

(3) "Capacity factor" means the ratio of the average load on a machine or equipment for the time period considered to the capacity rating of the machine or equipment.

(4) "Distillate oils" means fuel oil, including recycled oil, that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D-396, "Standard Specification for Fuel Oils".

(5) "Emission standard " means a rule setting forth an allowable rate of emissions, level of opacity, or prescribing equipment, fuel specifications, workplace standards, or material usage that result in control of air pollution emissions;

(6) "Excess emissions" means emissions of an air pollutant in excess of an emission standard.

(7) "Fossil fuel-fired steam generator" means a furnace or boiler used in the process of burning fossil fuel for the primary purpose of producing steam by heat transfer.

(8) "Nitric acid plant" means any facility producing nitric acid 30 to 70 percent in strength by either the pressure or atmospheric pressure process.

(9) “Permit condition” means
- (a) a condition set to comply with or to avoid any applicable requirement; or
- (b) a condition set to maintain compliance with toxic air pollutant acceptable ambient levels or ambient air quality standards.

(10) "Petroleum refinery" means any facility engaged in producing gasoline, kerosene, distillate oils, residual oils, lubricants, or other products through the distillation of

petroleum, or through the redistillation, cracking, or reforming of unfinished petroleum derivatives.

(11) "Residual oils" means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, or all fuel oil numbers 4, 5, and 6, as defined by the American Society for Testing and Materials in ASTM D-396, "Standard Specification for Fuel Oils".

(12) "Sulfuric acid plant" means any facility producing sulfuric acid by the contact process by burning elemental sulfur, alkylation acid, hydrogen sulfide, or acid sludge, but does not include facilities where conversion to sulfuric acid is utilized primarily as a means of preventing emissions to the atmosphere of sulfur dioxide or other sulfur compounds. (Ord. No. 9-94, 12-19-94, 5-24-99)

Sec. 3D-0603. Repealed

(12-19-94)

Sec. 3D-0604. Exceptions to monitoring and reporting requirements

(a) Unless a specific rule specifies otherwise, the owner or operator of a source shall not be required to monitor during a period of monitoring system malfunction or report emissions during a period of monitoring system malfunction if the owner or operator of the source shows, to the satisfaction of the Director, that the malfunction was unavoidable, is being repaired as expeditiously as practicable, and no applicable requirements are violated. The owner or operator of the source shall provide the Director documentation of continuous monitoring system performance when system repairs or adjustments have been made if the Director requests proof. Malfunctions of the monitoring system that result from inadequate or poor operation and maintenance practices shall not be exempted.

(b) Unless a specific rule specifies otherwise, the owner or operator of a source that operates less than 30 days per 12-month period shall not be required to monitor emissions from that source. However, the owner or operator shall maintain records to document that the source is operated less than 30 days per 12-month period.

(c) The owner or operator of a source exempted from needing a permit by Sec. 3Q-0102 shall not be required to monitor emissions from that source unless;

(1) required by a specific rule of this Subchapter or Subchapter 3Q of this Chapter, or

(2) required as a part of an enforcement settlement.

However, the owner or operator shall maintain records to document that the source qualifies for the permit exemption. (Ord. No. 9-94, 12-19-94, 5-24-99)

Sec. 3D-0605. General recordkeeping and reporting requirements

(a) The owner or operator of a source subject to a requirement of this Subchapter or Subchapter 3Q of this Chapter shall maintain:

(1) records detailing all malfunctions under Sec. 3D-0535,

(2) records of all testing conducted under rules in this Subchapter,
(3) records of all monitoring conducted under rules in this Subchapter or Subchapter 3Q of this Chapter,
(4) records detailing activities relating to any compliance schedule in this Subchapter, and
(5) for unpermitted sources, records necessary to determine compliance with rules in this Subchapter or Subchapter 3Q of this Chapter .

(b) The Director shall specify in the source's permit:
(1) the type of monitoring required and the frequency of the monitoring,
(2) the type of records to be maintained, and
(3) the type of reports to be submitted and the frequency of submitting these reports,
as necessary to determine compliance with rules in this Subchapter or Subchapter 3Q of this Chapter or with an emission standard or permit condition.

(c) If the Director has evidence that a source is violating an emission standard or permit condition, the Director may require that the owner or operator of any source subject to the requirements of this Subchapter or Subchapter 3Q of this Chapter submit to the Director any information necessary to determine the compliance status of the source.

(d) The owner or operator of a source of excess emissions which last for more than four hours and which results from a malfunction, a breakdown of process or control equipment, or any other abnormal conditions shall report excess emissions in accordance with the requirements of Sec. 3D-0535.

(e) Copies of all records and reports generated in response to the requirements of this Section shall be retained by the owner or operator for a period of two years after the date on which the record was made or the report submitted, except that the Director may extend the retention period in particular instances when necessary to comply with other County or federal requirements or when compliance with a particular standard requires documentation for more than two years.

(f) All records and reports generated in response to the requirements of this Section shall be made available to personnel of the Office for inspection.

(g) The owner or operator of a source subject to the requirements of this Section shall comply with the requirements of this Section at his own cost.

(h) No person shall falsify any information required by a rule in the Subchapter or a permit issued under Subchapter 3Q. No person shall knowingly submit any falsified information required by a rule in the Subchapter or a permit issued under Subchapter 3Q. (5-24-99)

Sec. 3D-0606. Sources covered by Appendix P of 40 CFR Part 51

(a) The following sources shall be monitored as described in Paragraph 2 of Appendix P of 40 CFR Part 51:
(1) fossil fuel-fired steam generators,
(2) nitric acid plants,
(3) sulfuric acid plants, and
(4) petroleum refineries,
Sources covered by Sec. 3D-0524 are exempt from this Rule.

(b) The monitoring systems required under Paragraph (a) of this Rule shall meet the minimum specifications described in Paragraphs 3.3 through 3.8 of Appendix P of 40 CFR Part 51.

(c) The excess emissions recorded by the monitoring systems required to be installed under this Rule shall be reported no later than 30 days after the end of the quarter to the Office in the manner described in Paragraphs 4 and 5.1 through 5.3.3 of Appendix P of 40 CFR Part 51 except that a six-minute time period is deemed as an appropriate alternative opacity averaging period as described in Paragraph 4.2 of Appendix P of 40 CFR Part 51. The owner or operators of any sources subject to this Rule that are required to monitor emissions of sulfur dioxide or nitrogen oxides under any other County or federal rule with continuous emission monitoring systems shall monitor compliance with the sulfur dioxide emission standard in Sec 3D-0516 and the nitrogen oxide emission standard in Sec. 3D-0519 or Section 3D-1400 with a continuous emission monitoring system. Compliance with sulfur dioxide and nitrogen oxide emission standards are determined by averaging hourly continuous emission monitoring system values over a 24-hour block period beginning at midnight. To compute the 24-hour block average, the average hourly values are summed, and the sum is divided by 24. A minimum of four data points, equally spaced, is required to determine a valid hour value unless the continuous emission monitoring system is installed to meet the provisions of 40 CFR Part 75. If a continuous emission monitoring system is installed to meet the provisions of 40 CFR Part 75, the minimum number of data points are determined by 40 CFR Part 75.

(d) For emissions of sulfur dioxide, fuel analysis may be used in place of a continuous emissions monitoring system if the source is not required to monitor emissions of sulfur dioxide using a continuous emissions monitoring system under another County or federal rule. If fuel analysis is used as an alternative method to determine emissions of sulfur dioxide, the test methods described in Section 3D-2600 shall be used except that gross or composite samples, gross caloric value, moisture content, and sulfur content shall be determined per shipment. Alternatively, gross or composite samples, gross caloric value, moisture content, and sulfur content may be determined sampling the fuel as fired if the owner or operator demonstrates to the Director that sampling as fired provides a more accurate estimation of sulfur dioxide emissions than sampling each shipment. If sulfur dioxide emissions are determined sampling fuel as fired, then a fuel sample shall be taken every four hours. These four-hour samples shall be composited into a daily sample, and the daily sample shall be composited into a weekly sample. This weekly sample shall be analyzed using the procedures in Section 3D-2600. The sulfur dioxide emission rate shall also be determined using fuel analysis data. Sulfur retention credit shall be granted and used for computing sulfur dioxide emission rates if a source, on a case-by-case basis, quantitatively and empirically demonstrates the sulfur retention.

(e) Wherever the language of the referenced portion of Appendix P of 40 CFR Part 51 speaks of the "state" or "state plan", the requirements described in Appendix P of 40 CFR Part 51 apply to those sources to which the requirements pertain.

(f) The owner or operator of the source shall conduct a daily zero and span check of the continuous opacity monitoring system following the manufacturer's recommendations and shall comply with the requirements of Sec. 3D-0613.

(g) The owner or operator of the source may request to use a different procedure or methodology than that required by this Rule if one of the conditions identified in 40 CFR Part 51,

Appendix P, Section 3.9 exists. The person requesting to use a different procedure or methodology shall submit the request to the Director along with a description of the different procedure or methodology proposed to be used, an explanation of why the procedure or methodology required by this Rule will not work, and a showing that the proposed procedure or methodology is equivalent to the procedure or methodology being replaced. The Director shall approve the use of this procedure or methodology if he finds that one of the conditions identified in 40 CFR Part 51, Appendix P, Section 3.9 exists, that the procedure or methodology required by this Rule will not work, and that the proposed procedure or methodology is equivalent to the procedure or methodology that it will replace.

(h) The owner or operator of the source shall report to the Director no later than 30 days following the end of the quarter the following information:

(1) for fuel analysis per shipment:
  (A) the quantity and type of fuels burned,
  (B) the BTU value,
  (C) the sulfur content in percent by weight, and
  (D) the calculated sulfur dioxide emission rates expressed in the same units as the applicable standard.

(2) for continuous monitoring of emissions:
  (A) the daily calculated sulfur dioxide and nitrogen oxide emission rates expressed in the same units as the applicable standard for each day and
  (B) other information required under Appendix P of 40 CFR Part 51.

(h) If emission testing for compliance with the sulfur dioxide emission standard is required, the testing shall be done according to 40 CFR Part 60, Appendix A, Method 6.

(i) If emission testing for compliance with the nitrogen oxide emission standard is required, the testing shall be done according to 40 CFR Part 60, Appendix A, Method 7. (Ord. No. 9-94, 12-19-94, 11-11-96, 5-24-99, 7-28-03)

Sec. 3D-0607. Large wood and wood-fossil fuel combination units

(a) This rule applies to wood-fired steam generator units with a heat input from wood fuels (or the sum of the heat inputs from wood fuels and liquid or solid fossil fuels for generators not covered by Sec. 3D-0524 or 0606) that exceeds 250 million Btu per hour and with an annual average capacity factor greater than 30 percent as demonstrated to the Director by the owner or operator of the source.

(b) The owner or operator of a wood-fired steam generator unit covered under this Rule shall install, calibrate, maintain, and operate, as specified in 40 CFR Part 60 Appendix B Performance Specification 1, opacity continuous emission monitoring systems on all stacks discharging the flue gases from one or more steam generator units covered under this Rule.

(c) The owner or operator of the source shall conduct a daily zero and span check of the opacity continuous emission monitoring system following the manufacturer's recommendations and shall comply with the requirements of Sec. 3D-0613.

(Ord. No. 9-94, 12-19-94, 5-24-99)

Sec. 3D-0608. Other large coal or residual oil burners

(a) The owner or operator of any fuel burning unit shall determine sulfur dioxide emissions into the ambient air if the unit:

(1) burns coal or residual oil;

(2) is not required to monitor sulfur dioxide emissions by Sec. 3D-0524 or 0606;

(3) has a total heat input of more than 250 million Btu per hour from coal and residual oil; and

(4) has an annual average capacity factor greater than 30 percent as determined from the three most recent calendar year reports to the Federal Power Commission or as otherwise demonstrated to the Director by the owner or operator. (If the unit has not been in existence for three calendar years, its three-calendar-year average capacity factor shall be determined by estimating its annual capacity factors for enough future years to allow a three-calendar-year average capacity factor to be computed. If this three-calendar-year average capacity factor exceeds 30 percent, the unit shall be monitored. If this three-calendar-year average capacity factor does not exceed 30 percent, the unit need not be monitored.)

(b) Once the unit is being monitored in accordance with Paragraph (a) of this Rule, it shall continue to be monitored until its most recent three-calendar-year average capacity factor does not exceed 25 percent. Once the unit is not being monitored in accordance with Paragraph (a) of this Rule, it need not be monitored until its most recent three-calendar-year average capacity factor exceeds 35 percent.

(c) If units required to be monitored have a common exhaust or if units required to be monitored have a common exhaust with units not required to be monitored, then the common exhaust may be monitored, and the sulfur dioxide emissions need not be apportioned among the units with the common exhaust.

(d) The owner or operator of the source shall determine sulfur dioxide emissions by:

(1) an instrument for continuous monitoring and recording sulfur dioxide emissions, or

(2) analyses of representative samples of fuels to determine Btu value and percent sulfur content.

(e) The owner or operators of any sources subject to this Rule that are required to monitor emissions of sulfur dioxide under any other County or federal rule with continuous emission monitoring systems shall monitor compliance with the sulfur dioxide emission standard in Sec. 3D-0516 with a continuous emission monitoring system. Compliance with sulfur dioxide emission standards is determined by averaging hourly continuous emission monitoring system values over a 24-hour block period beginning at midnight. To compute the 24-hour block average, the average hourly values are summed, and the sum is divided by 24. A minimum of four data points, equally spaced, is required to determine a valid hour value unless the continuous emission monitoring system is installed to meet the provisions of 40 CFR Part 75. If a continuous emission monitoring system is installed to meet the provisions of 40 CFR Part 75, the minimum number of data points are determined by 40 CFR Part 75.

(f) For emissions of sulfur dioxide, fuel analysis may be used in place of a continuous emissions monitoring system if the source is not required to monitor emissions of sulfur dioxide using a continuous

emissions monitoring system under another County or federal rule. If fuel analysis is used as an alternative method to determine emissions of sulfur dioxide, then:

(1) for coal, the test methods described in Section 3D-2600 shall be used except that gross or composite samples, gross caloric value, moisture content, and sulfur content shall be determined per shipment. Alternatively, gross or composite samples, gross caloric value, moisture content, and sulfur content may be determined sampling the fuel as fired if the owner or operator demonstrates to the Director that sampling as fired provides a more accurate estimation of sulfur dioxide emissions than sampling each shipment. If sulfur dioxide emissions are determined sampling fuel as fired, then a fuel sample shall be taken every four hours. These four-hour samples shall be composited into a daily sample, and the daily sample shall be composited into a weekly sample. This weekly sample shall be analyzed using the procedures in Section 3D-2600. The sulfur dioxide emission rate shall also be determined using fuel analysis data. Sulfur retention credit shall be granted and used for computing sulfur dioxide emission rates if a source, on a case-by-case basis, quantitatively and empirically demonstrates the sulfur retention.

(2) for residual oil, the test methods described in Section 3D- 2600 shall be used except that sulfur content shall be determined per shipment. Alternatively, gross or composite samples, gross caloric value, moisture content, and sulfur content may be determined sampling the fuel as fired if the owner or operator demonstrates to the Director that sampling as fired provides a more accurate estimation of sulfur dioxide emissions than sampling each shipment. If sulfur dioxide emissions are determined sampling fuel as fired, then a fuel sample shall be taken every four hours. These four-hour samples shall be composited into a daily sample, and the daily sample shall be composited into a weekly sample. This weekly sample shall be analyzed using the procedures in Section 3D-2600. Residual oil shall be collected in accordance with ASTM D4177 or D4057.

(g) The owner or operator of the source may request to use a different procedure or methodology than that required by this Rule if one of the conditions identified in 40 CFR Part 51, Appendix P, Section 3.9 exists. The person requesting to use a different procedure or methodology shall submit the request to the Director along with a description of the different procedure or methodology proposed to be used, an explanation of why the procedure or methodology required by this Rule will not work, and a showing that the proposed procedure or methodology is equivalent to the procedure or methodology being replaced. The Director shall approve the use of this procedure or methodology if he finds that one of the conditions identified in 40 CFR Part 51, Appendix P, Section 3.9 exists, that the procedure or methodology required by this Rule will not work, and that the proposed procedure or methodology is equivalent to the procedure or methodology that it will replace.

(h) The owner or operator of the source shall report to the Director no later than 30 days following the end of the quarter the following information:

(1) for fuel analysis per shipment:

(A) the quantity and type of fuels burned,

(B) the Btu value,
(C) the sulfur content in percent by weight, and
(D) the calculated sulfur dioxide emission rates expressed in the same units as the applicable standard.

(2) for continuous monitoring of emissions:
(A) the daily calculated sulfur dioxide emission rates expressed in the same units as the applicable standard for each day, and
(B) other information required under Appendix P of 40 CFR Part 51.

(i) The owner or operator of the source shall conduct a daily zero and span check of the continuous emission monitoring system following the manufacturer's recommendations and shall comply with the requirements of Sec. 3D-0613.

(j) If emission testing for compliance with the sulfur dioxide emission standard is required, the testing shall be done according to 40 CFR Part 60, Appendix A, Method 6. (Ord. No. 9-94, 12-19-94, 5-24-99)

Sec. 3D-0609. Repealed

(12-19-94)

Sec. 3D-0610. Federal monitoring requirements

(a) The owner or operator of sources subject to monitoring, recordkeeping, or reporting requirements contained in:

(1) 40 CFR Part 60, New Source Performance Standards (NSPS);
(2) 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants (NESHAP);
(3) 40 CFR Part 63, Maximum Achievable Control Technology (MACT); or
(4) 40 CFR Part 75, Acid Rain;

shall comply with these requirements.

(b) An air pollutant from sources covered under Paragraph (a) of this Rule for which monitoring is not required under Paragraph (a) of this Rule shall comply with the requirements covered in Sec. 3D-0611 if the pollutant from this source is subject to an emission standard.

(c) Sources that are not subject to any monitoring, recordkeeping, or reporting requirements contained in Paragraph (a) of this Rule shall comply with the requirements contained in Sec. 3D-0611. (5-24-99)

Sec. 3D-0611. Monitoring emissions from other sources

(a) This Rule applies to sources or air pollutants, including toxic air pollutants, from sources that are not covered under Sec. 3D-0606, 0607, 0608 or 0610 (a).

(b) The owner or operator of a source shall maintain records of production rates, throughputs, material usage, and other process operational information as is necessary to determine compliance with

the facility's permit and all applicable requirements. The Director shall specify in the facility's permit according to Sec. 3D-0605 the types of records that the owner or operator shall maintain.

(c) If the Director finds that the records maintained under Paragraph (b) of this Rule are inadequate to determine compliance with the facility's permit and all applicable requirements, the Director may require the owner or operator to use monitoring instruments. If the Director determines that monitoring instruments are necessary to demonstrate compliance with rules in this Subchapter or Subchapter 3Q of this Chapter or with an emission standard or permit condition, the owner or operator of a source shall:

(1) install, calibrate, operate, and maintain, in accordance with applicable performance specifications in 40 CFR Part 60 Appendix B, process and control equipment monitoring instruments or procedures as necessary to demonstrate compliance with the emission standards of this Subchapter and Subchapter 3Q of this Chapter;

(2) comply with the requirements of Sec. 3D-0613; and

(3) maintain, in writing, data and reports of any monitoring instruments or procedures necessary to comply with Subparagraph (1) of this Paragraph that will document the compliance status of the sources or control equipment.

(d) If the Director determines that monitoring instruments are necessary to demonstrate good operation and maintenance, the owner or operator of a source shall:

(1) install, calibrate, operate, and maintain, in accordance with applicable performance specifications in 40 CFR Part 60 Appendix B, process and control equipment monitoring instruments or procedures as necessary to demonstrate good operation and maintenance;

(2) comply with the requirements of Sec. 3D-0613 unless otherwise specified in any other applicable rule including 40 CFR Part 75 and 40 CFR 60.13. The Director may find that compliance with the quality assurance provisions of 40 CFR Part 51, Appendix P, is adequate to assure the quality of the data; and

(3) maintain, in writing, data and reports of any monitoring instruments or procedures necessary to comply with Subparagraph (1) of this Paragraph that will document that good operation and maintenance is being achieved. (5-24-99)

Sec. 3D-0612. Alternative monitoring and reporting procedures

(a) With the exceptions in Paragraph (b) of this Rule, the owner or operator of a source may petition the Director to allow monitoring or data reporting procedures varying from those prescribed by a rule of Subchapter 3D or 3Q of this Chapter. When petitioning for alternative monitoring or data reporting procedures, the owner or operator shall follow the procedures of Paragraph (c) of this Rule.

(b) This Rule does not apply to monitoring or reporting requirements of 40 CFR Part 60, 61, 63, or 75.

(c) When petitioning to use alternative monitoring or data reporting procedures in place of those procedures in Sec. 3D-0606, 0607 and 0608 of this Section or in Section 3D-0900, 1200 and 1400, the owner or operator of the source shall submit a written petition to the Director that shall include:

(1) the name and address of the company and the name and telephone number of a principal executive officer specified in Sec. 3Q-0304 (j) or responsible official specified in Sec. 3Q-0520 over whose signature the petition is submitted;
(2) a description of the sources at the facility to which the petition applies;
(3) identification of the rule or rules for which the alternative is sought;
(4) the basis or reason that alternative monitoring and reporting procedure is more desirable than those prescribed by the rule;
(5) a proposal of alternative monitoring and reporting procedure;
(6) a demonstration that the alternative procedure is at least as accurate as that prescribed by the rule;
(7) a showing that one or more of the following conditions exist:
    (A) a continuous monitoring system or other device prescribed by the rule would not provide accurate determinations of emissions;
    (B) the emissions from two or more sources of significantly different design and operating characteristics are combined before release to the atmosphere or the emissions are released to the atmosphere through more than one point;
    (C) the requirements prescribed by the rule would impose an extreme economic burden on the source owner or operator (The determination of an extreme economic burden shall be made on the basis of whether meeting the requirements prescribed by the rule would produce serious hardship without equal or greater benefit to the public);
    (D) the monitoring systems prescribed by the rule cannot be installed because of physical limitations at the facility (The determination of such limitations shall be made on the basis of whether meeting the requirements prescribed by this Rule would necessitate significant reconstruction of the facility); or
    (E) the alternative monitoring or reporting procedure is more accurate and precise than that prescribed by the rule;
(8) any other information that the petitioner believes would be helpful to the Director in evaluating the application.

(d) The Director may require the petitioner to submit other information that the Director considers necessary to evaluate the proposed monitoring or reporting procedures.

(e) The Director may approve the petition for alternative monitoring and reporting procedures if:

(1) The petition is submitted in accordance with this Rule and contains all the information required by Paragraph (c) of this Rule;
(2) The Director finds the petition satisfies the showing required by Subparagraph (c)(7) of this Rule;
(3) The Director finds that the proposed alternative monitoring or data reporting procedures provide information of sufficient quality to determine with reasonable certainty the amount of emissions or the adequacy of the emission control device or

practice such that the compliance status of the source can be determined by reviewing this information; and

(4) The facility is in compliance with, or under a schedule for compliance with, all applicable air quality rules.

(f) When monitoring or reporting requirements differ from those specified in the appropriate rule in this Subchapter or Subchapter 3Q of this Chapter are approved by the Director, the permit shall contain a condition stating such monitoring or reporting requirements. (5-24-99)

Sec. 3D-0613. Quality assurance program

(a) Any person required to operate a monitoring device by this Subchapter or Subchapter 3Q of this Chapter shall develop and implement a quality assurance program for the monitoring device.

(b) The Director may require the owner or operator of a facility required to operate a monitoring device by this Subchapter or Subchapter 3Q of this Chapter to submit a quality assurance program if:

(1) The maximum actual emission rate is more than 75 percent of the applicable emission standard;

(2) The facility has violated an emission standard or a permit condition; or

(3) The facility has failed to obtain quality assured data.

The quality assurance program shall be submitted to the Director within 60 days upon receipt of request.

(c) Except for gaseous continuous emission monitoring systems, the quality assurance program required by Paragraph (a) or (b) of this Rule shall include, if applicable:

(1) procedures and frequencies for calibration,

(2) standards traceability,

(3) operational checks,

(4) maintenance,

(5) auditing,

(6) data validation, and

(7) a schedule for implementing the quality assurance program.

Continuous opacity monitoring systems may satisfy the requirements of Paragraph (a) of this Rule by complying with 40 CFR Part 51, Appendix M, Method 203, as proposed in 57 FR 46114. Except for opacity monitors and gaseous continuous emission monitoring systems, a manufacturer's recommended quality assurance procedure may be used as a quality assurance program if it provides an adequate quality assurance program.

(d) Owner or operators that operate continuous emission monitoring systems for a gaseous pollutant may satisfy the requirements of Paragraphs (a) or (b) of this Rule by developing and implementing a written quality assurance program containing information required by 40 CFR Part 60, Appendix F, Section 3, Quality Assurance Procedures.

(e) The owner or operator of a facility shall certify all opacity and gaseous continuous emission monitoring systems following applicable performance specifications in 40 CFR Part 60, Appendix B, within 60 days of monitor installation unless otherwise specified in permit or any other applicable rules. The owner or operator of a facility required to install an opacity or gaseous continuous emission

monitoring systems shall notify the Director at least 60 days before installation unless otherwise specified in permit or in 40 CFR Part 60, 61, 63, or 75. The notification shall include plans or schematic diagrams of the proposed monitor location.

(f) Quality assurance programs for ambient monitors shall comply with the requirements in 40 CFR Part 58.

(g) A quality assurance program shall be available on-site for inspection within 30 days of monitor certification.

(h) The Director shall approve the quality assurance program within 30 days of submittal if he finds that the quality assurance program will assure that the precision and accuracy of the data for the pollutants being measured are within the design limits of the instruments being used. If the Director finds that the proposed quality assurance program does not meet the requirements of this Paragraph he shall notify the owner or operator of the facility of any deficiencies in the proposed quality assurance program. The owner or operator shall have 30 days after receiving written notification from the Director to correct the deficiencies. (5-24-99)

Sec. 3D-0614. Compliance assurance monitoring

(a) General Applicability. With the Exception of Paragraph (b) of this Rule, the requirements of this part shall apply to a pollutant-specific emissions unit at a facility required to obtain permit under Section 3Q-0500 if the unit satisfies all of the following criteria:

(1) The unit is subject to an emission limitation or standard for the applicable regulated air pollutant (or a surrogate thereof), other than an emission limitation or standard that is exempt under Subparagraph (b)(1) of this Rule;

(2) The unit uses a control device to achieve compliance with any such emission limitation or standard; and

(3) The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount in tons per year, required for a source to be classified as a major source. For purposes of this Subparagraph, "potential pre-control device emissions" means the same as "potential to emit," as defined in Sec. 3Q-0103, except that emission reductions achieved by the applicable control device shall not be taken into account.

(b) Exemptions.

(1) Exempt emission limitations or standards. The requirements of this Rule shall not apply to any of the following emission limitations or standards:

(A) emission limitations or standards proposed by the Administrator of the Environmental Protection Agency after November 15, 1990 pursuant to section 111 or 112 of the federal Clean Air Act;

(B) stratospheric ozone protection requirements under title VI of the federal Clean Air Act;

(C) Acid Rain Program requirements pursuant to sections 404, 405, 406, 407(a), 407(b), or 410 of the federal Clean Air Act;

(D) emission limitations or standards or other applicable requirements that apply solely under an emissions trading program approved under the rules of this Subchapter and Subchapter 3Q and that are incorporated in a permit issued under Section 3Q-0500;

(E) an emissions cap that is approved under the rules of this Subchapter and Subchapter 3Q and incorporated in a permit issued under Section 3Q-0500;

(F) emission limitations or standards for which a permit issued under Section 3Q-0500 specifies a continuous compliance determination method, as defined in 40 CFR 64.1. (This exemption shall not apply if the applicable compliance method includes an assumed control device emission reduction factor that could be affected by the actual operation and maintenance of the control device such as a surface coating line controlled by an incinerator for which continuous compliance is determined by calculating emissions on the basis of coating records and an assumed control device efficiency factor based on an initial performance test; in this example, this exemption would apply to the control device and capture system, but not to the remaining elements of the coating line, such as raw material usage).

(2) Exemption for backup utility power emissions units. The requirements of this Rule shall not apply to a utility unit, as defined in 40 CFR 72.2, that is municipally-owned if the owner or operator provides documentation in a permit application submitted under Section 3Q-0500 that:

(A) The utility unit is exempt from all monitoring requirements in 40 CFR Part 75 (including the appendices thereto);

(B) The utility unit is operated for the sole purpose of providing electricity during periods of peak electrical demand or emergency situations and will be operated consistent with that purpose throughout the permit term. The owner or operator shall provide historical operating data and relevant contractual obligations to document that this criterion is satisfied; and

(C) The actual emissions from the utility unit, based on the average annual emissions over the last three calendar years of operation (or such shorter time period that is available for units with fewer than three years of operation) are less than 50 tons per year and are expected to remain so.

(c) For the purposes of this Rule, the definitions in 40 CFR 64.1 shall apply with the following exceptions:

(1) "Applicable requirement" and "regulated air pollutant" shall have the same definition as in Sec. 3Q-0103.

(2) "Part 70 or 71 permit application" means an application (including any supplement to a previously submitted application) submitted by the owner or operator to obtain a permit under Section 3Q-0500.

(3) "Part 70 or 71 permit" means a permit issued under Section 3Q-0500.

(4) "Permitting authority" means the Office of Environmental Assistance and Protection.

(d) The owner or operator subject to the requirements of this rule shall comply with these requirements:

(1) 40 CFR 64.3, Monitoring Design Criteria;

(2) 40 CFR 64.4, Submittal Requirements;

(3) 40 CFR 64.5, Deadlines for Submittals;

(4) 40 CFR 64.7, Operation of Approved Monitoring; and

(5) 40 CFR 64.9, Reporting and Recordkeeping Requirements.

(e) The Office shall follow the procedures and requirements in 40 CFR Part 64.6, Approval of Monitoring, in reviewing and approving or disapproving monitoring plans and programs submitted under this Rule.

(f) Based on the result of a determination made under 40 CFR 64.7(d)(2), the Director may require the owner or operator to develop and implement a quality improvement plan. If a quality improvement plan is required, the quality improvement plan shall be developed and implemented according to the procedures and requirements of 40 CFR 64.8, Quality Improvement Plan (QIP) Requirements.

(g) Nothing in this Rule shall:

(1) excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, or local law, or any other applicable requirements. The requirements of this Rule shall not be used to justify the approval of monitoring less stringent than the monitoring that is required under another Rule in this Subchapter or Subchapter 3Q or Title 40 of the CFR and are not intended to establish minimum requirements for the purpose of determining the monitoring to be imposed under another Rule in this Subchapter or Subchapter 3Q or Title 40 of the CFR. The purpose of this Rule is to require, as part of the issuance of a permit under Section 3Q-0500, improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of this Rule;

(2) restrict or abrogate the authority of the Office to impose additional or more stringent monitoring, recordkeeping, testing, or reporting requirements on any owner or operator of a source under any provision of this Subchapter or Subchapter 3Q or the General Statutes;

(3) restrict or abrogate the authority of the Office to take any enforcement action for any violation of an applicable requirement; or

(4) restrict the authority of the Administrator of the Environmental Protection Agency or of any person to take action under Section 304 of the federal Clean Air Act as stated under 40 CFR 64.10. (5-24-99)

Sec. 3D-0615. Delegation

The Director may delegate his administrative and approval functions under this Section to a division manager of the Office of Environmental Assistance and Protection as he considers appropriate. (Ord. No. 9-94, 12-19-94, 5-24-99)

SECTION 3D-0700. REPEALED

Sec. 3D-0701. - Sec. 3D-0707. Repealed

(12-19-94)

FORSYTH COUNTY, NC - AIR QUALITY CONTROL

SECTION 3D-0800. REPEALED

Sec. 3D-0801. – Sec. 3D-0806. Repealed

SECTION 3D-0900. VOLATILE ORGANIC COMPOUNDS

Sec. 3D-0901. Definitions

For the purpose of this Section, the following definitions apply:

(1) "Coating" means a functional, protective, or decorative film applied in a thin layer to a surface.

(2) "Coating applicator" means an apparatus used to apply a surface coating.

(3) "Coating line" means one or more apparatus or operations in a single line wherein a surface coating is applied, dried, or cured and which include a coating applicator and flashoff area and may include an oven or associated control devices.

(4) "Continuous vapor control system" means a vapor control system which treats vapors displaced from tanks during filling on a demand basis without intermediate accumulation.

(5) "Delivered to the applicator" means the condition of coating after dilution by the user just before application to the substrate.

(6) "Flashoff area" means the space between the application area and the oven.

(7) "High solids coating" means a coating which complies with the requirements of the rules in this section by using a formulation that contains a higher percentage of solids and a lower percentage of volatile organic compounds and water than conventional organic solvent borne coatings.

(8) "Hydrocarbon" means any organic compound of carbon and hydrogen only.

(9) "Incinerator" means a combustion apparatus designed for high temperature operation in which solid, semisolid, liquid, or gaseous combustible wastes are ignited and burned efficiently and from which the solid and gaseous residues contain little or no combustible material.

(10) "Intermittent vapor control system" means a vapor control system which employs an intermediate vapor holder to accumulate vapors displaced from tanks during filling. The control device treats the accumulated vapors only during automatically controlled cycles.

(11) "Loading rack" means an aggregation or combination of loading equipment arranged so that all loading outlets in the combination can be connected to a tank truck or trailer parked in a specified loading space.

(12) "Low solvent coating" means a coating which contains a substantially lower amount of volatile organic compounds than conventional organic solvent borne coatings; it usually falls into one of three major groups of high solids, waterborne, or powder coatings.

(13) "Organic material" means a chemical compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate.

(14) "Oven" means a chamber within which heat is used to bake, cure, polymerize, or dry a surface coating.

(15) "Potential emissions" means the quantity of a pollutant which would be emitted at the maximum capacity of a stationary source to emit the pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is described or contained as a condition in the federally enforceable permit. Secondary emissions do not count in determining potential emissions of a stationary source. Fugitive emissions count, to the extent quantifiable, in determining the potential emissions only in these cases:

(A) petroleum refineries;

(B) chemical process plants; and

(C) petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels.

(16) "Prime coat" means the first film of coating applied to a surface to protect it or to prepare it to receive subsequent coatings.

(17) "Reasonably available control technology" (also denoted as RACT) means the lowest emission limit which a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. It may require technology which has been applied to similar, but not necessarily identical, source categories.

(18) "Reid vapor pressure" means the absolute vapor pressure of volatile crude oil and volatile non-viscous petroleum liquids except liquefied petroleum gases as determined by American Society for Testing and Materials, Part 17, 1973, D-323-72 (reapproved 1977).

(19) "Shutdown" means the cessation of operation of a source or a part thereof or emission control equipment.

(20) "Solvent" means organic materials which are liquid at standard conditions and which are used as dissolvers, viscosity reducers, or cleaning agents.

(21) "Standard conditions" means a temperature of 68 degrees Fahrenheit and pressure of 29.92 inches of mercury.

(22) “Stage I” means vapor control systems that minimize, collect, and transfer vapors in a gasoline storage tank, displaced by the incoming gasoline, which are routed through pipes and hoses back into the tank truck tank to be transported to where the truck is loaded and the vapors are recovered or destroyed. Vent lines on storage tanks with vapor control systems use pressure release valves or flow restrictors to minimize release to the atmosphere.

(23) "Startup" means the setting in operation of a source or emission control equipment.

(24) "Substrate" means the surface to which a coating is applied.

(25) "Topcoat" means the final films of coating applied in a multiple or single coat operation.

(26) "True vapor pressure" means the equilibrium partial pressure exerted by a petroleum liquid as determined in accordance with methods described in American Petroleum Institute Bulletin 2517, "Evaporation Loss from Floating Roof Tanks," 1962.

(27) "Vapor collection system" means a vapor transport system which uses direct displacement by the liquid loaded to force vapors from the tank into a vapor control system.

(28) "Vapor control system" means a system which prevents release to the atmosphere of at least 90 percent by weight of organic compounds in the vapors displaced from a tank during the transfer of gasoline.

(29) "Volatile organic compound" (also denoted as VOC) means any compound of carbon whose volatile content can be determined by the procedure described in Section 3D-2600 excluding any compound that is listed under 40 CFR 51.100(s) as having been determined to have negligible photochemical reactivity. (Ord. No. 9-94, 12-19-94, 11-11-96)

Sec. 3D-0902. Applicability

(a) The rules in this Section do not apply except as specifically set out in this Rule.

(b) This Section applies to sources that emit greater than or equal to 15 pounds of volatile organic compounds per day.

(c) Sec. 3D-0925, 0926, 0927, 0928, 0931, 0932, 0933 and 0958 apply regardless of the level of emissions of volatile organic compounds unless provisions specified in Paragraph (d)(1) of this Rule are applied.

(d) This Section does not apply to:

(1) sources that emit less than 800 pounds of volatile organic compounds per calendar month and that are:

(A) bench-scale, on-site equipment used exclusively for chemical or physical analysis for quality control purposes, staff instruction, water or wastewater analyses, or non-production environmental compliance assessments;

(B) bench-scale experimentation, chemical or physical analyses, training or instruction from not-for-profit, non-production educational laboratories

(C) bench-scale experimentation, chemical or physical analyses, training or instruction from hospitals or health laboratories pursuant to the determination or diagnoses of illness; or

(D) research and development laboratory activities provided the activity produces no commercial product or feedstock material; or

(2) emissions of volatile organic compounds during startup or shutdown operations from sources which use incineration or other types of combustion to control emissions of volatile organic compounds whenever the off-gas contains an explosive mixture during the startup or shutdown operation if the exemption is approved by the Director as meeting the requirements of this Subparagraph.

(e) The following Rules of this Section apply in Forsyth County:

(1) Sec. 3D-0925, Petroleum Liquid Storage in Fixed Roof Tanks, for fixed roof tanks at gasoline bulk plants and gasoline bulk terminals;

(2) Sec. 3D-0926, Bulk Gasoline Plants;

(3) Sec. 3D-0927, Bulk Gasoline Terminals;

(4) Sec. 3D-0928, Gasoline Service Stations Stage I;

(5) Sec. 3D-0932, Gasoline Truck Tanks and Vapor Collection Systems;

(6) Sec. 3D-0933, Petroleum Liquid Storage in External Floating Roof Tanks, for external floating roof tanks at bulk gasoline plants and bulk gasoline terminals;

(7) Sec. 3D-0948, VOC Emissions from Transfer Operations;

(8) Sec. 3D-0949, Storage of Miscellaneous Volatile Organic Compounds; and

(f) Reserved.

(g) Reserved.

(h) Reserved.

(i) Sources whose emissions of volatile organic compounds are not subject to limitation under this Section may still be subject to emission limits on volatile organic compounds in Sec. 3D-0524, 1110 or 1111. (Ord. No. 9-94, 12-19-94; 11-13-95, 11-11-96, 7-28-97, 5-24-99, 7-24-00)

Sec. 3D-0903. Recordkeeping: reporting: monitoring

(a) The owner or operator of any volatile organic compound emission source or control equipment shall:

(1) install, operate, and maintain process and control equipment monitoring instruments or procedures as necessary to comply with the requirements of this section; and

(2) maintain, in writing, data and reports relating to monitoring instruments or procedures which will, upon review, document the compliance status of the volatile organic compound emission source or control equipment. Such data and reports shall be maintained daily unless otherwise specified in this Section.

(b) The owner or operator of any volatile organic compound emission source or control equipment subject to the requirements of this Section shall comply with the monitoring, recordkeeping, and reporting requirements in Section 3D-0600. (Ord. No. 9-94, 12-19-94, 5-24-99)

Sec. 3D-0904. Repealed

(12-19-94)

Sec. 3D-0905. Repealed

(12-19-94)

Sec. 3D-0906. Circumvention

(a) An owner or operator subject to this Section shall not build, erect, install, or use any article, machine, equipment, process, or method, the use of which conceals an emission which would otherwise constitute a violation of an applicable regulation.

(b) Paragraph (a) of this Regulation includes, but is not limited to, the use of gaseous dilutants to achieve compliance and the piecemeal carrying out of an operation to avoid coverage by a regulation that applies only to operations larger than a specified size. (Ord. No. 9-94; 12-19-94)

Sec. 3D-0907. Repealed

(Ord. No. 9-94, 12-19-94, 11-13-95, 7-28-97)

Sec. 3D-0908. Repealed

(12-19-94)

Sec. 3D-0909. Compliance schedules for sources in new nonattainment areas

(a) Applicability. This Rule applies to sources located at any facility covered by Paragraph (f) or (h) of Sec. 3D-0902.

(b) Exceptions. This Rule does not apply to facilities subject to the rules listed under Paragraph (e) of Sec. 3D-0902. Facilities subject to the rules listed in Paragraph (e) of Rule 0902 shall comply in accordance with the provisions of those Rules rather than the schedule in Paragraphs (c) and (d) of this Rule.

(c) Maintenance area contingency plan. The owner or operator of any source subject to this Rule shall adhere to the following increments of progress and schedules:

(1) If compliance with applicable rules in this Section is to be achieved by installing emission control equipment, replacing process equipment, or modifying existing process equipment:

(A) The owner or operator shall submit a permit application and a compliance schedule within six months after the Director of the N.C. Division of Air Quality notices the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone;

(B) The compliance schedule shall contain the following increments of progress:

(i) a date by which contracts for the emission control system and process equipment shall be awarded or orders shall be issued for purchase of component parts;

(ii) a date by which on-site construction or installation of the emission control and process equipment shall begin; and

(iii) a date by which on-site construction or installation of the emission control and process equipment shall be completed; and

(C) Final compliance with applicable rules in this Section shall be achieved within three years after the Director of the N.C. Division of Air Quality notices the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone.

(2) If compliance with applicable rules in this Section is to be achieved by using low solvent content coating technology:

(A) The owner or operator shall submit a permit application and a compliance schedule within six months after the Director of the N.C. Division of Air Quality notices the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone;

(B) The compliance schedule shall contain the following increments:

(i) a date by which purchase orders shall be issued for low solvent content coatings and process modifications;

(ii) a date by which process modifications shall be initiated; and

(iii) a date by which process modifications shall be completed and use of low solvent content coatings shall begin; and

(C) Final compliance with applicable rules in this Section shall be achieved within two years after the Director of the N.C. Division of Air Quality notices the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone.

(3) The owner or operator shall certify to the Director within five days after each increment deadline of progress defined in this Paragraph, whether the required increment of progress has been met.

(d) Reserved.

(e) If the Director requires a test in accordance with Section .2600 of this Subchapter to demonstrate that compliance has been achieved, the owner or operator of sources subject to this Rule shall conduct a test and submit a final test report within six months after the stated date of final compliance.

(f) Sources already in compliance.

(1) Maintenance area contingency plan. Paragraph (c) of this Rule shall not apply to any source subject to this Rule that is in compliance with applicable rules of this Section when the N.C. Division of Air Quality Director notices the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone and that have determined and certified compliance to the satisfaction of the Director within six months after the N.C. Division of Air Quality Director notices the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone.

(2) Reserved.

(g) New sources.

(1) Maintenance area contingency plan. The owner or operator of any source subject to this Rule not in existence or under construction before the date that the N.C. Division

of Air Quality Director notices in the North Carolina Register in accordance with Paragraph (h) of Sec. 3D-0902 the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone, shall comply with all applicable rules in this Section upon start-up of the source.

(2) Reserved. (Ord. No. 9-94, 12-19-94; 11-13-95, 11-11-96, 7-28-97, 7-24-00)

Sec. 3D-0910. Repealed

(Ord. No. 9-94, 12-19-94; 11-13-95, 7-28-97)

Sec. 3D-0911. Repealed

(Ord. No. 9-94, 12-19-94; 11-13-95, 7-28-97)

Sec. 3D-0912. General provisions on test methods and procedures

(a) The owner or operator of any volatile organic compound source required to comply with Rules in this Section shall demonstrate compliance by the methods described in Section 3D-2600. The owner or operator of a volatile organic compound source shall demonstrate compliance when the Director requests such demonstration.

(b) If the volatile organic compound emissions test shows noncompliance, the owner or operator of the volatile organic source shall submit along with the final test report proposed corrective action.

(c) Compliance shall be determined on a line-by-line basis using the more stringent of the following two:

(1) Compliance shall be determined on a daily basis for each coating line using a weighted average, that is, dividing the sum of the mass (pounds) of volatile organic compounds in coatings consumed on that coating line, as received, and the mass (pounds) of volatile organic compound solvents added to the coatings on that coating line by the volume (gallons) of coating solids consumed during that day on that coating line; or

(2) Compliance shall be determined as follows:

(A) When low solvent or high solids coatings are used to reduce emissions of volatile organic compounds, compliance shall be determined instantaneously.

(B) When add on control devices, e.g., solvent recovery systems or incinerators, are used to reduce emissions of volatile organic compounds, compliance shall be determined by averaging emissions over a one-hour period.

(Ord. No. 9-94, 12-19-94, 7-28-03)

Sec. 3D-0913. Repealed

(Ord. No. 9-94, 12-19-94)

Sec. 3D-0914. Repealed

(Ord. No. 9-94, 12-19-94, 9-14-98)

Sec. 3D-0915. Repealed

(Ord. No. 9-94, 12-19-94)

Sec. 3D-0916. Repealed

(Ord. No. 9-94, 12-19-94)

Sec. 3D-0917. Repealed

(Ord. No. 9-94, 12-19-94, 11-11-96)

Sec. 3D-0918. Can coating

(a) For the purpose of this Rule, the following definitions apply:

(1) "End sealing compound" means a synthetic rubber compound which is coated onto can ends and which functions as a gasket when the end is assembled on the can.

(2) "Exterior base coating" means a coating applied to the exterior of a can to provide exterior protection to the metal and to provide background for the lithographic or printing operation.

(3) "Interior base coating" means a coating applied by roller coater or spray to the interior of a can to provide a protective lining between the can metal and product.

(4) "Interior body spray" means a coating sprayed on the interior of the can body to provide a protective film between the product and the can.

(5) "Overvarnish" means a coating applied directly over ink to reduce the coefficient of friction, to provide gloss, and to protect the finish against abrasion and corrosion.

(6) "Three-piece can side-seam spray" means a coating sprayed on the exterior and interior of a welded, cemented, or soldered seam to protect the exposed metal.

(7) "Two-piece can exterior end coating" means a coating applied by roller coating or spraying to the exterior end of a can to provide protection to the metal.

(b) This Rule applies to coating applicator(s) and oven(s) of sheet, can, or end coating lines involved in sheet basecoat (exterior and interior) and overvarnish; two-piece can interior body spray; two-piece can exterior end (spray or roll coat); three-piece can side-seam spray and end sealing compound operations.

(c) With the exception stated in Paragraph (d) of this Rule, emissions of volatile organic compounds from any can coating line subject to this Rule shall not exceed:

(1) 4.5 pounds of volatile organic compounds per gallon of solids delivered to the coating applicator from sheet basecoat (exterior and interior) and overvarnish or two-piece can exterior (basecoat and overvarnish) operations;

(2) 9.8 pounds of volatile organic compounds per gallon of solids delivered to the coating applicator from two and three-piece can interior body spray and two-piece can exterior end (spray or roll coat) operations;

(3) 21.8 pounds of volatile organic compounds per gallon of solids delivered to the coating applicator from a three-piece applicator from a three-piece can side-seam spray operations;

(4) 7.4 pounds of volatile organic compounds per gallon of solids delivered to the coating applicator from end sealing compound operations.

(d) Any source which has chosen to control emissions of volatile organic compounds under Sec. 3D-0518 (e) and which has installed air pollution control equipment in accordance with an air quality permit in order to comply with this Rule before December 1, 1989, may comply with the limits contained in this Paragraph instead of those contained in Paragraph (c) of this Rule. Emissions of volatile organic compounds from any can coating line subject to this Rule shall not exceed:

(1) 2.8 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds, delivered to the coating applicator from sheet basecoat (exterior and interior) and overvarnish or two-piece can exterior (basecoat and overvarnish) operations;

(2) 4.2 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds, delivered to the coating applicator from two and three-piece can interior body spray and two-piece can exterior end (spray or roll coat) operations;

(3) 5.5 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds, delivered to the coating applicator from a three-piece applicator from a three-piece can side-seam spray operations;

(4) 3.7 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds, delivered to the coating applicator from end sealing compound operations. (Ord. No. 9-94, 12-19-94, 11-11-96)

Sec. 3D-0919. Coil coating

(a) For the purpose of this Rule, the following definitions apply:

(1) "Coil coating" means the coating of any flat metal sheet or strip that comes in rolls or coils.

(2) "Quench area" means a chamber where the hot metal exiting the oven is cooled by either a spray of water or a blast of air followed by water-cooling.

(b) This Rule applies to the coating applicator(s), oven(s), and quench area(s) of coil coating lines involved in prime and topcoat or single coat operations.

(c) With the exception stated in Paragraph (d) of this Rule, emissions of volatile organic compounds from any coil coating line subject to this Rule shall not exceed 4.0 pounds of volatile organic compounds per gallon of solids delivered to the coating applicator from prime and topcoat or single coat operations.

(d) Any source which has chosen to control emissions of volatile organic compounds under Sec. 3D-0518 (e) and which has installed air pollution control equipment in accordance with an air quality permit in order to comply with this Rule before December 1, 1989, may comply with the limits contained in this Paragraph instead of those contained in Paragraph (c) of this Rule. Emissions of volatile organic

compounds from any coil coating line subject to this Rule shall not exceed 2.6 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds, delivered to the coating applicator from prime and topcoat or single coat operations. (Ord. No. 9-94, 12-19-94, 11-11-96)

Sec. 3D-0920. Repealed

(Ord. No. 9-94, 12-19-94, 11-11-96)

Sec. 3D-0921. Repealed

(Ord. No. 9-94, 12-19-94, 11-11-96)

Sec. 3D-0922. Metal furniture coating

(a) For the purpose of this Rule, the following definitions apply:

(1) "Application area" means the area where the coating is applied by spraying, dipping, or flow coating techniques.

(2) "Coating unit" means one or more coating areas and any associated drying area or oven wherein a coating is applied, dried, or cured.

(3) "Metal furniture coatings" means paints, sealants, caulks, inks, adhesives, and maskants.

(b) This Rule applies to each metal furniture surface coating unit source whose emissions of volatile organic compounds exceeds the threshold established in Paragraph (b) of Sec. 3D-0902.

(c) With the exception stated in Paragraph (f) of this Rule, emissions of all volatile organic compounds from any metal furniture coating unit subject to this Rule shall not exceed:

(1) 2.3 pounds of volatile organic compounds per gallon of coating excluding water and exempt compounds (3.3 pounds of volatile organic compounds per gallon of solids) delivered from general, one component or general, multi-component types of coating operations; and

(2) 3.0 pounds of volatile organic compounds per gallon of coating excluding water and exempt compounds (5.1 pounds of volatile organic compounds per gallon of solids) delivered from any other types of coating operations.

(d) EPA Method 24 (40 CFR Part 60, Appendix A-7) shall be used to determine the volatile organic compounds content of coating materials used at metal furniture surface coating units unless the facility maintains records to document the volatile organic compounds content of coating materials from the manufacturer.

(e) Emissions limits established in Subparagraph (c)(2) of this Rule do not apply to stencil coatings, safety-indicating coatings, solid film lubricants, electric-insulating and thermal-conducting coatings, touch up and repair coatings, coating application utilizing hand-held aerosol cans, or cleaning operations.

(f) Any coating unit which has chosen to use add-on control for coating operations rather than the emission limits established in Paragraph (c) of this Rule shall install control equipment with an overall control efficiency of 90 percent or use a combination of coating and add-on control equipment on a coating unit to meet limits established in Paragraph (c) of this Rule.

(g) The owner or operator of any facility subject to this rule shall comply with the Sec. 3D-0903 and 0958.

(Ord. No. 9-94, 12-19-94, 11-11-96)

Sec. 3D-0923. Surface coating of large appliances

(a) For the purpose of this Rule, the following definitions apply:

(1) "Application area" means the area where the coating is applied by spraying, dipping, or flow coating techniques.

(2) "Coating" means paints, sealants, caulks, inks, adhesives, and maskants.

(3) "Coating unit" means a unit that consists of a series of one or more coating applicators and any associated drying area or oven where a coating is dried, or cured.

(4) "Large appliance parts" means any organic surface-coated metal lid, door, casing, panel, or other interior or exterior metal part or accessory that is assembled to form a large appliance product.

(5) "Large appliance product" means any organic surface-coated metal range, oven, microwave oven, refrigerator, freezer, washer, dryer, dishwasher, water heater, or trash compactor manufactured for household, commercial, or recreational use.

(b) This Rule applies to each large appliance coating unit source whose volatile organic compounds emissions exceed the threshold established in Paragraph (b) of Sec. 3D-0902.

(c) Emissions of all volatile organic compounds from any large appliance coating unit subject to this Rule shall not exceed:

(1) 2.3 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds (3.3 pounds of volatile organic compounds per gallon of solids) delivered from general, one component coating or general, multi-component types of coating operations; and

(2) 2.8 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds (4.5 pounds of volatile organic compounds per gallon of solids) delivered from any other types of coating operations.

(d) EPA Method 24 (40 CFR Part 60, Appendix A-7) shall be used to determine the volatile organic compounds content of coating materials used at surface coating of large appliances parts facilities unless the facility maintains records to document the volatile organic compounds content of coating materials from the manufacturer.

(e) Emissions limits established in Subparagraph (c)(2) of this Rule do not apply to stencil coatings, safety-indicating coatings, solid film lubricants, electric-insulating and thermal-conducting coatings, touch up and repair coatings, coating applications utilizing hand- held aerosol cans, or any cleaning material.

(f) Any coating unit which has chosen to use add-on controls for coating operations rather than the emission limits established in Paragraph (c) of this Rule shall install control equipment with an overall control efficiency of 90 percent or use a combination of coating and add-on control equipment on a coating unit to meet limits established in Paragraph (c) of this Rule.

(g) The owner or operator of any facility subject to this Rule shall comply with the Sec. 3D-0903 and 0958.

(Ord. No. 9-94, 12-19-94, 11-11-96)

Sec. 3D-0924. Magnet wire coating

(a) For the purpose of this Rule, "magnet wire coating" means the process of applying a coating of electrically insulating varnish or enamel to aluminum or copper wire for use in electrical machinery.

(b) This Rule applies to the oven(s) of magnet wire coating operations.

(c) With the exception stated in Paragraph (d) of this Rule, emissions of volatile organic compounds from any magnet wire coating oven subject to this Rule shall not exceed 2.2 pounds of volatile organic compounds per gallon of solids delivered to the coating applicator from magnet wire coating operations.

(d) Any source which has chosen to control emissions of volatile organic compounds under Sec. 3D-0518(e) of this Subchapter and which has installed air pollution control equipment in accordance with an air quality permit in order to comply with this Rule before December 1, 1989, may comply with the limits contained in this Paragraph instead of those contained in Paragraph (c) of this Rule. Emissions of volatile organic compounds from any magnet wire coating oven subject to this Rule shall not exceed 1.7 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds, delivered to the coating applicator from magnet wire coating operations. (Ord. No. 9-94, 12-19-94, 11-11-96)

Sec. 3D-0925. Petroleum liquid storage in fixed roof tanks

(a) For the purpose of this Regulation, the following definitions apply:

(1) "Condensate" means hydrocarbon liquid separated from natural gas, which condenses due to changes in the temperature and/or pressure and remains liquid at standard conditions.

(2) "Crude oil" means a naturally occurring mixture which consists of hydrocarbons and/or sulfur, nitrogen and/or oxygen derivatives of hydrocarbons and which is a liquid at standard conditions.

(3) "Custody transfer" means the transfer of produced crude oil and/or condensate, after processing and/or treating in the producing operations, from storage tanks or automatic transfer facilities to pipeline or any other forms of transportation.

(4) "External floating roof" means a storage vessel cover in an open top tank consisting of a double deck or pontoon single deck which rests upon and is supported by the petroleum liquid being contained and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.

(5) "Internal floating roof" means a cover or roof in a fixed roof tank which rests upon or is floated upon the petroleum liquid being contained, and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.

(6) "Petroleum liquids" means crude oil, condensate, and any finished or intermediate products manufactured or extracted in a petroleum refinery.

(7) "Petroleum refinery" means any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation of crude oils, or through redistillation, cracking, extraction, or reforming of unfinished petroleum derivatives.

(b) This Regulation applies to all fixed roof storage vessels with capacities greater than 39,000 gallons containing volatile petroleum liquids whose true vapor pressure is greater than 1.52 psia.

(c) This Regulation does not apply to volatile petroleum liquid storage vessels:

(1) equipped with external floating roofs, or

(2) having capacities less than 416,000 gallons used to store produced crude oil and condensate prior to lease custody transfer.

(d) With the exceptions stated in Paragraph (c) of this Regulation, the owner or operator of any fixed roof storage vessel subject to this Regulation shall not use the storage vessel unless:

(1) The storage vessel has been retrofitted with an internal floating roof equipped with a closure seal, or seals, to close the space between the roof edge and tank wall;

(2) The storage vessel is maintained such that there are no visible holes, tears, or other openings in the seal or any seal fabric or materials;

(3) All openings, except stub drains are equipped with covers, lids, or seals such that:

(A) The cover, lid, or seal is in the closed position at all times except when in actual use;

(B) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;

(C) Rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting;

(4) Routine visual inspections are conducted through roof hatches once per month;

(5) A complete inspection of cover and seal is conducted whenever the tank is emptied for maintenance, shell inspection, cleaning, or for other non-operational reasons or whenever excessive vapor leakage is observed; and

(6) Records are maintained in accordance with Sec. 3D-0903 and shall include:

(A) reports of the results of inspections conducted under Parts (d)(4) and (d)(5) of this Regulation,

(B) a record of the average monthly storage temperature, and true vapor pressures of petroleum liquids stored, and

(C) records of the throughput quantities and types of petroleum liquids for each storage vessel. (Ord. No. 9-94, 12-19-94)

Sec. 3D-0926. Bulk gasoline plants

(a) For the purpose of this Rule, the following definitions apply:

(1) "Average daily throughput" means annual throughput of gasoline divided by 312 days per year

(2) "Bottom filling" means the filling of a tank truck or stationary storage tank through an opening that is flush with the tank bottom.

(3) "Bulk gasoline plant" means a gasoline storage and distribution facility which has an average daily throughput of less than 20,000 gallons of gasoline and which usually receives gasoline from bulk terminals by trailer transport, stores it in tanks, and subsequently dispenses it via account trucks to local farms, businesses, and service stations.

(4) "Bulk gasoline terminal" means a gasoline storage facility, which usually receives gasoline from refineries primarily by pipeline, ship, or barge; and delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by tank truck; and has an average daily throughput of more than 20,000 gallons of gasoline.

(5) "Gasoline" means any petroleum distillate having Reid vapor pressure of four psia or greater.

(6) "Incoming vapor balance system" means a combination of pipes or hoses which create a closed system between the vapor spaces of an unloading tank truck or trailer and a receiving stationary storage tank such that vapors displaced from the receiving stationary storage tank are transferred to the tank truck or trailer being unloaded.

(7) "Outgoing vapor balance system" means a combination of pipes or hoses which create a closed system between the vapor spaces of an unloading stationary storage tank and a receiving tank truck or trailer such that vapors displaced from the receiving tank truck or trailer are transferred to the stationary storage tank being unloaded.

(8) "Splash filling" means the filling of a tank trucker stationary storage tank through a pipe or hose whose discharge opening is above the surface level of the liquid in the tank being filled.

(9) "Submerged filling" means the filling of a tank truck or stationary tank through a pipe or hose whose discharge opening is entirely submerged when the pipe normally used to withdraw liquid from the tank can no longer withdraw any liquid, or whose discharge opening is entirely submerged when the liquid level is six inches above the bottom of the tank.

(b) This Rule applies to the unloading, loading, and storage facilities of all bulk gasoline plants and of all tank trucks or trailers delivering or receiving gasoline at bulk gasoline plants except stationary storage tanks with capacities less than 528 gallons.

(c) The owner or operator of a bulk gasoline plant shall not transfer gasoline to any stationary storage tanks after May 1, 1993, unless the unloading tank truck or trailer and the receiving stationary storage tank are equipped with an incoming vapor balance system as described in Paragraph (i) of this Rule and the receiving stationary storage tank is equipped with a fill line whose discharge opening is flush with the bottom of the tank.

(d) The owner or operator of a bulk gasoline plant with an average daily gasoline throughput of 4,000 gallons or more shall not load tank trucks or trailers at such plant after May 1, 1993, unless the

unloading stationary storage tank and the receiving tank truck or trailer are equipped with an outgoing vapor balance system as described in Paragraph (i) of this Rule and the receiving tank truck or trailer is equipped for bottom filling.

(e) The owner or operator of a bulk gasoline plant with an average daily throughput of more than 2,500 gallons but less than 4,000 gallons located in an area with a housing density exceeding specified limits as described in this Paragraph shall not load any tank truck or trailer at such bulk gasoline plant after November 1, 1996, unless the unloading stationary storage tank and receiving tank truck or trailer are equipped with an outgoing vapor balance system as described in Paragraph (i) of this Rule and the receiving tank truck or trailer is equipped for bottom filling. In Forsyth County, the specified limit on housing density is 50 residences in a square one mile on a side with the square centered on the loading rack at the bulk gasoline plant and with one side oriented in a true North-South direction. The housing density shall be determined by counting the number of residences using aerial photographs or other methods determined by the Director to provide equivalent accuracy.

(f) The owner or operator of a bulk gasoline plant not subject to the outgoing vapor balance system requirements of Paragraph (d) or (e) of this Rule shall not load trucks or trailers at such plants unless:

(1) Equipment is available at the bulk gasoline plant to provide for submerge filling of each tank truck or trailer; or

(2) Each receiving tank truck or trailer is equipped for bottom filling.

(g) For a gasoline bulk plants located in nonattainment area for ozone, once the average daily throughput of gasoline at the bulk gasoline plant reaches or exceeds the applicability threshold in Paragraph (d) or (e) of this Rule or if Paragraph (d) or (e) is currently applicable to the bulk gasoline plant, the bulk gasoline plant shall continue to comply with the outgoing vapor balance system requirements of Paragraph (d) or (e) of this Rule, as is applicable, even though the average daily gasoline throughput falls below the threshold contained in Paragraph (d) or (e) of this Rule.

(h) The owner or operator of a bulk gasoline plant, tank truck or trailer that is required to be equipped with a vapor balance system pursuant to Paragraphs (c), (d), or (e) of this Rule shall not transfer gasoline between tank truck or trailer and stationary storage tank unless:

(1) The vapor balance system is in good working order and is connected and operating;

(2) Tank truck or trailer hatches are closed at all times during loading and unloading operations; and

(3) The tank truck's or trailer's pressure/vacuum relief valves and hatch covers and the truck tanks or storage tanks or associated vapor and liquid lines are vapor tight during loading or unloading.

(i) Vapor balance systems required under Paragraphs (c), (d), and (e) of this Rule shall consist of the following major components:

(1) a vapor space connection on the stationary storage tank equipped with fittings which are vapor tight and will be automatically and immediately closed upon disconnection so as to prevent release of organic material;

(2) a connecting pipe or hose equipped with fittings which are vapor tight and will be automatically and immediately closed upon disconnection so as to prevent release of organic material; and

(3) a vapor space connection on the tank truck or trailer equipped with fittings, which are vapor tight and will be automatically and immediately closed upon disconnection so as to prevent release of organic material.

(j) The owner or operator of a bulk gasoline plant shall paint all tanks used for gasoline storage white or silver at the next scheduled painting or before November 1, 2002, whichever is sooner.

(k) The pressure relief valves on tank trucks or trailers loading or unloading at bulk gasoline plants shall be set to release at the highest possible pressure (in accordance with state or local fire codes or the National Fire Prevention Association guidelines). The pressure relief valves on stationary storage tanks shall be set at 0.5 psi for storage tanks placed in service on or after November 1, 1992, and 0.25 psi for storage tanks existing before November 1, 1992.

(l) No owner or operator of a bulk gasoline plant may permit gasoline to be spilled, discarded in sewers, stored in open containers, or handled in any other manner that would result in evaporation.

(m) The owner or operator of a bulk gasoline plant shall observe loading and unloading operations and shall discontinue the transfer of gasoline:

(1) if any liquid leaks are observed, or

(2) if any vapor leaks are observed where a vapor balance system is required under Paragraphs (c), (d), or (e) of this Rule.

(n) The owner or operator of a bulk gasoline plant shall not load, or allow to be loaded, gasoline into any truck tank or trailer unless the truck tank or trailer has been certified leak tight in accordance with Sec. 3D-0932 within the last 12 months where the bulk gasoline plant is required to use an outgoing vapor balance system. (Ord. No. 9-94, 12-19-94, 11-11-96)

Sec. 3D-0927. Bulk gasoline terminals

(a) For the purpose of this Rule, the following definitions apply:

(1) "Bulk gasoline terminal" means:

(A) breakout tanks of an interstate oil pipeline facility; or

(B) a gasoline storage facility that usually receives gasoline from refineries primarily by pipeline, ship, or barge; and delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by tank truck; and has an average daily throughput of more than 20,000 gallons of gasoline.

(2) "Breakout tank" means a tank used to:

(A) relieve surges in a hazardous liquid pipeline system, or

(B) receive and store hazardous liquids transported by pipeline for reinjection and continued transport by pipeline.

(3) "Gasoline" means a petroleum distillate having a Reid vapor pressure of four psia or greater.

(4) "Contact deck" means a deck in an internal floating roof tank that rises and falls with the liquid level and floats in direct contact with the liquid surface.

(5) "Degassing" means the process by which a tank's interior vapor space is decreased to below the lower explosive limit: for the purpose of cleaning, inspection, or repair.

(6) "Leak" means a crack or hole that lets petroleum product vapor or liquid escape that can be identified through the use of sight, sound, smell, and explosimeter, or the use of a meter that measures volatile organic compounds. When an explosimeter or meter is used to detect a leak, a leak is a measurement that is equal to or greater the 100 percent of the lower explosive limit as detected by a combustible gas detector using the test procedure described in Sec. 3D-0940.

(7) "Liquid balancing" means a process used to degas floating roof gasoline storage tanks with a liquid whose vapor pressure is below 1.52 psia. This is done by removing as much gasoline as possible without landing the roof on its internal supports, pumping in the replacement fluid, allowing mixing, remove as much mixture as possible without landing the roof, and repeating these steps until the vapor pressure of the mixture is below 1.52 psia.

(8) "Liquid displacement" means a process by which gasoline vapors, remaining in an empty tank, are displaced by a liquid with a vapor pressure below 1.52 psia.

(b) This Rule applies to bulk gasoline terminals and the appurtenant equipment necessary to load the tank truck or trailer compartments.

(c) Gasoline shall not be loaded into any tank trucks or trailers from any bulk gasoline terminal unless:

(1) The bulk gasoline terminal is equipped with a vapor control system that prevents the emissions of volatile organic compounds from exceeding 35 milligrams per liter. The owner or operator shall obtain from the manufacturer and maintain in his records a pre-installation certification stating the vapor control efficiency of the system in use;

(2) Displaced vapors and gases are vented only to the vapor control system or to a flare;

(3) A means is provided to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected; and

(4) All loading and vapor lines are equipped with fittings that make vapor-tight connections and that are automatically and immediately closed upon disconnection.

(d) Sources regulated by Paragraph (b) of this Rule shall not:

(1) allow gasoline to be discarded in sewers or stored in open containers or handled in any manner that would result in evaporation, or

(2) allow the pressure in the vapor collection system to exceed the tank truck or trailer pressure relief settings.

(e) The owner or operator of a bulk gasoline terminal shall paint all tanks used for gasoline storage white or silver at the next scheduled painting or by December 1, 2002, whichever occurs first.

(f) The owner or operator of a bulk gasoline terminal shall install on each external floating roof tank with an inside diameter of 100 feet or less used to store gasoline a self-supporting roof, such as a

geodesic dome, at the next time that the tank is taken out of service or by December 1, 2002, whichever occurs first.

(g) The following equipment shall be required on all new tanks storing gasoline at a bulk gasoline terminal when put into service and shall be required on all existing tanks storing gasoline at a bulk gasoline terminal:

(1) rim-mounted secondary seals on all external and internal floating roof tanks,

(2) gaskets on deck fittings, and

(3) floats in the slotted guide poles with a gasket around the cover of the poles.

(h) Decks shall be required on all above ground tanks with a capacity greater than 19,800 gallons storing gasoline at a bulk gasoline terminal. All decks installed after June 30, 1998 shall comply with the following requirements:

(1) deck seams shall be welded, bolted or riveted, and

(2) seams on bolted contact decks and on riveted contact decks shall be gasketed.

(i) If, upon facility or operational modification of a bulk gasoline terminal that existed before December 1, 1992, an increase in benzene emissions results such that:

(1) emissions of volatile organic compounds increase by more than 25 tons cumulative at any time during the five years following modifications; and

(2) annual emissions of benzene from the cluster where the bulk gasoline terminal is located (including the pipeline and marketing terminals served by the pipeline) exceed benzene emissions from that cluster based upon calendar year 1991 gasoline throughput and application of the requirements of this Subchapter,

then, the annual increase in benzene emissions due to the modification shall be offset within the cluster by reduction in benzene emissions beyond that otherwise achieved as a result of compliance with this Rule, in the ratio of at least 1.3 to 1.

(j) The owner or operators of a bulk gasoline terminal that has before December 1, 1992, to emit toxic air pollutants under Forsyth County Code, Section 3Q-0700 to comply with Section 3D-1100 shall continue to follow all terms and conditions of the permit issued under Forsyth County Code, Section 3Q-0700 and to bring the terminal into compliance with Section 3D-1100 according to the terms and conditions of the permit, in which case the bulk gasoline terminal shall continue to need a permit to emit toxic air pollutants and shall be exempted from Paragraphs (e) through (i) of this Rule.

(k) The owner or operator of a bulk gasoline terminal shall not load, or allow to be loaded, gasoline into any truck tank or trailer unless the truck tank or trailer has been certified leak tight according to Sec. 3D-0932 within the last 12 months.

(l) The owner or operator of a bulk gasoline terminal shall have on file at the terminal a copy of the certification test conducted according to Sec. 3D-0932 for each gasoline tank truck loaded at the terminal.

(m) Emissions of gasoline from degassing of external or internal floating roof tanks at a bulk gasoline terminal shall be collected and controlled by at least 90 percent by weight. Liquid balancing shall not be used to degas gasoline storage tanks at bulk gasoline terminals. Bulk gasoline storage tanks containing not more than 138 gallons of liquid gasoline or the equivalent of gasoline vapor and gasoline liquid are exempted from the degassing requirements if gasoline vapors are vented for at least 24-hours.

Documentation of degassing external or internal floating roof tanks shall be made according to Sec. 3D-0903 Recordkeeping: Reporting: Monitoring.

(n) According to Sec. 3D-0930, the owner or operator of a bulk gasoline terminal shall visually inspect the following for leaks each day that the terminal is both manned and open for business:

(1) the vapor collection system,

(2) the vapor control system, and

(3) each lane of the loading rack while a gasoline tank truck or trailer is being loaded.

If no leaks are found, the owner or operator shall record that no leaks were found. If a leak is found, the owner or operator shall record the information specified in Paragraph (p) of this rule. The owner or operator shall repair all leaks found according to Paragraph (q) of this Rule.

(o) The owner or operator of a bulk gasoline terminal shall inspect weekly for leaks:

(1) the vapor collection system,

(2) the vapor control system, and

(3) each lane of the loading rack while a gasoline tank truck or trailer is being loaded.

The weekly inspection shall be done using sight, sound, or smell; a meter used to measure volatile organic compounds or an explosimeter shall be conducted every month. If no leaks are found, the owner or operator shall record the date that the inspection was done and that no leaks were found. If a leak is found, the owner or operator shall record the information specified in Paragraph (p) of this Rule. The owner or operator shall repair all leaks found according to Paragraph (q) of the Rule.

(p) For each leak found under Paragraph (n) or (o) of this Rule, the owner or operator of a bilk gasoline terminal shall record:

(1) the date of the inspection,

(2) the findings (location, nature and severity of each leak),

(3) the corrective action taken,

(4) the date when corrective action was completed, and

(5) any other information that the terminal deems necessary to demonstrate compliance.

(q) The owner or operator of a bulk gasoline terminal shall repair all leaks as follows:

(1) The vapor collection hose that connects to the tank truck or trailer shall be repaired or replaced before another tank truck or trailer is loaded at that rack after a leak has been detected originating with the terminal's equipment rather than from the gasoline tank truck or trailer.

(2) All other leaks shall be repaired as expeditiously as possible but no later than 15 days from their detection. If more than 15 days are required to make the repair, the reasons that the repair cannot be made shall be documented and the leaking equipment shall not be used after the fifteenth day from when the leak detection was found until the repair is made. (Ord. No. 9-94, 12-19-94, 11-11-96, 9-14-98, 7-22-02, 7-28-03)

Sec. 3D-0928. Gasoline service stations stage I

(a) Definitions. For the purpose of this Rule, the following definitions apply:

(1) "Gasoline" means a petroleum distillate having a Reid vapor pressure of four psia or greater.

(2) "Delivery vessel" means tank trucks or trailers equipped with a storage tank and used for the transport of gasoline from sources or supply to stationary storage tanks of gasoline dispensing facilities.

(3) "Submerged fill pipe" means any fill pipe with a discharge opening which is entirely submerged when the pipe normally used to withdraw liquid from the tank can no longer withdraw any liquid, or which is entirely submerged when the level of the liquid is:

(A) six inches above the bottom of the tank if the tank does not have a vapor recovery adaptor, or

(B) 12 inches above the bottom of the tank if the tank has a vapor recovery adaptor.

If the opening of the submerged fill pipe is cut at a slant, the distance is measured from the top of the slanted cut to the bottom of the tank.

(4) "Owner" means any person who has legal or equitable title to the gasoline storage tank at a facility.

(5) "Operator" means any person who leases, operates, controls, or supervises a facility at which gasoline is dispensed.

(6) "Gasoline dispensing facility" means any site where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage tanks.

(7) "Gasoline service station" means any gasoline dispensing facility where gasoline is sold to the motoring public from stationary storage tanks.

(8) "Throughput" means the amount of gasoline dispensed at a facility during a calendar month after November 15, 1990.

(9) "Line" means any pipe suitable for transferring gasoline.

(10) "Dual point system" means the delivery of the product to the stationary storage tank and the recovery of vapors from the stationary storage tank occurs through two separate openings in the storage tank and two separate hoses between the tank truck and the stationary storage tank.

(11) "Coaxial system" means the delivery of the product and recovery of vapors occurs through a single coaxial fill tube, which is a tube within a tube. Product is delivered through the inner tube, and vapor is recovered through the annular space between the walls of the inner tube and outer tube.

(12) "Poppeted vapor recovery adaptor" means a vapor recovery adaptor that automatically and immediately closes itself when the vapor return line is disconnected and maintains a tight seal when the vapor return line is not connected.

(13) "Stationary storage tank" means a gasoline storage container, which is a permanent fixture.

(b) Applicability. This Rule applies to all gasoline dispensing facilities and gasoline service stations and to delivery vessels delivering gasoline to a gasoline dispensing facility or gasoline service station.

(c) Exemptions. This Rule does not apply to:

(1) transfers made to storage tanks at gasoline dispensing facilities or gasoline service stations equipped with floating roofs or their equivalent;

(2) stationary tanks with a capacity of not more than 2,000 gallons, which are in place before July 1, 1979, if the tanks are equipped with a permanent, or portable submerged fill pipe;

(3) stationary storage tanks with a capacity of not more than 550 gallons, which are installed after June 30, 1979, if tanks are equipped with a permanent or portable submerged, fill pipe;

(4) stationary storage tanks with a capacity of not more than 2000 gallons located on a farm or a residence and used to store gasoline for farm equipment or residential use if gasoline is delivered to the tank through a permanent or portable submerged fill pipe except that this exemption does not apply in ozone non-attainment areas;

(5) stationary storage tanks at a gasoline dispensing facility or gasoline service stations where the combined annual throughput of gasoline at the facility or station does not exceed 50,000 gallons, if the tanks are permanently equipped with submerged fill pipes;

(6) any tanks used exclusively to test the fuel dispensing meters.

(d) With exceptions stated in Paragraph (c) of this Rule, gasoline shall not be transferred from any delivery vessel into any stationary storage tank unless:

(1) The tank is equipped with a submerged fill pipe, and the vapors displaced from the storage tank during filling are controlled by a vapor control system as described in Paragraph (e) of this Rule;

(2) The vapor control system is in good working order and is connected and operating with a vapor tight connection;

(3) The vapor control system is properly maintained and all damaged or malfunctioning components or elements of design are repaired, replaced or modified;

(4) Gauges, meters, or other specified testing devices are maintained in proper working order;

(5) The delivery vessel and vapor collection system complies with Sec. 3D-0932; and

(6) The following records, as a minimum, are kept in accordance with Sec. 3D-0903:

(A) the scheduled date for maintenance or the date that a malfunction was detected;

(B) the date the maintenance was performed or the malfunction corrected; and

(C) the component or element of design of the control system repaired, replaced, or modified.

(e) The vapor control system required by Paragraph (d) of this Rule shall include one or more of the following:

(1) a vapor-tight line from the storage tank to the delivery vessel and:

(A) for a coaxial vapor recovery system, either a poppeted or unpoppeted vapor recovery adaptor;

(B) for a dual point vapor recovery system, poppeted vapor recovery adaptor; or

(2) a refrigeration-condensation system or equivalent designed to recover at least 90 percent by weight of the organic compounds in the displaced vapor.

(f) If an unpoppeted vapor recovery adaptor is used pursuant to Part (e)(1)(A) of this Rule, the tank liquid fill connection shall remain covered either with a vapor-tight cap or a vapor return line except when the vapor return line is being connected or disconnected.

(g) If an unpoppeted vapor recovery adaptor is used pursuant to Part (e)(1)(A) of this Rule, the unpoppeted vapor recovery adaptor shall be replaced with a poppeted vapor recovery adaptor when the tank is replaced or is removed and upgraded.

(h) Where vapor lines from the storage tanks are manifolded, poppeted vapor recovery adapters shall be used. No more than one tank shall be loaded at a time if the manifold vapor lines are size 2 inches and smaller. If the manifold vapor lines are 3 inches and larger, then two tanks at a time may be loaded.

(i) Vent lines on tanks with Stage I controls shall have pressure release valves or restrictors.

(j) The vapor-laden delivery vessel:

(1) shall be designed and maintained to be vapor-tight during loading and unloading operations and during transport with the exception of normal pressure/vacuum venting as required by regulations of the Department of Transportation; and

(2) if it is refilled in Forsyth County, shall be refilled only at:

(A) bulk gasoline plants complying with Sec. 3D-0926 or

(B) bulk gasoline terminals complying with Sec. 3D-0927 of this Section or Sec. 3D-0524. (Ord. No. 9-94, 12-19-94, 11-11-96)

Sec. 3D-0929. Repealed

(Ord. No. 9-94, 12-19-94, 11-11-96)

Sec. 3D-0930. Solvent metal cleaning

(a) For the purpose of this Regulation, the following definitions apply:

(1) "Cold cleaning" means the batch process of cleaning and removing soils from metal surfaces by spraying, brushing, flushing, or immersion while maintaining the solvent below its boiling point. Wipe cleaning is not included in this definition.

(2) "Conveyorized degreasing" means the continuous process of cleaning and removing soils from metal surfaces by operating with either cold or vaporized solvents.

(3) "Freeboard height" means for vapor degreasers the distance from the top of the vapor zone to the top of the degreaser tank. For cold cleaners, freeboard height means the distance from liquid solvent level in the degreaser tank to the top of the tank.

(4) "Freeboard ratio" means the freeboard height divided by the width of the degreaser.

(5) "Open top vapor degreasing" means the batch process of cleaning and removing soils from metal surfaces by condensing hot solvent vapor on the colder metal parts.

(6) "Solvent metal cleaning" means the process of cleaning soils from metal surfaces by cold cleaning or open top vapor degreasing or conveyorized degreasing.

(b) This Regulation applies to cold cleaning, open top vapor degreasing, and conveyorized degreasing operations.

(c) The provisions of this Regulation shall apply with the following exceptions:

(1) Open top vapor degreasers with an open area smaller than 10.8 square feet shall be exempt from Subparagraph (e)(3) of this Regulation; and

(2) Conveyorized degreasers with an air/vapor interface smaller than 21.6 square feet shall be exempt from Subparagraph (f)(2) of this Regulation.

(d) The owner or operator of a cold cleaning facility shall:

(1) equip the cleaner with a cover and the cover shall be designed so that it can be easily operated with one hand, if:

(A) The solvent volatility is greater than 15 millimeters of mercury or 0.3 pounds per square inch measured at 100^{o}F;

(B) The solvent is agitated; or

(C) The solvent is heated;

(2) equip the cleaner with a facility for draining cleaned parts. The drainage facility shall be constructed internally so that parts are enclosed under the cover while draining if the solvent volatility is greater than 32 millimeters of mercury or 0.6 pounds per square inch measured at 100^{o}F. However, the drainage facility may be external for applications where an internal type cannot fit into the cleaning system;

(3) install one of the following control devices if the solvent volatility is greater than 33 millimeters of mercury or 0.6 pounds per square inch measured at 100^{o}F, or if the solvent is heated above 120^{o}F:

(A) freeboard which gives a freeboard ratio greater than or equal to 0.7;

(B) water cover if the solvent is insoluble in and heavier than water; or

(C) other systems of equivalent control, such as refrigerated chiller or carbon adsorption, approved by the Director;

(4) provide a permanent, conspicuous label, summarizing the operating requirements;

(5) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than 20 percent of the waste solvent (by weight) can evaporate into the atmosphere;

(6) close the cover whenever parts are not being handled in the cleaner;

(7) drain the cleaned parts for at least 15 seconds or until dripping ceases; and

(8) if used, supply a solvent spray which is a solid fluid stream (not a fine, atomized, or shower type spray) at a pressure which does not cause excessive splashing.

(e) With the exception stated in Paragraph (c) of this Regulation, the owner or operator of an open top vapor degreaser shall:

(1) equip the vapor degreaser with a cover which can be opened and closed easily without disturbing the vapor zone;

(2) provide the following safety switches or devices:

(A) a condenser flow switch and thermostat or other device which prevents heat input if the condenser coolant is either not circulating or too warm,

(B) a spray safety switch or other device which shuts off the spray pump if the vapor level drops more than 10 inches, and

(C) a vapor level control thermostat or other device which prevents heat input when the vapor level rises too high;

(3) install one of the following control devices:

(A) freeboard ratio greater than or equal to 0.75. If the degreaser opening is greater than 10.8 square feet, the cover must be powered;

(B) refrigerated chiller;

(C) enclosed design (The cover or door opens only when the dry part is actually entering or exiting the degreaser.); or

(D) carbon adsorption system, with ventilation greater than or equal to 50 cubic feet per minute per square foot of air/vapor area (when cover is open), and exhausting less than 25 parts per million of solvent averaged over one complete adsorption cycle.

(4) keep the cover closed at all times except when processing workloads through the degreaser; and

(5) minimize solvent carry out by:

(A) racking parts to allow complete drainage,

(B) moving parts in and out of the degreaser at less than 11 feet per minute,

(C) holding the parts in the vapor zone at least 30 seconds or until condensation ceases,

(D) tipping out any pools of solvent on the cleaned parts before removal from the vapor zone, and

(E) allowing parts to dry within the degreaser for at least 15 seconds or until visually dry;

(6) not degrease porous or absorbent materials, such as cloth, leather, wood, or rope;

(7) not occupy more than half of the degreaser's open top area with a workload;

(8) not load the degreaser to the point where the vapor\ level would drop more than 10 inches when the workload is removed from the vapor zone;

(9) always spray below the vapor level;

(10) repair solvent leaks immediately or shutdown the degreaser;

(11) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than 20 percent of the waste solvent (by weight) can evaporate into the atmosphere;

(12) not operate the cleaner so as to allow water to be visually detectable in solvent exiting the water separator;

(13) not use ventilation fans near the degreaser opening, nor provide exhaust ventilation exceeding 65 cubic feet per minute per square foot of degreaser open area, unless necessary to meet OSHA requirements (OSHA is the U.S. Occupational Safety and Health Administration; in North Carolina the N.C. Labor Department has delegation of OSHA programs.); and

(14) provide a permanent, conspicuous label, summarizing the operating procedures of Subparagraphs (4) through (12) of this Paragraph.

(f) With the exception stated in Paragraph (c) of this Regulation, the owner or operator of a conveyorized degreaser shall:

(1) not use workplace fans near the degreaser opening, nor provide exhaust ventilation exceeding 65 cubic feet per minute per square foot of degreaser opening, unless necessary to meet OSHA requirements;

(2) install one of the following control devices:

(A) refrigerated chiller or

(B) carbon adsorption system, with ventilation greater than or equal to 50 cubic feet per minute per square foot of air/vapor area (when downtime covers are open), and exhausting less than 25 parts per million of solvent by volume averaged over a complete adsorption cycle;

(3) equip the cleaner with equipment, such as a drying tunnel or rotating (tumbling) basket, sufficient to prevent cleaned parts from carrying out solvent liquid or vapor;

(4) provide the following safety switches or devices:

(A) a condenser flow switch and thermostat or other device which prevents heat input if the condenser coolant is either not circulating or too warm,

(B) a spray safety switch or other device which shuts off the spray pump or the conveyor if the vapor level drops more than 10 inches, and

(C) a vapor level control thermostat or other device which prevents heat input when the vapor level rises too high;

(5) minimize openings during operation so that entrances and exits will silhouette workloads with an average clearance between the parts and the edge of the degreaser opening of less than four inches or less than 10 percent of the width of the opening;

(6) provide downtime covers for closing off the entrance and exit during shutdown hours;

(7) minimize carry out emissions by:

(A) racking parts for best drainage; and

(B) maintaining the vertical conveyor speed at less than 11 feet per minute;

(8) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than 20 percent of the waste solvent (by weight) can evaporate into the atmosphere;

(9) repair solvent leaks immediately, or shut down the degreaser;

(10) not operate the cleaner so as to allow water to be visually detectable in solvent exiting the water separator; and

(11) place downtime covers over entrances and exits or conveyorized degreasers immediately after the conveyors and exhausts are shutdown and not remove them until just before start-up. (Ord. No. 9-94, 12-19-94)

Sec. 3D-0931. Cutback asphalt

(a) For the purpose of this Regulation, the following definitions apply:

(1) "Asphalt" means a dark-brown to black cementitious material (solid, semisolid, or liquid in consistency) in which the predominating constituents are bitumens which occur in nature as such or which are obtained as residue in refining petroleum.

(2) "Cutback asphalt" means asphalt cement which has been liquefied by blending with petroleum solvents (diluents). Upon exposure to atmospheric conditions, the diluents evaporate, leaving the asphalt cement to perform its function.

(3) "Emulsified asphalt" means an emulsion of asphalt cement and water which contains a small amount of an emulsifying agent; a heterogeneous system containing two normally immiscible phases (asphalt and water) in which the water forms the continuous phase of the emulsion, and minute globules of asphalt form the discontinuous phase.

(4) "Penetrating prime coat" means an application of low-viscosity liquid asphalt to an absorbent surface. It is used to prepare an untreated base for an asphalt surface. The prime penetrates the base and plugs the voids, hardens the top, and helps bind it to the overlying asphalt course. It also reduces the necessity of maintaining an untreated base course prior to placing the asphalt pavement.

(b) This Regulation applies to the manufacture and use of cutback asphalts for the purpose of paving or maintaining roads, highways, streets, parking lots, driveways, curbs, sidewalks, airfields (runways, taxiways, and parking aprons), recreational facilities (tennis courts, playgrounds, and trails), and other similar structures.

(c) Cutback asphalt shall not be manufactured, mixed, stored, used, or applied except where:

(1) Long-life (one month or more) stockpile storage is necessary;

(2) The use or application at ambient temperatures less than 50^{o}F, as measured at the nearest National Weather Service Field Office or Federal Aviation Administration Station, is necessary;

(3) The cutback asphalt is to be used solely as a penetrating prime coat; or

(4) The user can demonstrate to the Director that there are no volatile organic compound emissions under conditions of normal use. (Ord. No. 9-94, 12-19-94)

Sec. 3D-0932. Gasoline truck tanks and vapor collection systems

(a) For the purposes of this Rule, the following definitions apply:

(1) "Bottom filling" means the filling of a tank truck or stationary storage tank through an opening that is flush with the tank bottom.

(2) "Bulk gasoline plant" means a gasoline storage and distribution facility that has an average daily throughput of less than 20,000 gallons of gasoline and which usually receives gasoline from bulk terminals by trailer transport, stores it in tanks, and subsequently dispenses it via account trucks to local farms, businesses, and service stations.

(3) "Bulk gasoline terminal" means:
  (A) breakout tanks of an interstate oil pipeline facility; or
  (B) a gasoline storage facility that usually receives gasoline from refineries primarily by pipeline, ship, or barge; delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by tank truck; and has an average daily throughput of more than 20,000 gallons of gasoline.

(4) “Certified facility” means any facility that has been certified under Sec. 3D-0960 to perform leak tightness tests on truck tanks.

(5) "Gasoline" means any petroleum distillate having a Reid vapor pressure of 4.0 psia or greater.

(6) "Gasoline dispensing facility" means any site where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage tanks.

(7) "Gasoline service station" means any gasoline dispensing facility where gasoline is sold to the motoring public from stationary storage tanks.

(8) "Truck tank" means the storage vessels of trucks or trailers used to transport gasoline from sources of supply to stationary storage tanks of bulk gasoline terminals, bulk gasoline plants, gasoline dispensing facilities and gasoline service stations.

(9) "Truck tank vapor collection equipment" means any piping, hoses, and devices on the truck tank used to collect and route gasoline vapors in the tank to or from the bulk gasoline terminal, bulk gasoline plant, gasoline dispensing facility or gasoline service station vapor control system or vapor balance system.

(10) "Vapor balance system" means a combination of pipes or hoses that create a closed system between the vapor spaces of an unloading tank and a receiving tank such that vapors displaced from the receiving tank are transferred to the tank being unloaded.

(11) "Vapor collection system" means a vapor balance system or any other system used to collect and control emissions of volatile organic compounds.

(b) This Rule applies to gasoline truck tanks equipped for vapor collection and to vapor control systems at bulk gasoline terminals, bulk gasoline plants, gasoline dispensing facilities, and gasoline service stations equipped with vapor balance or vapor control systems.

(c) Gasoline Truck Tanks

(1) Gasoline truck tanks and their vapor collection systems shall be tested annually by a certified facility. The test procedure that shall be used is described in Section 2600 of this Subchapter and is according to Sec. 3D-0912. The gasoline truck tank shall not be used if it sustains a pressure change greater than 1.0 inch of water in five minutes when pressurized to a gauge pressure of 18 inches of water or when evacuated to a gauge pressure of 6.0 inches of water.

(2) Each gasoline truck tank that has been certified leak tight, according to Subparagraph (1) of this Paragraph shall display a sticker near the Department of Transportation certification plate required by 49 CFR 178.340-10b.

(3) There shall be no liquid leaks from any gasoline truck tank.

(4) Any truck tank with a leak equal to or greater than 100 percent of the lower explosive limit, as detected by a combustible gas detector using the test procedure described in Sec. 3D-2615 shall not be used beyond 15 days after the leak has been discovered, unless the leak has been repaired and the tank has been certified to be leak tight according to Subparagraph (1) of this Paragraph.

(5) The owner or operator of a gasoline truck tanks with a vapor collection system shall maintain records of all certification testing and repairs. The records shall identify the gasoline truck tank, the date of the test or repair; and, if applicable, the type of repair and the date of retest. The records of certification tests shall include:

(A) the gasoline truck tank identification number;
(B) the initial test pressure and the time of the reading;
(C) the final test pressure and the time of the reading;
(D) the initial test vacuum and the time of reading;
(E) the final test vacuum and the time of the reading;
(F) the date and location of the tests;
(G) the NC sticker number issued; and
(H) the final change in pressure of the internal vapor value test.

(6) A copy of the most recent certification report shall be kept with the truck tank. The owner or operator of the truck tank shall also file a copy of the most recent certification test with each bulk gasoline terminal that loads the truck tank. The records shall be maintained for at least two years after the date of the testing or repair, and copies of such records shall be made available within a reasonable time to the Director upon written request.

(d) Bulk Gasoline Terminals, Bulk Gasoline Plants Equipped With Vapor Balance or Vapor Control Systems

(1) The vapor collection system and vapor control system shall be designed and operated to prevent gauge pressure in the truck tank from exceeding 18 inches of water and to prevent a vacuum of greater than six inches of water.

(2) During loading and unloading operations there shall be:

(A) no vapor leakage from the vapor collection system such that a reading equal to or greater than 100 percent of the lower explosive limit at one inch around the perimeter of each potential leak source as detected by a combustible gas detector using the test procedure described in Sec. 3D-2615; and
(B) no liquid leaks.

(3) If a leak is discovered that exceeds the limit in Subparagraph (2) of this Paragraph:

(A) For bulk gasoline plants, the vapor collection system or vapor control system (and therefore the source) shall not be used beyond 15 days after the leak has been discovered, unless the leak has been repaired and the system has been retested and found to comply with Subparagraph (2) of this Paragraph;
(B) For bulk gasoline terminals, the vapor collection system or vapor control system shall be repaired following the procedures in Sec. 3D-0927.

(4) The owner or operator of a vapor collection system at a bulk gasoline plant or a bulk gasoline terminal shall test, according to Sec. 3D-0912, the vapor collection system at least once per year. If after two complete annual checks no more than 10 leaks are found, the Director may allow less frequent monitoring. If more than 20 leaks are found, the Director may require that the frequency of monitoring be increased.

(5) The owner or operator of a vapor control systems at bulk gasoline terminals, bulk gasoline plants, gasoline dispensing facilities, and gasoline service stations equipped with vapor balance or vapor control systems shall maintain records of all certification testing and repairs. The records shall identify the vapor collection system, or vapor control system; the date of the test or repair; and, if applicable, the type of repair and the date of retest. (Ord. No. 9-94, 12-19-94, 7-22-02, 7-28-03)

Sec. 3D-0933. Petroleum liquid storage in external floating roof tanks

(a) For the purpose of this Rule, the following definitions apply:

(1) "Condensate" means hydrocarbon liquid separated from natural gas which condenses due to changes in the temperature or pressure and remains liquid at standard conditions.

(2) "Crude oil" means a naturally occurring mixture consisting of hydrocarbons or sulfur, nitrogen or oxygen derivatives of hydrocarbons or mixtures thereof which is a liquid in the reservoir at standard conditions.

(3) "Custody transfer" means the transfer of produced crude oil or condensate, after processing or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.

(4) "External floating roof" means a storage vessel cover in an open top tank consisting of a double deck or pontoon single deck which rests upon and is supported by the petroleum liquid being contained and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.

(5) "Internal floating roof" means a cover or roof in a fixed roof tank which rests upon or is floated upon the petroleum liquid being contained, and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.

(6) "Liquid-mounted seal" means a primary seal mounted so the bottom of the seal covers the liquid surface between the tank shell and the floating roof.

(7) "Vapor-mounted seal" means a primary seal mounted so there is an annular vapor space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the tank shell, the liquid surface, and the floating roof.

(8) "Petroleum liquids" means crude oil, condensate, and any finished or intermediate products manufactured or extracted in a petroleum refinery.

(b) This Rule applies to all external floating roof tanks with capacities greater than 950 barrels containing petroleum liquids whose true vapor pressure exceed 1.52 pounds per square inch absolute.

(c) This Rule does not apply to petroleum liquid storage vessels:

(1) that have external floating roofs that have capacities less than 10,000 barrels and that are used to store produced crude oil and condensate prior to custody transfer;
(2) that have external floating roofs and that store waxy, heavy-pour crudes;
(3) that have external floating roofs, and that contain a petroleum liquid with a true vapor pressure less than 4.0 pounds per square inch absolute and:
(A) The tanks are of welded construction; and
(B) The primary seal is a metallic-type shoe seal, a liquid-mounted foam seal, a liquid-mounted filled type seal, or any other closure device of demonstrated equivalence; or
(4) that have fixed roofs with or without internal floating roofs.

(d) With the exceptions stated in Paragraph (c) of this Rule, an external floating roof tank subject to this Rule shall not be used unless:
(1) The tank has:
(A) a continuous secondary seal extending from the floating roof to the tank wall (a rim-mounted secondary), or
(B) a metallic-type shoe primary seal and a secondary seal from the top of the shoe seal to the tank wall (shoe-mounted secondary seal); or
(C) a closure or other control device demonstrated to have an efficiency equal to or greater than that required under Part (A) of this Subparagraph.
(2) The seal closure devices meet the following requirements:
(A) There shall be no visible holes, tears, or other openings in the seal or seal fabric;
(B) The seal shall be intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall; and
(C) For vapor mounted primary seals, the gap-area of gaps exceeding 0.125 inch in width between the secondary seal and the tank wall shall not exceed 1.0 square inch per foot of tank diameter;
(3) All openings in the external floating roof, except for automatic bleeder vents, rim space vents, and leg sleeves, are:
(A) provided with a projection below the liquid surface; and
(B) equipped with covers, seals, or lids that remain in a closed position at all times except when in actual use;
(4) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;
(5) Rim vents are set to open only when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting;
(6) Any emergency roof drains are provided with slotted membrane fabric covers or equivalent covers that cover at least 90 percent of the area at the opening;
(7) Routine visual inspections are conducted once per month;
(8) For tanks equipped with a vapor-mounted primary seal, the secondary seal gap measurements are made annually in accordance with Paragraph (e) of this Rule; and

(9) Records are maintained in accordance with Sec. 3D-0903 and include:

(A) reports of the results of inspections conducted under Subparagraph (7) and (8) of this Paragraph;

(B) a record of the average monthly storage temperature and the true vapor pressures or Reid vapor pressures of the petroleum liquids stored; and

(C) records of the throughput quantities and types of volatile petroleum liquids for each storage vessel.

(e) The secondary seal gap area is determined by measuring the length and width of the gaps around the entire circumference of the secondary seal. Only gaps equal to or greater than 0.125 inch are used in computing the gap area. The area of the gaps are accumulated to determine compliance with Part (d)(2)(C) of this Rule.

(f) Notwithstanding the definition of volatile organic compound found in Sec. 3D-0901 (28), the owner or operator of a petroleum liquid storage vessel with an external floating roof not equipped with a secondary seal or approved alternative, that contains a petroleum liquid with a true vapor pressure greater than 1.0 pound per square inch shall maintain records of the average monthly storage temperature, the type of liquid, throughput quantities, and the maximum true vapor pressure for all petroleum liquids with a true vapor pressure greater than 1.0 pound per square inch. (Ord. No. 9-94, 12-19-94)

Sec. 3D-0934. Repealed

(Ord. No. 9-94, 12-19-94, 11-11-96)

Sec. 3D-0935. Factory surface coating of flat wood paneling

(a) For the purpose of this Rule, the following definitions apply:

(1) Flat wood paneling coatings means wood paneling product that are any interior, exterior or tileboard (class I hardboard) panel to which a protective, decorative, or functional material or layer has been applied.

(2) "Hardboard" is a panel manufactured primarily from inter felted lignocellulosic fibers which are consolidated under heat and pressure in a hot-press.

(3) Tileboard" means a premium interior wall paneling product made of hardboard that is used in high moisture area of the home.

(b) This Rule applies to each flat wood paneling coatings source whose volatile organic compounds emissions exceed the threshold established in Paragraph (b) of Sec. 3D-0902 at the facilities with flat wood paneling coating applications for the following products:

(1) class II finishes on hardboard panels;

(2) exterior siding;

(3) natural finish hardwood plywood panels;

(4) printed interior wall panels made of hardwood, plywood and thin particleboard; and

(5) tileboard made of hardboard.

(c) Emissions of volatile organic compounds from any factory finished flat wood product operation subject to this Rule shall not exceed 2.1 pounds of volatile organic compounds per gallon material excluding water and exempt compounds (2.9 pounds of volatile organic compounds per gallon solids.)

(d) EPA Method 24 (40 CFR Part 60, Appendix A-7) shall be used to determine the volatile organic compounds content of coating materials used at surface coating of flat wood paneling facilities unless the facility maintains records to document the volatile organic compounds content of coating materials from the manufacturer.

(e) Any facility that meet definition of Paragraph (b) of this Rule and which has chosen to use add-on controls for flat wood paneling coating operation rather than the emission limits established in Paragraph (c) of this Rule shall install control equipment with an overall control efficiency of 90 percent or use a combination of coating and add-on control equipment on a flat wood paneling coating operation to meet limits established in Paragraph (c) of this Rule.

(f) The owner or operator of any facility subject to this Rule shall comply with the Sec. 3D-0903 and 0958.

(Ord. No. 9-94, 12-19-94, 11-11-96)

Sec. 3D-0936. Repealed

(Ord. No. 9-94, 12-19-94)

Sec. 3D-0937. Manufacture of pneumatic rubber tires

(a) For the purpose of this Rule, the following definitions apply:

(1) "Bead dipping" means the dipping of an assembled tire bead into a solvent based cement.

(2) "Green tires" means assembled tires before molding and curing have occurred.

(3) "Green tire spraying" means the spraying of green tires, both inside and outside, with release compounds which help remove air from the tire during molding and prevent the tire from sticking to the mold after curing.

(4) "Pneumatic rubber tire manufacture" means the production of passenger car tires, light and medium truck tires, and other tires manufactured on assembly lines.

(5) "Tread end cementing" means the application of a solvent based cement to the tire tread ends.

(6) "Undertread cementing" means the application of a solvent based cement to the underside of a tire tread.

(b) This Rule applies to undertread cementing, tread end cementing, bead dipping, and green tire spraying operations of pneumatic rubber tire manufacturing.

(c) With the exception stated in Paragraph (d) of this Rule, emissions of volatile organic compounds from any pneumatic rubber tire manufacturing plant shall not exceed:

(1) 25 grams of volatile organic compounds per tire from each undertread cementing operation,

(2) 4.0 grams of volatile organic compounds per tire from each tread end cementing operation,

(3) 1.9 grams of volatile organic compounds per tire from each bead dipping operation, or

(4) 24 grams of volatile organic compounds per tire from each green tire spraying operation.

(d) If the total volatile organic compound emissions from all undertread cementing, tread end cementing, bead dipping, and green tire spraying operations at a pneumatic rubber tire manufacturing facility does not exceed 50 grams per tire, Paragraph (c) of this Rule shall not apply. (Ord. No. 9-94, 12-19-94, 11-11-96)

Sec. 3D-0938. Repealed

(Ord. No. 9-94, 12-19-94, 9-14-98)

Sec. 3D-0939. Repealed

(Ord. No. 9-94, 12-19-94)

Sec. 3D-0940. Repealed

(Ord. No. 9-94, 12-19-94)

Sec. 3D-0941. Repealed

(Ord. No. 9-94, 12-19-94)

Sec. 3D-0942. Repealed

(Ord. No. 9-94, 12-19-94)

Sec. 3D-0943. Synthetic organic chemical and polymer manufacturing

(a) For the purposes of this Rule, the following definitions apply:

(1) "Closed vent system" means a system which is not open to the atmosphere and which is composed of piping, connections, and if necessary, flow inducing devices that transport gas or vapor from a fugitive emission source to an enclosed combustion device or vapor recovery system.

(2) "Enclosed combustion device" means any combustion device which is not open to the atmosphere such as a process heater or furnace, but not a flare.

(3) "Fugitive emission source" means each pump, valve, safety/relief valve, open-ended valve, flange or other connector, compressor, or sampling system.

(4) "In gas vapor service" means that the fugitive emission source contains process fluid that is in the gaseous state at operating conditions.

(5) "In light liquid service" means that the fugitive emission source contains a liquid having:

(A) a vapor pressure of one or more of the components greater than 0.3 kilopascals at 20 degrees Celsius, and

(B) a total concentration of the pure components having a vapor pressure greater than 0.3 kilopascals at 20 degrees Celsius equal to or greater than 10 percent by weight, and the fluid is a liquid at operating conditions.

(6) "Open-ended valve" means any valve, except safety/relief valves, with one side of the valve seat in contact with process fluid and one side that is open to the atmosphere, either directly or through open piping.

(7) "Polymer manufacturing" means the industry that produces, as intermediates or final products, polyethylene, polypropylene, or polystyrene.

(8) "Process unit" means equipment assembled to produce, as intermediates or final products, polyethylene, polypropylene, polystyrene, or one or more of the chemicals listed in 40 CFR 60.489. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the final product.

(9) "Quarter" means a three month period. The first quarter concludes at the end of the last full month during the 180 days following initial start-up.

(10) "Synthetic organic chemical manufacturing" means the industry that produces, as intermediates or final products, one or more of the chemicals listed in 40 CFR 60.489.

(b) This Rule applies to synthetic organic chemicals manufacturing facilities and polymer manufacturing facilities.

(c) The owner or operator of a synthetic organic chemical manufacturing facility or a polymer manufacturing facility shall not cause, allow or permit:

(1) any liquid leakage of volatile organic compounds or

(2) any gaseous leakage of volatile organic compound of 10,000 ppm or greater from any fugitive emission source.

The owner or operator of these facilities shall control emissions of volatile organic compounds from open-ended valves as described in Paragraph (f) of this Rule.

(d) The owner or operator shall visually inspect each week every pump in light liquid service. If there are indications of liquid leakage, the owner or operator shall repair the pump within 15 days after detection except as provided in Paragraph (k) of this Rule.

(e) Using procedures in Section 3D-2600 of this Section, the owner or operator shall monitor each pump, valve, compressor and safety/relief valve in gas/vapor service or in light liquid service for gaseous leaks at least once each quarter. The owner or operator shall monitor safety/relief valves after each overpressure relief to ensure the valve has properly reseated. If a volatile organic compound concentration of 10,000 ppm or greater is measured, the owner or operator shall repair the component within 15 days after detection except as provided in Paragraph (k) of this Rule. Exceptions to the quarterly monitoring frequency are provided for in Paragraphs (h), (i) and (j) of this Rule.

(f) The owner or operator shall install on each open-ended valve:

(1) a cap,

(2) a blind flange,

(3) a plug, or

(4) a second closed valve,

which shall remained attached to seal the open end at all times except during operations requiring process fluid flow through the opened line.

(g) If any fugitive emission source appears to be leaking on the basis of sight, smell, or sound, it shall be repaired within 15 days after detection except as provided in Paragraph (k) of this Rule.

(h) If after four consecutive quarters of monitoring no more than two percent of the valves in gas/vapor service or in light liquid service are found leaking more than 10,000 ppm of volatile organic compounds, then the owner or operator may monitor valves for gaseous leaks only every third quarter. If the number of these valves leaking more than 10,000 ppm of volatile organic compounds remains at or below two percent, these valves need only be monitored for gaseous leaks every third quarter. However, if more than two percent of these valves are found leaking more than 10,000 ppm of volatile organic compounds, they shall be monitored every quarter until four consecutive quarters are monitored which have no more than two percent of these valves leaking more than 10,000 ppm of volatile organic compounds.

(i) When a fugitive emission source is unsafe to monitor because of extreme temperatures, pressures, or other reasons, the owner or operator of the facility shall monitor the fugitive emission source only when process conditions are such that the fugitive emission source is not operating under extreme conditions. The Director may allow monitoring of these fugitive emission sources less frequently than each quarter, provided they are monitored at least once per year.

(j) Any fugitive emission source more than 12 feet above a permanent support surface may be monitored only once per year.

(k) The repair of a fugitive emission source may be delayed until the next turnaround if the repair is technically infeasible without a complete or partial shutdown of the process unit.

(l) The owner or operator of the facility shall maintain records in accordance with Sec. 3D-0903, which shall include:

(1) identification of the source being inspected or monitored,
(2) dates of inspection or monitoring,
(3) results of inspection or monitoring,
(4) action taken if a leak was detected,
(5) type of repair made and when it was made, and
(6) if the repair were delayed, an explanation as to why.

(Ord. No. 9-94, 12-19-94)

Sec. 3D-0944. Manufacture of polyethylene, polypropylene and polystyrene

(a) For the purpose of this Regulation, the following definitions apply:

(1) "By-product and diluent recovery operation" means the process that separates the diluent from the by-product (atactic) and purifies and dries the diluent for recycle.
(2) "Continuous mixer" means the process that mixes polymer with anti-oxidants.
(3) "Decanter" means the process that separates the diluent/crude product slurry from the alcohol-water solution by decantation.

(4) "Ethylene recycle treater" means the process that removes water and other impurities from the recovered ethylene.

(5) "High-density polyethylene plants using liquid phase slurry processes" means plants that produce high density polyethylene in which the product, polyethylene, is carried as a slurry in a continuous stream of process diluent, usually pentane or isobutane.

(6) "Neutralizer" means the process that removes catalyst residue from the diluent/crude product slurry.

(7) "Polypropylene plants using liquid phase processes" means plants that produce polypropylene in which the product, polypropylene, is carried as a slurry in a continuous stream of process diluent, usually hexane.

(8) "Polystyrene plants using continuous processes" means plants which produce polystyrene in which the product, polystyrene, is transferred in a continuous stream in a molten state.

(9) "Product devolatilizer system" means the process that separates unreacted styrene monomer and by- products from the polymer melt.

(10) "Reactor" means the process in which the polymerization takes place.

(b) This Regulation applies to:

(1) polypropylene plants using liquid phase processes,

(2) high-density polyethylene plants using liquid phase slurry processes, and

(3) polystyrene plants using continuous processes.

(c) For polypropylene plants subject to this regulation, the emissions of volatile organic compounds shall be reduce by 98 percent by weight or to 20 ppm, whichever is less stringent, from:

(1) reactor vents,

(2) decanter vents,

(3) neutralizer vents,

(4) by-product and diluent recovery operation vents,

(5) dryer vents, and

(6) extrusion and pelletizing vents.

(d) For high-density polyethylene plants subject to this regulation, the emissions of volatile organic compounds shall be reduced by 98 percent by weight or to 20 ppm, whichever is less stringent, from:

(1) ethylene recycle treater vents,

(2) dryer vents, and

(3) continuous mixer vents.

(e) For polystyrene plants subject to this regulation, the emissions of volatile organic compounds shall not exceed 0.24 pounds per ton of product from the product devolatilizer system.

(f) If flares are used to comply with this Regulation all of the following conditions shall be met:

(1) Visible emissions shall not exceed five minutes in any two-hour period.

(2) A flame shall be present.

(3) If the flame is steam-assisted or air-assisted, the net heating value shall be at least 300 Btu per standard cubic foot. If the flame is non-assisted, the net heating value shall be at least 200 Btu per standard cubic foot.

(4) If the flare is steam-assisted or non-assisted, the exit velocity shall be no more than 60 feet per second. If the flare is air-assisted, the exit velocity shall be no more than (8.706 + 0.7084 HT) feet per second, where HT is the net heating value. A flare that meets the conditions given in Subparagraphs (1) through (4) of this Paragraph are presumed to achieve 98 percent destruction of volatile organic compounds by weight. If the owner or operator of the source chooses to use a flare that fails to meet one or more of these conditions, he shall demonstrate to the Director that the flare shall destroy at least 98 percent of the volatile organic compounds by weight. To determine if the specifications for the flare are being met, the owner or operator of a source using the flare to control volatile organic compound emissions shall install, operate, and maintain necessary monitoring instruments and shall keep necessary records as required by Sec. 3D-0903. (Ord. No. 9-94, 12-19-94)

Sec. 3D-0945. Petroleum dry cleaning

(a) For the purpose of this Rule, the following definitions apply:

(1) "Cartridge filter" means perforated canisters containing filtration paper or filter paper, and activated carbon that are used in a pressurized system to remove solid particles and fugitive dyes from soil-laden solvent, together with the piping and duct work used in the installation of this device.

(2) "Containers and conveyors of solvent" means piping, duct work, pumps, storage tanks, and other ancillary equipment that are associated with the installation and operation of washers, dryers, filters, stills, and settling tanks.

(3) "Dry cleaning" means a process for the cleaning of textiles and fabric products in which articles are washed in a nonaqueous solution (solvent) and then dried by exposure to a heated air stream.

(4) "Dryer" means a machine used to remove petroleum solvent from articles of clothing or other textile or leather goods, after washing and removing of excess petroleum solvent, together with the piping and duct work used in the installation of this device.

(5) "Perceptible leaks" means any petroleum solvent vapor or liquid leaks that are conspicuous from visual observation or that bubble after application of a soap solution, such as pools or droplets of liquid, open containers of solvent, or solvent laden waste standing open to the atmosphere.

(6) "Petroleum solvent" means organic material produced by petroleum distillation comprising a hydrocarbon range of eight to 12 carbon atoms per organic molecule that exists as a liquid under standard conditions.

(7) "Petroleum solvent dry cleaning" means a dry cleaning facility that uses petroleum solvent in a combination of washers, dryers, filters, stills, and settling tanks.

(8) "Settling tank" means a container which gravimetrically separates oils, grease, and dirt from petroleum solvent, together with the piping and duct work used in the installation of the device.

(9) "Solvent filter" means a discrete solvent filter unit containing a porous medium which traps and removes contaminants from petroleum solvent, together with the piping and duct work used in the installation of this device.

(10) "Solvent recovery dryer" means a class of dry cleaning dryers that employs a condenser to condense and recover solvent vapors evaporated in a closed-loop stream of heated air, together with the piping and duct work used in the installation of this device.

(11) "Still" means a device used to volatilize, separate, and recover petroleum solvent from contaminated solvent together with the piping and duct work used in the installation of this device.

(12) "Washer" means a machine which agitates fabric articles in a petroleum solvent bath and spins the articles to remove the solvent, together with the piping and duct work used in the installation of this device.

(b) This Rule applies to petroleum solvent washers, dryers, solvent filters, settling tanks, stills, and other containers and conveyors of petroleum solvent that are used in petroleum solvent dry cleaning facilities that consume 32,500 gallons or more of petroleum solvent annually.

(c) The owner or operator of a petroleum solvent dry cleaning dryer subject to this Rule shall:

(1) limit emissions of volatile organic compounds to the atmosphere to an average of 3.5 pounds of volatile organic compounds per 100 pounds dry weight of articles dry cleaned, or

(2) install and operate a solvent recovery dryer in a manner such that the dryer remains closed and the recovery phase continues until a final recovered solvent flow rate of 50 milliliters per minute is attained.

(d) The owner or operator of a petroleum solvent filter subject to this Rule shall:

(1) reduce the volatile organic compound content in all filter wastes to 1.0 pound or less per 100 pounds dry weight of articles dry cleaned, before disposal and exposure to the atmosphere, or

(2) install and operate a cartridge filter and drain the filter cartridges in their sealed housings for 8 hours or more before their removal.

(e) The owner or operator of a petroleum solvent dry cleaning facility subject to this Rule shall inspect the facility every 15 days and shall repair all perceptible leaks within 15 working days after identifying the sources of the leaks. If necessary repair parts are not on hand, the owner or operator shall order these parts within 15 working days and repair the leaks no later than 15 working days following the arrival of the necessary parts. The owner or operator shall maintain records, in accordance with Sec. 3D-0903, of when inspections were made, what was inspected, leaks found, repairs made and when repairs were made.

(f) To determine compliance with Subparagraph (c)(1) of this Rule, the owner or operator shall use the test method in Section 3D-2600 and shall:

(1) field calibrate the flame ionization analyzer with propane standards;

(2) determine in a laboratory the ratio of the flame ionization analyzer response to a given parts per million by volume concentration of propane to the response to the same parts per million concentration of the volatile organic compounds to be measured;

(3) determine the weight of volatile organic compounds vented to the atmosphere by:

(A) multiplying the ratio determined in Subparagraph (2) of this Paragraph by the measured concentration of volatile organic compound gas (as propane) as indicated by the flame ionization analyzer response output record,

(B) converting the parts per million by volume value calculated in Part (A) of this Subparagraph into a mass concentration value for the volatile organic compounds present, and

(C) multiplying the mass concentration value calculated in Part(B) of this Subparagraph by the exhaust flow rate; and

(4) Calculate and record the dry weight of articles dry cleaned. The test shall be repeated for normal operating conditions that encompass at least 30 dryer loads that total not less than 4,000 pounds dry weight and that represent a normal range of variation in fabrics, solvents, load weights, temperatures, flow rates, and process deviations.

(g) To determine compliance with Subparagraph(c)(2) of this Rule, the owner or operator shall verify that the flow rate of recovered solvent from the solvent recovery dryer at the termination of the recovery phase is no greater than 50 milliliters per minute. This one-time procedure shall be conducted for a duration of not less than two weeks during which not less than 50 percent of the dryer loads shall be monitored for their final recovered solvent flow rate. Near the end of the recovery cycle, the flow of recovered solvent shall be diverted to a graduated cylinder. The cycle shall continue until the minimum flow of solvent is 50 milliliters per minute. The type of articles cleaned and the total length of the cycle shall be recorded. (Ord. No. 9-94, 12-19-94)

Sec. 3D-0946. Repealed

(Ord. No. 9-94, 12-19-94, 7-28-97)

Sec. 3D-0947. Manufacture of synthesized pharmaceutical products

(a) For the purposes of this Rule, the following definitions apply:

(1) "Production equipment exhaust system" means a device for collecting and directing out of the work area fugitive emissions of volatile organic compounds from reactor openings, centrifuge openings, and other vessel openings for the purpose of protecting workers from excessive exposure to volatile organic compounds.

(2) "Synthesized pharmaceutical manufacturing" means manufacture of pharmaceutical products by chemical synthesis.

(b) This Rule applies to synthesized pharmaceutical products manufacturing facilities.

(c) The owner or operator of a synthesized pharmaceutical products manufacturing facility shall control the emissions of volatile organic compounds from:

(1) reactors, distillation operations, crystallizers, centrifuges, and vacuum dryers that have the potential to emit 15 pounds per day or more of volatile organic compounds with surface condensers that meet the requirements of Paragraph (e) of this Rule or equivalent controls;

(2) air dryers and production equipment exhaust system by reducing emissions of volatile organic compounds:

(A) by 90 percent if they are 330 pounds per day or more; or

(B) to 33 pounds per day if they are less than 330 pounds per day.

(3) storage tanks by:

(A) providing a vapor balance system or equivalent control that is at least 90 percent effective in reducing emissions from truck or railcar deliveries to storage tanks with capacities greater than 2,000 gallons that store volatile organic compounds with a vapor pressure greater than 4.1 pounds per square inch at 68°F; and

(B) installing pressure/vacuum conservation vents, which shall be set ±0.8 inches of water unless a more effective control system is used, on all storage tanks that store volatile organic compounds with a vapor pressure greater than 1.5 pounds per square inch at 68°F;

(4) centrifuges containing volatile organic compounds, rotary vacuum filters processing liquid containing volatile organic compounds, and other filters having an exposed liquid surface where the liquid contains volatile organic compounds by enclosing those centrifuges and filters that contain or process volatile organic compounds with a vapor pressure of 0.5 pounds per square inch or more at 68°F; and

(5) in-process tanks by installing covers, which shall remain closed except when production, sampling, maintenance, or inspection procedures require operator access.

(d) The owner or operator of a synthesized pharmaceutical products manufacturing facility shall repair as expeditiously as possible all leaks from which liquid volatile organic compounds can be seen running or dripping. This repair must take place at least within 15 days after which said leak is discovered unless the leaking component cannot be repaired before the process is shutdown in which case the leaking component must be repaired before the process is restarted.

(e) If surface condensers are used to comply with Subparagraph (c)(1) of this Rule, the condenser outlet temperature shall not exceed:

(1) -13°F when condensing volatile organic compounds of vapor pressure greater than 5.8 psi at 68°F;

(2) 5°F when condensing volatile organic compounds of vapor pressure greater than 2.9 psi at 68°F;

(3) 32°F when condensing volatile organic compounds of vapor pressure greater than 1.5 psi at 68°F;

(4) 50°F when condensing volatile organic compounds of vapor pressure greater than 1.0 psi at 68°F; or

(5) 77°F when condensing volatile organic compounds of vapor pressure greater than 0.5 psi at 68°F. (Ord. No. 9-94, 12-19-94)

Sec. 3D-0948. VOC emissions from transfer operations

(a) This Rule applies to operations that transfer volatile organic compounds from a storage tank to tank-trucks, trailers, or railroad tank cars that are not covered by Sec. 3D-0926, 0927 or 0928.

(b) The owner or operator of a facility to which this Rule applies shall not load in any one day more than 20,000 gallons of volatile organic compounds with a vapor pressure of 1.5 pounds per square inch or greater under actual conditions into any tank-truck, trailer, or railroad tank car from any loading operation unless the loading operation uses submerged loading through boom loaders that extend down into the compartment being loaded or by other methods that are at least as efficient based on source testing or engineering calculations. (Ord. No. 9-94, 12-19-94, 7-24-00)

Sec. 3D-0949. Storage of miscellaneous volatile organic compounds

(a) This Rule applies to the storage of volatile organic compounds in stationary tanks, reservoirs, or other containers with a capacity greater than 50,000 gallons that are not covered by Sec. 3D-0925 or 0933.

(b) The owner or operator of any source to which this Rule applies shall not place, store, or hold in any stationary tank, reservoir, or other container with a capacity greater than 50,000 gallons, any liquid volatile organic compound that has a vapor pressure of 1.5 pounds per square inch absolute or greater under actual storage conditions unless such tank, reservoir, or other container:

(1) is a pressure tank capable of maintaining working pressures sufficient at all times to prevent vapor gas loss into the atmosphere; or

(2) is designed and equipped with one of the following vapor loss control devices:

(A) a floating pontoon, double deck type floating roof or internal pan type floating roof equipped with closure seals to enclose any space between the cover's edge and compartment wall; this control equipment shall not be permitted for volatile organic compounds with a vapor pressure of 11.0 pounds per square inch absolute or greater under actual storage conditions; all tank gauging or sampling devices shall be gas-tight except when tank gauging or sampling is taking place;

(B) a vapor recovery system or other equipment or means of air pollution control that reduces the emission of organic materials into the atmosphere by at least 90 percent by weight; all tank gauging or sampling devices shall be gas-tight except when tank gauging or sampling is taking place. (Ord. No. 9-94, 12-19-94, 7-24-00)

Sec. 3D-0950. Repealed

(Ord. No. 9-94, 12-19-94, 11-13-95, 7-24-00)

Sec. 3D-0951. RACT for sources of volatile organic compounds

(a) Facilities required to install reasonably available control technology (RACT) pursuant to Sec. 3D- 0902 of this Section shall determine the emissions control level according to this Rule. If the only other applicable emissions control rule for the facility in this Section is Sec. 3D-0958, then both this Rule and Sec. 3D-0958 apply.

(b) This Rule does not apply to architectural or maintenance coating.

(c) The owner or operator of any facility to which this Rule applies shall comply by either of the following:

(1) install and operate reasonably available control technology as set forth by category specific emission standards defined in this Section; or

(2) install and operate alternative reasonably available control technology based on the Office's technical analysis of the information provided in Paragraph (d) of this Rule. All reasonably available control technology demonstrations, and any modifications or changes to those determinations, approved or determined by the Office pursuant to this Subparagraph and Paragraph (d) of this Rule shall be submitted by the Office to the U.S. EPA as a revision to the state implementation plan. No reasonably available control technology demonstration, nor any modification or change to a demonstration, approved or determined by the Office pursuant to this subsection shall revise the state implementation plan or be used as a state implementation plan credit, until it is approved by the U.S. EPA as a state implementation plan revision.

(d) If the owner or operator of a facility chooses to install reasonably available control technology under Subparagraph (c)(2) of this Rule, the owner or operator shall submit to the Director:

(1) the name and location of the facility;

(2) information identifying the source for which a reasonably available control technology limitation or standard is being proposed;

(3) a demonstration that shows the proposed reasonably available control technology limitation or standard advances attainment equivalent to or better than application of requirements under Subparagraph (c)(1) of this Rule; and

(4) a proposal for demonstrating compliance with the proposed reasonably control technology limitation or standard. (Ord. No. 9-94, 12-19-94, 11-11-96, 7-24-00)

Sec. 3D-0952. Petition for alternative controls for ract

(a) This Rule applies to all sources covered under this Section:

(b) If the owner or operator of any source of volatile organic compounds subject to the requirements of this Section, can demonstrate that compliance with Rules in this Section would be technologically or economically infeasible, he may petition the Director to allow the use of alternative

operational or equipment controls for the reduction of volatile organic compound emissions. Petition shall be made for each source to the Director.

(c) The petition shall contain:

(1) the name and address of the company and the name and telephone number of a company officer over whose signature the petition is submitted;

(2) a description of all operations conducted at the location to which the petition applies and the purpose that the volatile organic compound emitting equipment serves within the operations;

(3) reference to the specific operational and equipment controls under the Rules of this Section for which alternative operational or equipment controls are proposed;

(4) a description of the proposed alternative operational or equipment controls, the magnitude of volatile organic compound emission reduction that will be achieved, and the quantity and composition of volatile organic compounds that will be emitted if the alternative operational or equipment controls are instituted;

(5) a plan, which will be instituted in addition to the proposed alternative operational or equipment controls, to reduce, where technologically and economically feasible, volatile organic compound emissions from other source operations at the facility, further than that required under the Rules of this Section, if these sources exist at the facility, such that aggregate volatile organic compound emissions from the facility will in no case be greater through application of the alternative control than would be allowed through conformance with the Rules of this Section;

(6) a schedule for the installation or institution of the alternative operational or equipment controls in conformance with Sec. 3D-0909, as applicable; and

(7) certification that emissions of all other air contaminants from the subject source are in compliance with all applicable local, state and federal laws and regulations.

The petition may include a copy of the permit application and need not duplicate information in the permit application.

(d) The Director shall approve a petition for alternative control if:

(1) The petition is submitted in accordance with Paragraph (d)of this Rule;

(2) The Director determines that the petitioner cannot comply with the Rules in question because of technological or economical infeasibility;

(3) All other air contaminant emissions from the facility are in compliance with, or under a schedule for compliance as expeditiously as practicable with, all applicable local, state, and federal regulations; and

(4) The petition contains a schedule for achieving and maintaining reduction of volatile organic compound emissions to the maximum extent feasible and as expeditiously as practicable.

(e) When controls different from those specified in the appropriate emission standards in this Section are approved by the Director, the permit shall contain a condition stating such controls. (Ord. No. 9-94, 12-19-94; 11-13-95, 7-28-03)

Sec. 3D-0953. Vapor return piping for stage ii vapor recovery

Repealed. (Ord. No. 9-94, 12-19-94, 11-11-96, 9-14-98)

Sec. 3D-0954. Stage ii vapor recovery

Repealed (Ord. No. 9-94, 12-19-94; 11-13-95, 11-11-96, 7-28-97)

Sec. 3D-0955. Thread bonding manufacturing

(a) For the purpose of this Rule, the following definitions apply:

(1) "Capture hoods" means any device designed to remove emissions from the solution bath tray areas during the manufacturing process.

(2) "Curing" means exposing coated threads to high temperatures in an oven until the nylon solution mixture hardens (vaporizing the solvents) and bonds to the threads.

(3) "Day tanks" means holding tanks that contain nylon solution mixture ready for use.

(4) "Drying ovens" means any apparatus through which the coated threads are conveyed while curing.

(5) "Enclose" means to construct an area within the plant that has a separate ventilation system and is maintained at a slightly negative pressure.

(6) "Fugitive emissions" means emissions that cannot be collected and routed to a control system.

(7) "Nylon thread coating process" means a process in which threads are coated with a nylon solution and oven cured.

(8) "Permanent label" means a label that cannot be easily removed or defaced.

(9) "Polyester solution mixture" means a mixture of polyester and solvents which is used for thread coating.

(10) "Storing" means reserving material supply for future use.

(11) "Thread bonding manufacturing" means coating single or multi-strand threads with plastic (nylon or polyester solution mixture) to impart properties such as additional strength and durability, water resistance, and moth repellency.

(12) "Transporting" means moving material supply from one place to another.

(b) This Rule applies in accordance with Sec. 3D-0902 to any thread bonding manufacturing facility with total uncontrolled exhaust emissions from nylon thread coating process collection hoods and drying ovens of volatile organic compounds (VOC) equal to or greater than 100 tons per year.

(c) Annual VOC emissions from each nylon thread coating process shall be determined by multiplying the hourly amount of VOC consumed by the total scheduled operating hours per year.

(d) Emissions from each nylon thread coating process subject to this Rule shall be reduced:

(1) by at least 95 percent by weight, or

(2) by installing a thermal incinerator with a temperature of at least 1600° F and a residence time of at least 0.75 seconds.

(e) The owner or operator of any thread bonding manufacturing facility shall:

(1) enclose the nylon thread coating process area of the plant to prevent fugitive emissions from entering other plant areas;
(2) store all VOC containing materials in covered tanks or containers;
(3) ensure that equipment used for transporting or storing VOC containing material does not leak and that all lids and seals used by such equipment are kept in the closed position at all times except when in actual use;
(4) not cause or allow VOC containing material to be splashed, spilled, or discarded in sewers;
(5) hold only enough nylon solution mixture in the day tanks to accommodate daily process times measured in hours; and
(6) place permanent and conspicuous labels on all equipment affected by Subparagraphs (3) through (5) of this Paragraph summarizing handling procedures described in Subparagraphs (3) through (5) of this Paragraph for VOC contaminated materials at the nylon thread coating process.

(f) The owner or operator of a thread bonding manufacturing facility shall notify the Director within 30 days after the calculated annual emissions of VOC from nylon thread coating processes equal or exceed 100 tons per year. The owner or operator shall submit within six months after such calculation a permit application including a schedule to bring the facility into compliance with this Rule. (8-14-95)

Sec. 3D-0956. Glass christmas ornament manufacturing

(a) For the purpose of this Rule, the following definitions apply:
(1) "Coating" means the application of a layer of material, either by dipping or spraying, in a relatively unbroken film onto glass Christmas ornaments.
(2) "Curing ovens" means any apparatus through which the coated glass Christmas ornaments are conveyed while drying.
(3) "Glass Christmas ornament" means any glass ornament that is coated with decorative exterior and is traditionally hung on Christmas trees.
(4) "Glass Christmas ornament manufacturing facility" means a facility that coats glass Christmas ornaments through the process of interior coating or exterior coating that uses either mechanical or hand-dipping methods, drying (curing), cutting, and packaging operations.
(5) "Mechanical coating lines" means equipment that facilitates mechanized dipping or spraying of a coating onto glass Christmas ornaments in which the neck of each ornament is held mechanically during the coating operation.
(6) "Solvent-borne coating" means a coating that uses organic solvents as an ingredient.

(b) This Rule applies in accordance with Sec. 3D-0902 to any curing ovens servicing the mechanical coating lines in the coating of glass Christmas ornaments at glass Christmas tree ornament manufacturing facilities with potential volatile organic compound (VOC) emissions of 100 tons per year or more.

(c) This Rule does not apply to glass Christmas ornament manufacturing facilities that do not use solvent-borne coating materials.

(d) Emissions of VOC from each curing oven shall be reduced by at least 90 percent by weight.

(e) If the owner or operator of a facility subject to this Rule chooses to use low VOC content, solvent-borne coatings to reduce emissions, the emission reduction from the use of these coatings shall be equivalent to that achieved using add-on controls.

(f) The owner or operator of a Christmas tree ornament manufacturing facility shall notify the Director within 30 days after the calculated annual emissions of VOC from facility equal or exceed 100 tons per year. The owner or operator shall submit within six months after such calculation a permit application including a schedule to bring the facility into compliance with this Rule. (8-14-95)

Sec. 3D-0957. Commercial bakeries

(a) For the purpose of this Rule, the following definitions apply:

(1) "Baking Oven" means an oven used at any time for the purpose of baking yeast-leavened products, including bread and rolls.

(2) "Commercial Bakery" means an establishment where bread and baked goods are produced.

(b) This Rule applies in accordance with Sec. 3D-0902 to any baking oven at a commercial bakery with potential volatile organic compound (VOC) emissions of 100 tons per year or more. Daily volatile organic compound emissions shall be determined according to the calculation procedures in Paragraph (d) of this Rule.

(c) Emissions of VOC from baking ovens subject to this Rule shall be reduced by at least:

(1) 90 percent by weight, or

(2) 60 percent by weight, if biofiltration is used.

(d) Daily volatile organic compound emissions from each commercial baking oven shall be determined according to the following: $EtOH = 0.40425 + 0.444585[(Y \times T) + (S \times t)]$, where;

(1) EtOH = pounds ethanol per ton of baked bread.

(2) Y = baker's percent yeast in sponge to the nearest tenth of a percent.

(3) T = total time of fermentation in hours to the nearest tenth of an hour.

(4) S = baker's percent of yeast added to dough to the nearest tenth of a percent.

(5) t = proof time + floor time in hours to the nearest tenth of an hour.

(e) The owner or operator of a commercial bakery shall notify the Director within 30 days after the calculated emissions of VOC from the bakery equal or exceed 100 tons per year. The owner or operator shall submit within six months after such calculation a permit application including a schedule to bring the facility into compliance with this Rule. (8-14-95)

Sec. 3D-0958. Work practices for sources of volatile organic compounds

(a) This Rule applies to all facilities that use volatile organic compounds as solvents, carriers, material processing media, or industrial chemical reactants, or in other similar uses or that mix, blend, or

manufacture volatile organic compounds, or emit volatile organic compounds as a product of chemical reactions.

(b) This Rule does not apply to:

(1) architectural or maintenance coating, or

(2) sources subject to 40 CFR Part 63, Subpart JJ.

(c) The owner or operator of any facility subject to this Rule shall:

(1) store all material, including waste material, containing volatile organic compounds in containers covered with a tightly fitting lid that is free of cracks, holes, or other defects, when not in use,

(2) clean up spills as soon as possible following proper safety procedures,

(3) store wipe rags in closed containers,

(4) not clean sponges, fabric, wood, paper products, and other absorbent materials, unless volatile organic compound emissions are captured and controlled,

(5) drain solvents used to clean supply lines and other coating equipment into closable containers and close containers immediately after each use,

(6) clean mixing, blending, and manufacturing vats and containers by adding cleaning solvent, closing the vat or container before agitating the cleaning solvent. The spent cleaning solvent shall then be poured into a closed container.

(d) When cleaning parts, the owner or operator of any facility subject to this Rule shall:

(1) flush parts in the freeboard area,

(2) take precautions to reduce the pooling of solvent on and in the parts,

(3) tilt or rotate parts to drain solvent and allow a minimum of 15 seconds for drying or until all dripping has stopped, whichever is longer,

(4) not fill cleaning machines above the fill line,

(5) not agitate solvent to the point of causing splashing , unless volatile organic compound emissions are captured and controlled.

(e) The owner or operator of a source on which a control device has been installed to comply with Sec. 3D-0518 (d) shall continue to maintain and operate the control device unless the Director determines that the removal of the control device shall not cause or contribute to a violation of the ozone ambient air quality standard (Sec. 3D-0405).

(f) The owner or operator of a source that has complied with Sec. 3D-0518 by complying with a Rule in this Section, shall continue to comply with that rule unless the Director determines that if the source ceases to comply with that rule, it shall not cause or contribute to a violation of the ozone ambient air quality standard (Sec. 3D-0405).

(g) All sources at a facility subject to this Rule shall be permitted unless they are exempted from permitting by Sec. 3Q-0102, Activities Exempted From Permit Requirements. (7-24-00)

Sec. 3D-0959. Petition for superior alternative controls

(a) This Rule applies to all sources covered under this Section.

(b) If the owner or operator of any source of volatile organic compounds subject to the requirements of this Section, can demonstrate that an alternative operational or equipment control is superior to the required control, he may petition the Director to allow the use of alternative operational or equipment controls for the reduction of volatile organic compound emissions. The petition shall be made for each source to the Director.

(c) The petition shall contain:

(1) the name and address of the company and the name and telephone number of a company officer over whose signature the petition is submitted;

(2) a description of all operations conducted at the location to which the petition applies and the purpose that the volatile organic compound emitting equipment serves within the operations;

(3) reference to the specific operational and equipment controls under the rules of this Section for which alternative operational or equipment controls are proposed;

(4) a detailed description of the proposed alternative operational or equipment controls, the magnitude of volatile organic compound emission reduction that will be achieved, and the quantity and composition of volatile organic compounds that will be emitted if the alternative operational or equipment controls are instituted; and

(5) certification that emissions of all other air contaminants from the subject source are in compliance with all applicable local, state and federal laws and regulations.

The petition may include a copy of the permit application and need not duplicate information in the permit application.

(d) The Director shall approve a petition for alternative control if:

(1) The petition is submitted in accordance with Paragraph (c) of this Rule;

(2) The Director determines that the proposed alternative operational or equipment control is superior to the required controls;

(3) All other air contaminant emissions from the facility are in compliance with, or under a schedule for compliance as expeditiously as practicable with, all applicable local, state, and federal regulations; and

(4) The petition contains a schedule for achieving and maintaining reduction of volatile organic compound emissions to the maximum extent feasible and as expeditiously as practicable.

(e) When controls different from those specified in the appropriate emission standards in this Section are approved by the Director, the permit shall contain a condition stating such controls. (7-28-03)

Sec. 3D-0960. Certification of leak tightness tester

(a) Purpose. The purpose of this Rule is to establish procedures for certifying facilities to perform leak tightness tests on truck tanks as defined under Sec. 3D-0932.

(b) Certification request. To request certification to perform leak tightness testing on truck tanks for the purposes of complying with Sec. 3D-0932, a facility shall submit to the Director the following information:

(1) the name and address of the facility requesting certification, including the primary contact and telephone number; and

(2) the federal (tank cargo) number.

(c) Approval. The Director shall certify a facility requesting certification to perform leak tightness testing if he finds that:

(1) All the information required under Paragraph (b) of this Rule has been submitted;

(2) The Office has observed the facility conducting one or more leak tightness tests and finds that:

(A) The facility has the equipment necessary to perform Method 27 of 40 CFR Part 60, Subpart A; and

(B) The facility has the skills necessary to perform Method 27 of 40 CFR Part 60, Subpart A correctly;

(d) Expiration. A certification to perform leak tightness testing under this Rule shall expire one year from the date of its issuance.

(e) Renewal. To have a certification renewed, the certified facility shall submit to the Director a request to have the certification renewed. Within 30 days after receipt of the request, the Office shall observe the certified facility conducting one or more leak tightness tests. If the Director finds that:

(1) The certified facility has the equipment necessary to perform Method 27 of 40 CFR Part 60, Subpart A; and

(2) The certified facility has the skills necessary to perform Method 27 of 40 CFR Part 60, Subpart A correctly,

he shall renew the certification. If the certified facility submits a request for renewal after the expiration of the last certification, the Director shall reject the renewal request, and the facility shall request a new certification under Paragraph (b) of this Rule.

(f) Interim certification. If the Office is unable to observe the performance of leak tightness testing required under Paragraphs (c) or (e) of this Rule, the Director shall issue an interim certification for up to 90 days to allow the certified facility to perform leak tightness tests. An interim certification shall not be renewed.

(g) Revocation of Certification. If the Director finds that a certified facility is not performing Method 27 of 40 CFR Part 60, Subpart A correctly or that the certified facility is certifying tanks as leak tight that have not passed the leak tightness test, the Director shall revoke the facility's certification or interim certification.

(h) Stickers. The Office shall provide serialized stickers at no cost, or the facility may choose to provide the stickers. If the facility provides the stickers, the stickers shall contain the same information that is on the stickers provided by the Office and shall have the same dimensions and a sample sticker shall accompany the application for certification. Once a facility is certified under this Rule to perform leak tightness tests, stickers are to be:

(1) affixed to tanks that have passed the test under Sec. 3D-0932, and

(2) placed near the Department of Transportation Certification plate (DOT, 49 CFR 178.340-10b).

The certified facility performing the test shall maintain a log matching sticker serial numbers and tank identification numbers. The certified facility shall send this log to the Director monthly.

(i) Certification report. The certified facility performing the test shall give a copy of the certification report to the truck tank owner and shall retain a copy of the certification report. The certification report shall contain the following information:

(1) name, address, and telephone number of certified facility performing the test;
(2) name and signature of the individual actually performing the test;
(3) name and address of the owner of the tank;
(4) serial number of the sticker and identification number of the tank;
(5) the date that the sticker is issued and the date that the sticker expires, which shall be one year after the issuance date;
(6) the pressure drops measured and vacuum drops measured;
(7) list or description of problems with tank (if none are found, the report shall state that none were found).

(j) Record retention. The certified facility performing the test and the owner of the truck tank shall keep the certification report for at least two years. Certification reports shall be made available to the Office upon request.

(k) Verification of leak tightness. The Office may use Method 21 to verify the leak tightness of a tank. (7-28-03)

Sec. 3D-0961. Offset lithographic printing and letterpress printing

(a) For the purpose of this Rule, the following definitions apply:

(1) "Composite partial vapor pressure" means the sum of the partial pressure of the compounds defined as volatile organic compounds. Volatile organic compounds composite partial vapor pressure is calculated as follows:

$$PP_c = \sum_{i=1}^{n} \frac{(W_i)(VP_i)/MW_i}{\frac{W_w}{MW_w} + \frac{W_c}{MW_c} + \sum_{i=1}^{n} \frac{W_i}{MW_i}}$$

Where:
W_i = Weight of the "i" volatile organic compound, in grams
W_w = Weight of water, in grams
W_c = Weight of exempt compound, in grams
MW_i = Molecular weight of the "i" volatile organic compound, in g/g-mole
MW_w = Molecular weight of water, in g/g-mole
MW_c = Molecular weight of exempt compound, in g/g-mole
PP_c = Volatile organic compounds composite partial vapor pressure at 20 degrees Celsius (68 degrees Fahrenheit), in mm Hg
VP_i = Vapor pressure of the "i" volatile organic compound at 20 degrees Celsius (68 degrees Fahrenheit), in mm Hg

(2) "First installation date" means the actual date when this control device becomes operational. This date does not change if the control device is later redirected to a new press.

(3) "Fountain solution" means water-based solution that applies to lithographic plate to render the non-image areas unreceptive to the ink.
(4) "Heatset" means any operation in which heat is required to evaporate ink oils from the printing ink, excluding ultraviolet (UV) curing, electron beam curing and infrared drying.
(5) "Letterpress printing" means a printing process in which the image area is raised relative to the non-image area and the paste ink is transferred to the substrate directly from the image surface.
(6) "Non-heatset" means a lithographic printing process where the printing inks are set by absorption or oxidation of the ink oil, not by evaporation of the ink oils in a dryer. For the purposes of this Rule, use of an infrared heater or printing conducted using ultraviolet-cured or electron beam-cured inks is considered non-heatset.
(7) "Offset lithography" means an indirect method of printing when ink transferred from the lithographic plate to a rubber-covered intermediate "blanket" cylinder and then transferred from the blanket cylinder to the substrate.
(8) "Press" means a printing production assembly composed of one or more units used to produce a printed substrate including any associated coating, spray powder application, heatset web dryer, ultraviolet or electron beam curing units, or infrared heating units.
(9) "Sheet-fed printing" means an indirect method of printing when ink transferred from the lithographic plate to a rubber-covered intermediate "blanket" cylinder and then transferred from the blanket cylinder to the substrate.
(10) "Web printing" means printing when continuous rolls of substrate material are fed to the press and rewound or cut to size after printing.

(b) This Rule applies to any offset lithographic and any letterpress printing operations sources that are not covered by Subparagraph (c)(1) of Rule 3D-0966 of this Section and whose emissions of volatile organic compounds exceed: whose emissions of volatile organic compounds exceed:
(1) the threshold established in Paragraphs (b) and (f) of Sec. 3D-0902 of this Section; or
(2) an equivalent level of three tons per 12-consecutive month rolling period.

(c) Volatile organic compounds content in the fountain solution from on-press (as-applied) heatset web offset lithographic printing shall meet one of the following requirements or equivalent level of control as determined in permit conditions:
(1) contain 1.6 percent alcohol or less, by weight, as applied, in the fountain solution:
(2) contain three percent alcohol or less (by weight) on-press (as-applied) in the fountain solution if the fountain solution is refrigerated to below 60 degrees Fahrenheit; or
(3) contain five percent alcohol substitute or less (by weight) on-press (as-applied) and no alcohol in the fountain solution.

(d) Volatile organic compounds content in the fountain solution for on-press (as-applied) sheet-fed lithographic printing shall meet one of the following requirements or equivalent level of control as determined in permit conditions:
(1) contain five percent alcohol or less, by weight, on-press (as-applied) in the fountain solution:
(2) contain 8.5 percent alcohol or less by, weight, the on-press (as-applied) in the fountain solution if the fountain solution is refrigerated to below 60 degrees Fahrenheit; or
(3) contain five percent alcohol substitute or less, by weight, the on-press (as-applied) and no alcohol in the in the fountain solution.

(e) Volatile organic compounds content in emissions from fountain solution from non-heatset web offset lithographic printing shall not exceed five percent alcohol substitute (by weight) on-press (as-applied) and contain no alcohol in the fountain solution.

(f) An owner or operator of an individual web offset lithographic printing press dryer or letterpress-printing heatset press subject to this Rule that potentially emits 25 or more tons per year emissions of volatile organic compounds shall:

(1) use an enforceable limitation on potential emissions to keep individual heatset press below 25 tons per year potential to emit volatile organic compounds (petroleum ink oil) threshold, which can be achieved by using inks and coatings that contain less than 31.25 tons per year volatile organic compound (petroleum ink oil) where 20 percent retention factor of petroleum ink oil applies, or by using other methods established by permit conditions; or

(2) use an add-on control system that meets one of the following requirements:

(A) reduces volatile organic compounds emissions from each dryer by at least 90 percent volatile organic compounds emissions control efficiency established by procedures defined in Paragraph (h) of this Rule for a control device from heatset dryers at whose first installation date was prior to July 1, 2010, at facilities with potential to emit 100 tons or more of volatile organic compounds per year and May 1, 2013, at facilities with potential to emit less than 100 tons of volatile organic compounds per year; or

(B) reduce volatile organic compounds emissions from each dryer by at least 95 percent volatile organic compounds emissions control efficiency established by procedures defined in Paragraph (h) of this Rule for a control device from heatset dryers whose first installation date was on or after July 1, 2010, at facilities with potential to emit 100 tons or more of volatile organic compounds per year and May 1, 2013, at facilities with potential to emit less than 100 tons of volatile organic compounds per year; or

(C) maintain a maximum volatile organic compounds outlet concentration of 20 parts per million by volume (ppmv), as hexane (C6H14) on a dry basis.

(g) The control limits established in:

(1) Paragraphs (c), (d), and (e), shall not be applied to any press with total fountain solution reservoir of less than one gallon; and

(2) Paragraph (d) shall not be applied to sheet-fed presses with maximum sheet size 11x 17 inches or smaller; and

(3) Paragraph (f)(2)shall not be applied to a heatset press used for book printing, or to a heatset press with maximum web width of 22 inches or less.

(h) If the owner or operator of a printing press is required by permit conditions to determine:

(1) the volatile organic compounds content, the EPA test Method 24 or approved alternative methods shall be used;

(2) the control efficiency by measuring volatile organic compounds at the control device inlet and outlet, the EPA test Methods 18, 25, 25A, or approved alternative methods shall be used.

(i) All test methods defined in Paragraph (h) of this Rule shall be conducted at typical operating conditions and flow rates.

(j) The owner or operator of any facility subject to this Rule shall demonstrate compliance with RACT applicability requirements by calculating volatile organic compounds emissions and keep records

of the basis of the calculations required by Sec. 3D-0605 and 0903 of this Subchapter. Volatile organic compounds emissions from offset lithographic printing and letterpress printing shall be determined by permit condition requirements or by using the following retention and capture efficiency factors:

(1) the retention factors are:
  (A) 20 percent for heatset petroleum ink oils;
  (B) 100 percent for heatset vegetable ink oils;
  (C) 95 percent for sheet-fed and coldset web petroleum ink oils;
  (D) 100 percent for sheet-fed and coldset web vegetable ink oils.

(2) the retention factor is 50 percent for low volatile organic compounds composite vapor pressure cleaning materials in shop towels where:
  (A) volatile organic compounds composite vapor pressure of the cleaning material is less than 10 mm Hg at 20ºC; and
  (B) cleaning materials and used shop towels are kept in closed containers.

(3) carryover (capture) factors of volatile organic compounds from automatic blanket wash and fountain solution to offset lithographic heatset dryers are:
  (A) 40 percent VOC carryover (capture) factor for automatic blanket washing when the volatile organic compounds composite vapor pressure of the cleaning material is less than 10mm Hg at 20°C.
  (B) 70 percent VOC carryover (capture) factor for alcohol substitutes in fountain solution.

(4) capture efficiency for volatile organic compounds (petroleum ink oils) from oil-based paste inks and oil-based paste varnishes (coatings) in heatset web offset lithographic presses and heatset web letterpress presses shall be demonstrated by showing that the dryer is operating at negative pressure relative to the surrounding pressroom. As long as the dryer is operated at negative pressure, the capture efficiency for VOC from the heatset lithographic inks and varnishes (coatings) formulated with low volatility ink oils is 100 percent of the VOC (ink oils) volatilized in the dryer. Capture efficiency test is not required in this situation.

(k) Except as specified in this Paragraph, all cleaning materials used for cleaning a press, press parts, or to remove dried ink from areas around the press shall meet one of the following requirements:

(1) the volatile organic compounds content shall be less than 70 percent by weight; or

(2) composite partial vapor pressure of volatile organic compounds shall be less than 10 mm Hg at 20 degrees Celsius.

(3) no more than 110 gallons per year of cleaning materials that do not meet the requirements of Subparagraph (1) or (2) of this Paragraph shall be used during any 12 consecutive months.

(l) The owner or operator of any facility subject to this Rule shall maintain the following records for a minimum of five years:

(1) parametric monitoring for processes and control devices as determined and at the frequency specified in the permit or by Paragraph (f) of this Rule; and

(2) the total amount of each individual or class of fountain solution and ink used monthly for the printing operations and the percentage of volatile organic compounds, alcohol, and alcohol substitute as applied in it; and

(3) the total amount of each individual or class of cleaning solutions used monthly with vapor pressure and the percentage of volatile organic compounds as applied in it; and

(4) the total amount of cleaning solutions used monthly with vapor pressure and the percentage of volatile organic compounds as applied which does not meet the vapor

pressure or percentage of volatile organic compounds requirements of Paragraph (k) of this Rule; and

(5) temperature of fountain solutions for lithographic printing presses using alcohol at the frequency specified in the permit; and

(6) any other parameters required by the permit in accordance with Sec. 3D-0903 and 0605 of this Subchapter.

(m) The owner or operator of any facility subject to this Rule shall comply with the Sec. 3D-0903 and 0958.

Sec. 3D-0962. Industrial cleaning solvents

(a) For the purpose of this Rule, the following definitions apply:

(1) "Organic solvent" means a liquid hydrocarbon, such as methyl ethyl ketone or toluene, used to dissolve paints, varnishes, grease, oil, or other hydrocarbons.

(2) "Solvent cleaning" means the process of removing the excess penetrant from the surface or a part by wiping, flushing, or spraying with a solvent for the penetrant.

(3) "Wipe cleaning" means the method of cleaning that utilizes a material such as a rag wetted with a solvent, prior to a physical rubbing process to remove contaminants from surfaces.

(b) This Rule applies, with exemptions defined in Paragraphs (c) and (d) of this Rule, to sources whose volatile organic compound emissions exceed the threshold established in Paragraph (b) of Sec. 3D-0902 from the following cleaning operations:

(1) spray gun cleaning;
(2) spray booth cleaning;
(3) large manufactured components cleaning;
(4) parts cleaning;
(5) equipment cleaning;
(6) line cleaning;
(7) floor cleaning;
(8) tank cleaning; and
(9) small manufactured components cleaning.

(c) Paragraph (e) of this Rule does not apply to any cleaning material used for cleaning operations covered by Sec. 3D-0918, 0919, 0921, 0923, 0924, 0930, 0934, 0935, 0936, 0961, 0963, 0964, 0965, 0966, 0967 and 0968 of this Section.

(d) Cleaning operations of portable or stationary mixing vats, high dispersion mills, grinding mills, tote tanks and roller mills for manufacturing of coating, ink, or adhesive shall apply one or more of the following methods:

(1) use industrial cleaning solvents that either contains less than 1.67 pounds VOC per gallon or has an initial boiling point greater than 120 degrees Celsius, and where the initial boiling point exceeds the maximum operating temperature by at least 100 degrees Celsius. The industrial cleaning solvents shall be collected and stored in closed containers;

(2) implement the following work practices:

(A) maintain the equipment being cleaned as leak free; and

(B) drain volatile organic compounds containing cleaning materials from the cleaned equipment upon completion of cleaning; and

(C) store or dispose of volatile organic compounds containing cleaning materials,

including waste solvent, in a manner that will prevent evaporation into atmosphere; and

(D) store all volatile organic containing cleaning materials in closed containers;

(3) collect and vent the emissions from equipment cleaning to an add-on control system as set forth in Paragraph (g) of this Rule; or

(4) use organic solvents other than listed in Paragraph (d)(1) of this Rule if no more than 60 gallons of fresh solvent shall be used per month. Organic solvent that is reused or recycled either onsite or offsite for further use in equipment cleaning or the manufacture of coating, ink, or adhesive shall not be included in this limit.

(e) Any cleaning material of the nine cleaning operations listed in Paragraph (b) of this Rule shall have:

(1) volatile organic compounds content that does not exceed 0.42 pounds per gallon; or

(2) composite vapor limit of eight millimeters of mercury (mmHg) at 20 degrees Celsius.

(f) EPA Method 24 (40 CFR Part 60, Appendix A-7) shall be used to determine the volatile organic compounds content of coating materials used in industrial cleaning solvents operations unless the facility maintains records to document the volatile organic compounds content of coating materials from the manufacturer.

(g) Facilities which have chosen to use add-on control rather than to comply with the emission limits established in Paragraph (e) of this Rule shall install control equipment with 85 percent overall efficiency.

(h) The owner or operator of any facility subject to this Rule shall comply with the Sec. 3D-0903 and 0958.

Sec. 3D-0963. Fiberglass boat manufacturing materials

(a) For the purpose of this Rule, the following definitions apply:

(1) "Closed molding" means any fabrication techniques in which pressure is used to distribute the resin through the reinforcing fabric placed between two mold surfaces to either saturate the fabric or fill the mold cavity.

(2) "Monomer" means a volatile organic compound that partly combines with itself, or other similar compounds, by a cross-linking reaction to become a part of the cured resin.

(3) "Open molding" means the open mold which is first spray-coated with a clear or pigmented polyester resin known as a gel coat. The gel coat will become the outer surface of the finished part.

(b) This Rule applies to a facility that manufactures hulls or decks of boats and related parts, builds molds to make fiberglass boat hulls or decks and related parts from fiberglass, or makes polyester resin putties for assembling fiberglass parts; and whose volatile organic compounds emissions exceed the threshold established in Paragraph (b) of Sec. 3D-0902 from sources for the following operations:

(1) open molding and gel coat operations (including pigmented gel coat, clear gel coat, production resin, tooling gel coat, and tooling resin);

(2) resins and gel coat mixing operations; and

(3) resins and gel coat application equipment cleaning operations.

(c) The following activities are exempted from the provisions of this Rule:

(1) surface coatings applied to fiberglass boats;

(2) surface coatings for fiberglass and metal recreational boats (pleasure craft); and

(3) industrial adhesives used in the assembly of fiberglass boats.

(d) Volatile organic compounds content limits in resin and gel coat that are used for any molding operations listed in Paragraph (b) of this Rule and closed molding operations that do not meet the definition of monomer established in Subparagraph (a)(2) of this Rule, such as vacuum bagging operations, shall not exceed monomer volatile organic compounds limits established in Table 1:

Table 1 Organic Hazardous Air Pollutants Content Requirements for Open Molding Resin and Gel Coat Operations (40 CFR 63, Subpart VVVV.)

Material	Application Method	Limit of Weighted-Average Monomer VOC Content (weight percent)
Production resin	Atomized (spray)	28
Production resin	Nonatomized	35
Pigmented gel coat	Any method	33
Clear gel coat	Any method	48
Tooling resin	Atomized	30
Tooling resin	Nonatomized	39
Tooling gel coat	Any method	40

The average monomer volatile organic compounds contents listed in the Table 1 shall be determined by using Equation 1:

$$\text{Weighted Average Monomer VOC Content} = \frac{\sum_{i=1}^{n} (M_i \, VOC_i)}{\sum_{i=1}^{n} (M_i)}$$

Where: M_i = mass of open molding resin or gel coat i used in the past 12 month in an operation, megagrams (metric ton).

VOC_i = monomer volatile organic compounds content, by weight percent, of open molding resin or gel coat i used in the past 12 month in an operation.

n = number of different open molding resins or gel coats used in the past 12 month in an operation.

(e) Molding monomer and non-monomer volatile organic compounds limits established in Paragraph (d) of this Rule are not applicable to:

(1) production resins (including skin coat resins) that meet specifications for use in military vessels or are approved by the U.S. Coast Guard for the use in the construction of lifeboats, rescue boats, and other life saving appliances approved under 46 CFR Subchapter Q, or the construction of small passenger vessels regulated by 46 CFR Subchapter T. Production resins that meet these criteria shall be applied with nonatomizing resin application equipment;

(2) production and tooling resins; and pigmented, clear, and tooling gel coat used for part or mold repair and touch up. Total resin and gel coat materials that meet these criteria shall not exceed one percent by weight of all resin and gel coat used at a facility on a 12-month rolling-average basis; or

(3) pure, 100-percent vinylester resin used for skin coats that are applied with nonatomizing resin application equipment and with the total amount of the resin materials not exceeding five percent by weight of all resin used at a factory on 12-month rolling-average basis.

(f) Any molding resin and gel coat operations listed in Paragraph (b) of this Rule, that a facility chooses to include into average emissions among different operations to meet numerical monomer volatile organic compounds emission rate limits rather than to comply with the emission limits established in Paragraph (d) of this Rule shall use:

(1) Equation 2 to estimate a facility-specific monomer volatile organic compounds mass emission limit (12-month rolling average). Estimations of emissions average shall be determined on 12-month rolling average basis at the end of every month (12 times per year).

Equation 2:

Monomer VOC Limit= $46(M_R) + 159(M_{PG}) + 291(MCG) + 54(M_{TR}) + 214(M_{TG})$

Where:

Monomer VOC Limit = total allowable monomer volatile organic compounds that can be emitted from the open molding operations included in the average, kilograms per 12-month period.

M_R = mass of production resin used in the past 12 month excluding any materials that are exempt, megagrams.

M_{PG} = mass of pigmented gel coat used in the past 12 month, excluding any materials that are exempt, megagrams.

M_{CG} = mass of clear gel coat used in the past 12 month, excluding any materials that are exempt, megagrams.

M_{TR}= mass of tooling resin coat used in the past 12 month, excluding any materials that are exempt, megagrams.

M_{TG} = mass of tooling gel coat used in the past 12 month, excluding any materials that are exempt, megagrams.

The numerical coefficients associated with each term on the right hand side of Equation 2 are the allowable monomer volatile organic compounds emission rate for that particular material in units of kilograms of VOC per megagrams of material used.

(2) Equation 3 to demonstrate that the monomer volatile organic compounds emissions from the operations included in the average do not exceed the emission limit calculated using Equation 2 from Subparagraph (f)(1) of this Rule for the same 12-month period. This demonstration shall be conducted at the end of the first 12-month averaging period and at the end of every subsequent month for only those operations and materials that included in the average.

Equation 3:

Monomer VOC emissions = $(P_{VR})(M_R) + (PV_{PG})(M_{PG}) + (PV_{CG})(M_{CG}) + (PV_{TR})(M_{TR}) + (PV_{TG})(M_{TG})$

Where:

Monomer VOC emissions = monomer volatile organic compounds emissions calculated using the monomer volatile organic compounds emission equation for each operation included in the average, kilograms.

PV_R = weighted-average monomer volatile organic compounds emission rate for production resin used in the past 12 month, kilograms per megagram.

M_R = Mass of production resin used in the past 12 month, megagrams.

PV_{PG} = weighted-average monomer volatile organic compounds emission rate for pigmented gel coat used in the past 12 month, kilograms per megagram.

MPG = mass of pigmented gel coat used in the past 12 month, megagrams.

PV_{CG} = weighted-average monomer volatile organic compounds emission rate for clear gel coat used in the past 12 month, kilograms per megagram.

M_{CG} = Mass of clear gel coat used in the past 12 month, megagrams.

PV_{TR} = Weighted-average monomer volatile organic compounds emission rate for tooling resin used in the past 12 month, kilograms per megagram.

M_{TR} = Mass of tooling resin used in the past 12 month, megagrams.

PV_{TG} = Weighted-average monomer volatile organic compounds emission rate for tooling gel coat used in the past 12 month, kilograms per megagram.

M_{TG} = Mass of tooling gel coat used in the past 12 month, megagrams.

(3) Equation 4 to compute the weighted-average monomer volatile organic compounds emission rate for the previous 12 month for each open molding resin and gel coat operation included in the average to apply the results in Equation 3.

Equation 4:

$$PVOP = \frac{\sum_{i=1}^{n} (Mi\ PVi)}{\sum_{i=1}^{n} (Mi)}$$

Where:

PV_{OP} = weighted-average monomer volatile organic compounds emission rate for each open molding operation (PV_R, PV_{PG}, PV_{CG}, PV_{TR}, and PV_{TG}) included in the average, kilograms of monomer volatile organic compounds per megagram of material applied.

M_i = mass or resin or gel coat i used within an operation in the past 12 month, megagrams.

n = number of different open molding resins and gel coats used within an operation in the past 12 month.

PV_i = the monomer volatile organic compounds emission rate for resin or gel coat i used within an operation in the past 12 month, kilograms of monomer volatile organic compounds per megagram of material applied. Equations in Table 2 shall be used to compute PV.

Table 2 Compliant Materials Monomer Volatile Organic Compounds Content for Open Molding Resin and Gel Coat.

For this material	and this application method	Use this formula to calculate the monomer VOC emission rate
1. Production resin, tooling resin	a. Atomized	$0.014 \times (\text{Resin VOC\%})^{2.425}$
	b. Atomized, plus vacuum bagging with roll-out	$0.01185 \times (\text{Resin VOC\%})^{2.425}$
	c. Atomized, plus vacuum bagging without roll-out	$0.00945 \times (\text{Resin VOC\%})^{2.425}$
	d. Nonatomized	$0.014 \times (\text{Resin VOC\%})^{2.275}$
	e. Nonatomized, plus vacuum bagging with roll-out	$0.0110 \times (\text{Resin VOC\%})^{2.275}$
	f. Nonatomized, plus vacuum bagging without roll-out	$0.0076 \times (\text{Resin VOC\%})^{2.275}$
2. Pigmented gel coat, clear gel coat, tooling gel coat	All methods	$0.445 \times (\text{Gel coat VOC\%})^{1.675}$

(g) If the owner or operator of any facility with molding resin and gel coat operations listed in Paragraph (b) of this Rule, chooses to use of higher-monomer volatile organic compounds materials rather than to comply with the emission limits established in Paragraph (d) of this Rule he shall:

(1) install control equipment to meet the emission limit determined by Equation 2 in Subparagraph (f)(1) of this Rule, applying the mass of each material used during the control device performance test in Equation 2 to determine the emission limit (in kilogram of monomer VOC) that is applicable during the test, instead of using the mass of each material as it established in Subparagraph (f)(1) of this Rule;

(2) monitor and record relevant control device and capture system operating parameters during the control device performance test to use the recorded values to establish operating limits for those parameters; and

(3) monitor the operating parameters for the control device and emissions capture system

and maintain the parameters within the established limits.

(h) Any molding resin and gel coat operations that use a filled production resin or filled tooling resin shall calculate the emission rate for the filled production resin or filled tooling resin on as applied basis using Equation 5. If the filled resin:

(1) is used as a production resin then the value of PVF calculated by Equation 5 shall not exceed 46 kilograms of monomer VOC per megagram of filled resin applied;

(2) is used as a tooling resin then the value of PVF calculated by Equation 5 shall not exceed 54 kilograms of monomer VOC per megagram of filled resin applied; and

(3) is included in the emissions averaging procedure then the facility shall use the value of PVF calculated by Equation 5 for the value PVi in Equation 4 in Subparagraph (f)(3) of this Rule.

Equation 5:

$$PV_F = \frac{PV_U \times (100 - \%Filler)}{100}$$

Where:

PV_F = The as-applied monomer volatile organic compounds emission rate for the filled production resin or tooling resin, kilograms monomer VOC per megagram of filled material.

PV_U = The monomer volatile organic compounds emission rate for the neat (unfilled) resin before filler is added, as calculated using the formulas in Table 2 of Subparagraph (f)(3) of this Rule.

%Filler = The weight-percent of filler in the as-applied filled resin system.

(i) All resins and gel coats included in volatile organic compounds limits described in Paragraphs (d) through (h) shall meet non-monomer volatile organic compounds content limit of five percent.

(j) If the non-monomer volatile organic compounds content of a resin or gel coat exceeds five percent, then the excess non-monomer volatile organic compounds over five percent shall be counted toward the monomer volatile organic compounds content.

(k) SCAQMD Method 312-91, Determination of Percent Monomer in Polyester Resins, revised April 1996 shall be used to determine the monomer volatile organic compounds content of resin and gel coat materials unless the facility maintains records to document the volatile organic compounds content of resin and gel coat materials from the manufacturer.

(l) All resin and gel coat mixing containers with a capacity equal to or greater than 55 gallons, including those used for on-site mixing of putties and polyputties, shall have a cover with no visible gaps in place at all times except the following operations:

(1) when material is being manually added to or removed from a container; or

(2) when mixing or pumping equipment is being placed or removed from a container.

(m) Volatile organic compounds cleaning solvents for routine application equipment cleaning shall contain no more than five percent volatile organic compounds by weight, or have a composite vapor pressure of no more than 0.50 mm Hg at 68 degrees Fahrenheit.

(n) Only non-volatile organic compounds solvents shall be used to remove cured resin and gel coat from application equipment.

(o) The owner or operator of any facility subject to this Rule shall comply with the Sec. 3D-0903 and 0958.

Sec. 3D-0964. Miscellaneous industrial adhesives

(a) For the purpose of this Rule, the following definitions apply:

(1) "Air-assisted airless spray" means a system that consists of an airless spray gun with a compressed air jet at the gun tip to atomize the adhesive.

(2) "Airless spray" means the application of an adhesive through an atomizing nozzle at high pressure (1,000 to 6,000 pounds per square inch) by a pump forces.

(3) "Application process" means a process that consists of a series of one or more adhesive applicators and any associated drying area or oven where an adhesive is applied, dried and cured.

(4) "Dip Coating" means application where substrates are dipped into a tank containing the adhesive. The substrates are then withdrawn from the tank and any excess adhesive is allowed to drain.

(5) "Electrocoating" means a specialized form of dip coating where opposite electric charges are applied to the waterborne adhesive and the substrate.

(6) "Electrostatic spray" means application where the adhesive and substrate are oppositely charged.

(7) "Flow coating" means conveying the substrate over an enclosed sink where the adhesive is applied at low pressure as the item passes under a series of nozzles.

(8) "HVLP" means a system with specialized nozzles that provide better air and fluid flow than conventional air atomized spray systems at low air pressure, shape spray pattern, and guide high volumes of atomized adhesive particles to the substrate using lower air pressure (10 pounds per square inch or less at the spray cap).

(9) "Miscellaneous industrial adhesives" means adhesives (including adhesive primers used in conjunction with certain types of adhesives) used at industrial manufacturing and repair facilities for a wide variety of products and equipment that operate adhesives application processes.

(10) "Roll coating", "brush coating", and "hand application" means application of high viscosity adhesives onto small surface area.

(b) Control of volatile organic compounds emissions from miscellaneous industrial adhesives product categories covered by Sec. 3D-0921, 0923, 0934, 0935, 0936, 0961, 0962, 0963, 0965, 0966, 0967 and 0968 are exempted from the requirements of this Rule.

(c) This Rule applies to miscellaneous industrial adhesive application sources whose volatile organic compounds emissions exceed the threshold established in Paragraph (b) of Sec. 3D-0902.

(d) With the exception established in Paragraph (b) of this Rule, all volatile organic compounds containing materials applied by each miscellaneous industrial adhesive application processes before control shall:

(1) not exceed limits established in Table 1 of this Paragraph; and

(2) be used in one of the following application methods in conjunction with using low volatile organic compounds adhesives or adhesive primers:

(A) electrostatic spray;

(B) HVLP spray;

(C) flow coat;
(D) roll coat or hand application, including non-spray application methods similar to hand or mechanically powered caulking gun, brush, or direct hand application;
(E) dip coat (including electrodesposition);
(F) airless spray;
(G) air-assisted airless spray; or
(H) other adhesive application method capable of achieving a transfer efficiency equivalent to or better than that achieved by HVLP spraying.

(e) Emission limits established in Subparagraph (d)(1) of this Rule shall be:
(1) met by averaging the volatile organic compounds content of materials used on a single application unit for each day; and
(2) calculated as mass of volatile organic compounds per volume of adhesive primer excluding water and exempt compounds, as applied.

(f) If an adhesive is used to bond dissimilar substrates together in general adhesive application process (Table 1), then the applicable substrate category with the highest volatile organic compounds emission limit shall be established as the limit for such application.

Table 1. Volatile Organic Compounds Emission Limits for General and Specialty Adhesive Application Process.

General Adhesive Application Processes	VOC Emission Limit (lb/gal)
Reinforced Plastic Composite	1.7
Flexible vinyl	2.1
Metal	0.3
Porous Material (Except Wood)	1
Rubber	2.1
Wood	0.3
Other Substrates	2.1
Specialty Adhesive Application Processes	VOC Emission Limit (lb/gal)
Ceramic Tile Installation	1.1
Contact Adhesive	2.1
Cove Base Installation	1.3
Floor Covering Installation (Indoor)	1.3
Floor Covering Installation (Outdoor)	2.1
Floor Covering Installation (Perimeter Bonded Sheet Vinyl)	5.5
Metal to Urethane/Rubber Molding or Casting	7.1
Motor Vehicle Adhesive	2.1
Motor Vehicle Weatherstrip Adhesive	6.3
Multipurpose Construction	1.7
Plastic Solvent Welding (ABS)	3.3

Plastic Solvent Welding (Except ABS)	4.2
Sheet Rubber Lining Installation	7.1
Single-Ply Roof Membrane Installation/Repair (Except EPDM)	2.1
Structural Glazing	0.8
Thin Metal Laminating	6.5
Tire Repair	0.8
Waterproof Resorcinol Glue	1.4
Adhesive Primer Application Processes	VOC Emission Limit1 (lb/gal)
Motor Vehicle Glass Bonding Primer	7.5
Plastic Solvent Welding Adhesive Primer	5.4
Single-Ply Roof Membrane Adhesive Primer	2.1
Other Adhesive Primer	2.1

(g) Any miscellaneous industrial adhesive application processes subject to this Rule, which chooses to use add-on control for adhesive application processes rather than to comply with the emission limits established in Paragraph (d) of this Rule, shall install control equipment with overall control efficiency of 85 percent or use a combination of adhesives and add-on control equipment on an application process to meet limits established in Paragraph (d) of this Rule.

(h) EPA Method 24 or 24A (40 CFR Part 60, Appendix A-7) shall be used to determine the volatile organic compounds content of adhesives, other than reactive adhesives, and the procedure established in Appendix A of the NESHAP for surface coating of plastic parts (40 CFR Part 63, Subpart PPPP) shall be used to determine the volatile organic compounds content of reactive adhesives unless the facility maintains records to document the volatile organic compounds content of adhesives from the manufacturer.

(i) The owner or operator of any facility subject to this Rule shall comply with the Sec. 3D-0903 and 0958.

Sec. 3D-0965. Flexible package printing

(a) For the purpose of this Rule, the following definitions apply:

(1) "First installation date" means the actual date when the equipment or control device becomes operational. This date does not change if the equipment or control device is later moved to a new location.

(2) "Flexible Packaging" means any package or part of a package the shape of which can be readily changed.

(3) "Flexographic printing" means a printing process in which an image is raised above the printing plate, and the image carrier is made of rubber or other elastomeric materials.

(4) "Rotogravure press" means an unwind or feed section, which may include:

(A) more than one unwind or feed station (such as on a laminator);

(B) series of individual work stations, one or more of which is a rotogravure print station;

(C) any dryers associated with the work stations; and
(D) a rewind, stack, or collection section.

(5) "Rotogravure printing" means a printing process in which an image (type and art) is etched or engraved below the surface of a plate or cylinder.

(b) This Rule applies to flexible packaging printing press sources whose emissions of volatile organic compounds exceed the threshold established in Paragraph (b) of Sec. 3D-0902.

(c) Volatile organic compounds content of materials used on any single flexible packaging printing press subject to this Rule shall not exceed 0.8 pounds volatile organic compounds per one pound of solids applied, or 0.16 pounds volatile organic compounds per one pound of materials applied limits. These volatile organic compounds content limits are consistent with 80 percent overall emissions reduction level and reflect similar control levels as the capture and control option.

(d) Any flexible packaging printing press which has chosen to use add-on control for coating operations rather than to comply with the emission limits established in Paragraph (c) of this Rule shall install control equipment with:

(1) 65 percent overall control based on a capture efficiency of 75 percent and a control device efficiency of 90 percent for a press that was first installed prior to March 14, 1995 and that is controlled by an add-on control device whose first installation date prior to July 1. 2010;
(2) 70 percent overall control based on a capture efficiency of 75 percent and a control device efficiency of 95 percent for a press that was first installed prior to March 14, 1995 and that is controlled by an add-on control device whose first installation date was on or after July 1, 2010;
(3) 75 percent overall control based on a capture efficiency of 85 percent and a control device efficiency of 95 percent for a press that was first installed on or after March 14, 1995 and that is controlled by an add-on control device whose first installation date was prior July 1, 2010; and
(4) 80 percent overall control based on a capture efficiency of 85 percent and a control device efficiency of 95 percent for a press that was first installed on or after March 14, 1995 and that is controlled by an add-on control device whose first installation date was on or after July 1, 2010.

(e) EPA Method 24 or 24A (40 CFR Part 60, Appendix A-7) shall be used to determine the volatile organic compounds content of coating materials used at flexible package printing facilities unless the facility maintains records to document the volatile organic compounds content of coating materials from the manufacturer.

(f) The owner or operator of any facility subject to this Rule shall comply with the Sec. 3D-0903 and 0958.

Sec. 3D-0966. Paper, film and foil coatings

(a) For the purpose of this Rule, the following definitions apply:

(1) "Paper, film, and foil coating line" means a series of coating applicators, flash-off areas, and any associated curing/drying equipment between one or more unwind/feed stations and one or more rewind/cutting stations.
(2) "Flexographic coating" means that the area to be coated is delineated by a raised surface on a flexible plate.
(3) "Rotary screen or flat screen coating" means the application of a coating material to a

substrate by means of masking the surface and applying a color or finish using a screen either in flat form or rotary form.

(4) "Rotogravure coating" means the application of a coating material to a substrate by means of a roll coating technique in which the pattern to be applied is etched on the coating roll. The coating material is picked up in these recessed areas and is transferred to the substrate.

(b) With the exception in Paragraph (c) of this Rule, this Rule applies to paper, film and foil surface coating operations sources, including related cleaning activity, whose emissions of volatile organic compounds exceed the threshold established in Paragraph (b) of Sec. 3D-0902, at a facility that applies:

(1) paper, film, or foil surfaces in the manufacturing of products for pressure sensitive tape and labels (including fabric coated for use in pressure sensitive tapes and labels; photographic film; industrial and decorative laminates; abrasive products (including fabric coated for use in abrasive products); and flexible packaging (including coating of non-woven polymer substrates for use in flexible packaging); and

(2) coatings during coating applications for production of corrugated and solid fiber boxes; die-cut paper paperboard, and cardboard; converted paper and paperboard not elsewhere classified; folding paperboard boxes, including sanitary boxes; manifold business forms and related products; plastic asceptic packaging; and carbon paper and inked ribbons.

(c) The following types of coatings are not covered by this Rule:

(1) coatings performed on or in-line with any offset lithographic, screen, letterpress, flexographic, rotogravure, or digital printing press; or

(2) size presses and on machine coaters that function as part of an in- line papermaking system.

(d) With the exception stated in Paragraph (c) of this Rule, emissions of volatile organic compounds from:

(1) pressure sensitive tape and label surface coating lines with the potential to emit, prior to controls, less than 25 tons per year of volatile organic compounds from coatings shall not exceed 0.20 pounds volatile organic compounds per pound of solids applied (0.067 pounds volatile organic compounds per pound of coating applied);

(2) paper, film, and foil surface coating lines with the potential to emit, prior to controls less than 25 tons per year of volatile organic compounds from coatings shall not exceed 0.40 pounds of volatile organic compounds per pound of solids (0.08 pounds volatile organic compounds per pound of coating applied); and

(3) The volatile organic compounds content limits shall be determined in accordance with Subparagraphs (c)(2) and (c)(3) of Sec. 3D-0912.

(e) EPA Method 24 or 24A (40 CFR Part 60, Appendix A-7) shall be used to determine the volatile organic compounds content of coating materials used at paper, film and foil coatings facilities unless the facility maintains records to document the volatile organic compounds content of coating materials from the manufacturer.

(f) Any individual paper, film, and foil coating line with the potential to emit, prior to controls, at least 25 tons per year of volatile organic compounds from coatings shall apply control with overall volatile organic compounds efficiency of 90 percent rather than the emission limits established in Paragraph (d) of this Rule or use a combination of coating and add-on control equipment on a coating unit to meet limits that are equivalent to 90 percent overall control efficiency.

(g) The owner or operator of any facility subject to this Rule shall comply with the Sec. 3D-0903 and 0958.

Sec. 3D-0967. Miscellaneous metal and plastic parts coatings

(a) For the purpose of this Rule, the following definitions apply:

(1) "Air dried coating" a means coating that is cured at a temperature below 90 degrees Celsius (194 degrees Fahrenheit).

(2) "Baked coating" means a coating that is cured at a temperature at or above 90 degrees Celsius (194 degrees Fahrenheit).

(3) "Clear coat" means a colorless coating which contains binders, but no pigment, and is formulated to form a transparent film.

(4) "Coating unit" means series one or more coating applicators and any associated drying area and oven wherein a coating is applied, dried, and cured.

(5) "Drum" means any cylindrical metal shipping container larger than 12 gallons capacity but no larger than 110 gallons capacity.

(6) "Electric dissipating coating" means a coating that rapidly dissipates a high voltage electric charge.

(7) "Electric-insulating varnish" means a non-convertible-type coating applied to electric motors, components of electric motors, or power transformers, to provide electrical, mechanical, and environmental protection or resistance.

(8) "Etching filler" means a coating that contains less than 23 percent solids by weight and at least 1/2-percent acid by weight, and is used instead of applying a pretreatment coating followed by a primer.

(9) "Extreme high-gloss coating" means a coating which, when tested by the American Society for Testing Material Test Method D-523 adopted in 1980, shows a reflectance of 75 or more on a 60 degrees meter.

(10) "Extreme-performance coating" means a coating used on a metal or plastic surface where the coated surface is, in its intended use, subject to the following:

(A) Chronic exposure to corrosive, caustic or acidic agents, chemicals, chemical fumes, chemical mixtures or solutions;

(B) Repeated exposure to temperatures in excess of 250 degrees Fahrenheit; or

(C) Repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleansers or scouring agents. Extreme performance coatings include coatings applied to locomotives, railroad cars, farm machinery, and heavy duty trucks.

(11) "High-performance architectural coating" means a coating used to protect architectural subsections and which meets the requirements of the Architectural Aluminum Manufacturer Association's publication number AAMA 2604-05 (Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels) or 2605-05 (Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels).

(12) "Miscellaneous metal product and plastic parts surface coatings" means the coatings that are applied to the surfaces of a varied range of metal and plastic parts and products. Such parts or products are constructed either entirely or partially from metal or plastic. These miscellaneous metal products and plastic parts include metal and plastic components of the following types of products as well as the products themselves: fabricated metal products, molded plastic parts, small and large farm

machinery, commercial and industrial machinery and equipment, automotive or transportation equipment, interior or exterior automotive parts, construction equipment, motor vehicle accessories, bicycles and sporting goods, toys, recreational vehicles, pleasure craft (recreational boats), extruded aluminum structural components, railroad cars, heavier vehicles, lawn and garden equipment, business machines, laboratory and medical equipment, electronic equipment, steel drums, metal pipes, and other industrial and household products.

(13) "Multi-component coating" means a coating requiring the addition of a separate reactive resin, commonly known as a catalyst or hardener, before application to form a dry film.

(14) "One-component coating" means a coating that is ready for application as it comes out of its container to form a dry film. A thinner, necessary to reduce the viscosity, is not considered a component.

(b) This Rule applies to miscellaneous metal and plastic parts surface coating units whose volatile organic compounds emissions exceed the threshold established in Paragraph (b) of Sec. 3D-0902 for coating and related cleaning activities of the following types of products:

(1) fabricated metal products, molded plastic parts, small and large farm machinery, commercial and industrial machinery and equipment;

(2) automotive or transportation equipment, interior or exterior automotive parts, construction equipment, motor vehicle accessories, bicycles and sporting goods;

(3) toys, recreational vehicles, pleasure craft (recreational boats), extruded aluminum structural components, railroad cars, heavy vehicles, lawn and garden equipment;

(4) business machines, laboratory and medical equipment; and

(5) electronic equipment, steel drums metal pipes, and other industrial and household products.

(c) This Rule does not apply to:

(1) coatings that are applied to test panels and coupons as part of research and development, quality control;

(2) performance testing activities at paint research or manufacturing facility; or

(3) sources covered by Sec. 3D-0921, 0922, 0923, 0935, 0936, 0961, 0962, 0963, 0964, 0965, 0966 and 0968.

(d) With the exception stated in Paragraph (c) of this Rule, emissions of volatile organic compounds before control for surface coating of:

(1) Metal parts and products shall not exceed limits as established in Table 1;

Table 1. Metal Parts and Products Volatile Organic Compounds Content Limits

Coating Category	Air Dried lb VOC/gal coating	Baked lb VOC/gal coating
General One Component; General Multi Component; Military Specification	2.8	2.3
Camouflage; Electric-Insulating Varnish; Etching Filler; High Temperature; Metallic; Mold-Seal; Pan Backing; Pretreatment Coatings; Drum Coating, New, Interior; Drum Coating, Reconditioned, Exterior; Silicone Release; Vacuum-Metalizing	3.5	3.5

Extreme High-Gloss; Extreme Performance; Heat-Resistant; Repair and Touch Up; Solar-Absorbent	3.5	3.0
High Performance Architectural	6.2	6.2
Prefabricated Architectural Multi-Component; Prefabricated Architectural One-Component	3.5	2.3
Drum Coating, New, Exterior	2.8	2.8
Drum Coating, Reconditioned, Interior	4.2	4.2

(2) Plastic parts and products shall not exceed limits as established in Table 2;

Table 2. Plastic Parts and Products Volatile Organic Compounds Content Limits

Coating Category	lbs VOC/gal coating
General One Component	2.3
General Multi Component; Metallic	3.5
Electric Dissipating Coatings and Shock-Free Coatings; Optical Coatings; Vacuum-Metalizing	6.7
Extreme Performance	3.5 (2-pack coatings)
Military Specification	2.8 (1 pack) 3.5 (2 pack)
Mold-Seal	6.3
Multi-colored Coatings	5.7

(3) automotive/transportation and business machine plastic parts shall not exceed limits as established in Table 3;

Table 3. Automotive/Transportation and Business Machine Plastic Parts Volatile Organic Compounds Content Limits

Coating Category	lbs VOC/gal coating
Automotive/Transportation Coatings	
I. High Bake Coatings – Interior and Exterior Parts	
Non-flexible Primer	3.5
Base Coats; Non-basecoat/clear coat; Flexible Primer	4.3
Clear Coat	4.0
II. Low Bake/Air Dried Coatings – Exterior Parts	
Primers; Basecoat; Non-basecoat/clearcoat	4.8
Clearcoats	4.5
III. Low Bake/Air Dried Coatings – Interior Parts	5.0
IV. Touchup and Repair Coatings	5.2
Business Machine Coatings	

Primers; Topcoat Texture Coat; Touchup and repair	2.9
Fog Coat	2.2

(4) pleasure craft shall not exceed limits as established in Table 4;

Table 4. Pleasure Craft Surface Coating Volatile Organic Compounds Content Limits

Coating Category	lbs VOC/gal coating
Extreme High Gloss Topcoat	4.1
High Gloss Topcoat Finish; Primer/Surfacer; All other pleasure craft surface coatings for metal or plastic	3.5
Pretreatment Wash Primers	6.5
High Build Primer Surfacer; Other Substrate Antifoulant Coating	2.8
Aluminum Substrate Antifoulant Coating	4.7

(5) motor vehicle materials shall not exceed limits as established in Table 5.

Table 5. Motor Vehicle Materials Volatile Organic Compounds Content Limits

Coating Category	lbs VOC/gal coating
Motor vehicle cavity wax; Motor vehicle sealer; Motor vehicle deadener; Motor vehicle underbody coating; Motor vehicle trunk interior coating	5.4
Motor vehicle gasket/gasket sealing material; Motor vehicle bedliner	1.7
Motor vehicle lubricating wax/compound	5.8

(e) With the exception of motor vehicle materials coatings, any miscellaneous metal and plastic parts coatings operations facility may choose a combination of low volatile organic compounds coatings and add-on control equipment on a coating unit. Emissions of volatile organic compounds before control with such combination shall not exceed limits for surface coating of:

(1) Metal parts and products as established in Table 6;

Table 6. Metal Parts and Products Volatile Organic Compounds Content Limits

Coating Category	Air Dried	Baked
	lb VOC/gal solids	lb VOC/gal solids
General One Component; General Multi Component; Military Specification;	4.52	3.35
Etching Filler; High Temperature; Metallic; Mold-Seal; Pan Backing; Pretreatment Coatings; Silicone Release; Drum Coating, New, Interior; Drum Coating, Reconditioned, Exterior; Vacuum-Metalizing	6.67	6.67
Extreme High-Gloss; Extreme Performance; Heat-Resistant; Solar-Absorbent	6.67	5.06

High Performance Architectural	38.0	38.0
Prefabricated Architectural Multi-Component	6.67	3.35
Prefabricated Architectural One-Component	6.67	3.35
Solar-Absorbent	6.67	5.06
Drum Coating, New, Exterior	4.52	4.52
Drum Coating, Reconditioned, Interior	6.67	9.78

(2) plastic parts and products as established in Table 7;

Table 7. Plastic Parts and Products Volatile Organic Compounds Content Limits

Coating Category	lbs VOC/gal solids
General One Component	3.35
General Multi Component; Metallic	6.67
Electric Dissipating Coatings and Shock-Free Coatings Optical Coatings; Vacuum-Metalizing	74.7
Extreme Performance	6.67 (2-pack)
Military Specification	4.52 (1 pack) 6.67 (2 pack)
Mold-Seal	43.7
Multi-colored Coatings	25.3

(3) automotive/transportation and business machine plastic parts as established in Table 8;

Table 8. Automotive/Transportation and Business Machine Plastic Parts Volatile Organic Compounds Content Limits

Coating Category	lbs VOC/gal solids
Automotive/Transportation Coatings1	
I. High Bake Coatings – Interior and Exterior Parts	
Flexible Primer	11.58
Non-flexible Primer; Non-basecoat/clear coat	6.67
Base Coats	10.34
Clear Coat	8.76
II. Low Bake/Air Dried Coatings – Exterior Parts	
Primers	13.8
Basecoat; Non-basecoat/clearcoat	15.59
Clearcoats:	11.58
III. Low Bake/Air Dried Coatings – Interior Parts	15.59
IV. Touchup and Repair Coatings	17.72

Business Machine Coatings	
Primers; Topcoat; Texture Coat; Touchup and repair	4.8
Fog Coat	3.14

(4) pleasure craft surface coatings as established in Table 9;

Table 9. Pleasure Craft surface Coatings Volatile Organic Compounds Content Limits

Coating Category	lbs VOC/gal solids
Extreme High Gloss Topcoat	9.2
High Gloss Topcoat; Finish Primer/Surfacer; All other pleasure craft surface coatings for metal or plastic	6.7
Pretreatment Wash Primers	55.6
Aluminum Substrate Antifoulant Coating	12.8
High Build Primer Surfacer; Other Substrate Antifoulant Coating	4.4

(f) EPA Method 24 or 24A (40 CFR Part 60, Appendix A-7) shall be used to determine the volatile organic compounds content of coating materials used at miscellaneous metal and plastic part coating facilities unless the facility maintains records to document the volatile organic compounds content of coating materials from the manufacturer.

(g) With the exception of motor vehicle materials coatings, any miscellaneous metal and plastic parts coatings operations facility may choose to use add-on control equipment with an overall control efficiency of 90 percent in lieu of using low-VOC coatings and specified application methods.

(h) The owner or operator of any facility subject to this Rule shall comply with the Sec. 3D-0903 and 0958.

Sec. 3D-0968. Automobile and light duty truck assembly coatings

(a) For the purpose of this Rule, the following definitions apply:

(1) "Automobile" means a motor vehicle designed to carry up to eight passengers, excluding vans, sport utility vehicles, and motor vehicles designed primarily to transport light loads of property.

(2) "Automobile Topcoat Protocol" means Protocol For Determining The Daily Volatile Organic Compound Emission Rate Of Automobile and Light-duty Truck Topcoat Operations (EPA-450/3-88-018).

(3) "Electrodeposition" means a process of applying a protective, corrosion-resistantwaterborne primer on exterior and interior surfaces that provides coverage of recessed areas. It is a dip coating method that uses an electrical field to apply or deposit the conductive coating onto the part. The object being painted acts as an electrode that is oppositely charged from the particles of paint in the dip tank.

(4) "Final repair" means the operations performed and coating(s) applied to completely assembled motor vehicles or to parts that are not yet on a completely assembled vehicle to correct damage or imperfections in the coating.

(5) "Light-duty truck" means vans, sport utility vehicles, and motor vehicles designed primarily to transport light loads of property with gross vehicle weight rating of 8,500

pounds or less.

(6) "Primer-surfacer" means an intermediate protective coating applied over the electrodeposition primer (EDP) and under the topcoat. Primer-surfacer provides adhesion, protection, and appearance properties to the total finish.

(7) "Solids turnover ratio (RT)" means the ratio of total volume of coating solids that is added to the EDP system in a calendar month divided by the total volume design capacity of the EDP system.

(b) This Rule applies to automobile and light-duty truck assembly coating operations and related cleaning activities whose emissions of volatile organic compounds exceed the threshold established in Paragraph (b) of Sec. 3D-0902 at:

(1) automobile or light-duty assembly plants during the vehicle assembly processes with the following primary coating product applications:

(A) new automobile or new light-duty truck bodies, or body parts for new automobiles or new light-duty trucks;

(B) other parts that are coated along with these bodies or body parts; or

(C) additional coatings which include glass bonding primer, adhesives, cavity wax, sealer, deadener, gasket/gasket sealing material, underbody coating, trunk interior coating, bedliner, weatherstrip adhesive, and lubricating waxes/compounds; and

(2) facilities that perform coating operations on a contractual basis other than plastic or composites molding facilities.

(c) This Rule does not apply to:

(1) aerosol coatings of automobile and light-truck assembly coatings;

(2) coatings that are applied to other parts intended for use in new automobiles or new light-duty trucks (e.g., application of spray primer, color and clear coat to fascia or bumpers) on coating lines that are not related to the vehicle assembly process at automobile or light-duty assembly plants. They are covered by Sec. 3D-0964 and 0967; and

(3) aftermarket repair or replacement parts for automobiles or light-duty trucks that are covered by Sec. 3D-0964 and 0967.

(d) With the exception of materials supplied in containers with a net volume of 16 ounces or less, or a net weight of one pound or less, emissions of volatile organic compounds before control for:

(1) automobile and light-duty truck assembly coatings shall not exceed limits established in Table 1.

Table 1. Volatile Organic Compounds emission limits for automobile and light-duty truck assembly coatings.

Assembly Coating Process	Volatile Organic Compounds Emission Limit		
Electrodeposition primer (EDP) operations (including application area, spray/rinse stations, and curing oven)	When solids turnover ratio (R_T) $\geq$ 0.16;	When 0.040$\leq R_T$ <0.160;	When R_T < 0.040;
	0.7lb/gal coatings solids applied.	$0.084^{0.160-R}$ x 8.34 lb/gal coating solids applied.	No VOC emission limit.
Primer-surfacer operations(including application	12.0 lb VOC/gal deposited solids on a daily weighted average basis as determined by following the procedures in the		

area, flash-off area, and oven)	revised Automobile Topcoat Protocol
Topcoat operations (including application area, flash-off area, and oven)	12.0 lb VOC/gal deposited solids on a daily weighted average basis as determined by following the procedures in the revised Automobile Topcoat Protocol
Final repair operations	4.8 lb VOC/gallon of coating less water and less exempt solvents on a daily weighted average basis or as an occurrence weighted average.
Combined primer-surfacer and topcoat operations	12.0 lb VOC/gal deposited solids on a daily weighted average basis as determined by following the procedures in the revised Automobile Topcoat Protocol

(2) materials used at automobile and light-duty truck assembly coatings facilities shall not exceed limits established in Table 2.

Table 2. Volatile Organic Compounds emission limits for miscellaneous materials used at automobile and light-duty

Material	VOC Emission Limit
Automobile and light-duty truck glass bonding primer	900
Automobile and light-duty truck adhesive	250
Automobile and light-duty truck cavity wax	650
Automobile and light-duty truck sealer	650
Automobile and light-duty truck deadener	650
Automobile and light-duty truck gasket/gasket sealing material	200
Automobile and light-duty truck underbody coating	650
Automobile and light-duty truck trunk interior coating	650
Automobile and light-duty truck bedliner	200
Automobile and light-duty truck weatherstrip adhesive	750
Automobile and light-duty truck lubricating wax/compound	700

(e) EPA Method 24 or 24A (40 CFR Part 60, Appendix A-7) shall be used to determine the volatile organic compounds content of coatings, other than reactive adhesives used at automobile and light-duty truck coating facilities unless the facility maintains records to document the volatile organic compounds content of coating materials from the manufacturer.

(f) The emission limits established in Paragraph (d) of this Rule may be achieved with a combination of higher-solid solvent-borne coatings, efficient application equipment and bake oven exhaust control.

(g) The owner or operator of any facility subject to this Rule shall comply with the Sec. 3D-0903 and 0958.

FORSYTH COUNTY, NC - AIR QUALITY CONTROL

SECTION 3D-1000. MOTOR VEHICLE EMISSION CONTROL STANDARD

Sec. 3D-1001. Reserved

Sec. 3D-1002. Reserved

Sec. 3D-1003. Reserved

Sec. 3D-1004. Reserved

Sec. 3D-1005. Reserved

Sec. 3D-1006. Reserved

Sec. 3D-1007. Reserved

Sec. 3D-1008. Reserved

Sec. 3D-1009. Reserved

Sec. 3D-1010. Heavy-duty vehicle idling restrictions

(a) Applicability. The requirements of this rule apply to on-road heavy-duty vehicles powered in-part or entirely by an internal combustion engine.

(b) Definitions. For the purposes of this Rule, the following definitions apply:

(1) “Auxiliary power unit” means a mechanical or electrical device affixed to a vehicle that is designed to be used to generate an alternative source of power for any of the vehicle’s systems other than the primary propulsion engine;

(2) “Congestion” means a situation that occurs when the volume of traffic exceeds the capacity of a roadway;

(3) “Emergency” means a situation that poses an immediate risk to health, life, property, or environment;

(4) “Emergency vehicle” means any vehicle that responds to or supports an emergency. These vehicles are operated by part of the government, charities, non-governmental organizations, and commercial companies;

(5) “Gross vehicle weight rating” means the weight specified by the manufacturer as the loaded weight of a single vehicle;

(6) "Farm vehicle" means a vehicle used exclusively for farm use and operated within 150 miles of the farmer's farm by the farmer or the farmer's employee to transport either agricultural product, farm machinery, or farm supplies. It is not used in the operations of a for-hire motor carrier.

(7) “Heavy-duty vehicle” means a motor vehicle (excluding trailer(s)) with a gross vehicle weight rating of 10,001 pounds or greater for the purpose of this Rule;

(8) “Idling” means the operation of a motor vehicle’s propulsion engine while the vehicle is stationary;
(9) “Military vehicle” means a motor vehicle owned by the U.S. Department of Defense;
(10) “Motor vehicle” means any self-propelled vehicle used for transporting property or persons;
(11) "On-road vehicle " means a self-propelled vehicle that is designed for use on a highway.
(12) “Passenger bus” means any bus, including school buses, which is designed to carry sixteen or more passengers;
(13) “Power take off” means a device used to transfer mechanical energy from a heavy-duty vehicle’s propulsion engine to equipment that supplies mechanical, pneumatic, hydraulic, or electric power to non-vehicular mechanical, pneumatic, hydraulic, or electrically operated devices; and
(14) “Queue area” means an area used by heavy-duty vehicles waiting to provide or receive services.

(c) Exemptions. The following exemptions to idle restrictions apply to this rule:
(1) Heavy-duty vehicles may idle if they remain motionless due to traffic conditions, traffic control devices or signals, congestion, or at the direction of law enforcement officials;
(2) Emergency vehicles may idle while performing an emergency or training function. This exemption does not apply when idling only for driver comfort;
(3) Military vehicles;
(4) Heavy-duty vehicles may idle main propulsion engines to operate power take offs to perform the heavy-duty vehicle’s designed functions (e.g., refrigeration of cargo, processing of cargo, dumping, lifting, hoisting, drilling, mixing, loading, unloading, other operations requiring the use of power take offs). This exemption does not apply when idling only for driver comfort;
(5) Heavy-duty vehicles may idle if following manufacturer’s recommendations for cold engine startup and engine cool-down, maintenance, inspection, servicing, repairing, or diagnostic purposes, if idling is required for such activity;
(6) Heavy-duty vehicles with an occupied sleeper berth compartment may idle for the purposes of air conditioning or heating during federally mandated rest or sleep periods. This exemption shall expire on May 1, 2011;
(7) Auxiliary power units;
(8) Heavy-duty vehicles with a primary diesel engine meeting the nitrogen oxide idling emission standard in Title 13, of the California Code of Regulations, Section 1956.8(a)(6)(C);
(9) A passenger bus when non-driver passengers are on board the vehicle and up to 20 minutes prior to passengers boarding;
(10) Heavy-duty vehicles may idle to provide customer climate controlled comfort during periods of providing customer services (e.g., library bookmobile, blood mobile, safety

shoe and safety glasses vendors). This exemption does not apply when idling only for driver comfort; and

(11) Heavy-duty vehicles may idle if defrosters, heaters, air conditioners, or other equipment are operating solely to prevent a safety or health emergency.

(12) Heavy-duty farm vehicles.

(d) Requirements.

(1) No person who operates a heavy-duty vehicle shall cause, let, permit, suffer or allow idling for a period of time in excess of 5 consecutive minutes in any 60 minute period.

(2) Heavy-duty vehicles located in a queue area are not exempted from this Rule.

SECTION 3D-1100. CONTROL OF TOXIC AIR POLLUTANTS

Sec. 3D-1101. Purpose

This Section sets forth the Rules for the control of toxic air pollutants to protect human health. (Ord. No. 9-94, 12-19-94)

Sec. 3D-1102. Applicability

(a) The toxic air pollutant Rules in this Section apply to all facilities that emit a toxic air pollutant that are required to have permit under Forsyth County Code, Section 3Q-0700.

(b) Sources at facilities subject to this Section shall comply with the requirements of this Section as well as with any applicable requirements in Sections 3D-0500, 0900 and 1200. (Ord. No. 9-94, 12-19-94, 9-14-98)

Sec. 3D-1103. Definitions

For the purpose of this Section, the following definitions apply:

(1) "Asbestos" means asbestos fibers as defined in 40 CFR 61.141.

(2) “Bioavailable chromate pigments” means the group of chromium (VI) compounds consisting of calcium chromate (CAS No.13765-19-0), calcium dichromate (CAS No. 14307-33-6), strontium chromate (CAS No. 7789-06-2), strontium dichromate (CAS No. 7789-06-2), zinc chromate (CAS No. 13530-65-9), and zinc dichromate (CAS No. 7789-12-0).

(3) “CAS Number” means the Chemical Abstract Service registry number identifying a particular substance.

(4) “Chromium (VI) equivalent” means the molecular weight ratio of the chromium (VI) portion of a compound to the total molecular weight of the compound multiplied by the associated compound emission rate or concentration at the facility.

(5) “Non-specific chromium (VI) compounds” means the group of compounds consisting of any chromium (VI) compounds not specified in this Section as a bioavailable chromate pigment or a soluble chromate compound.

(6) "Cresol" means o-cresol, p-cresol, m-cresol or any combination of these compounds.

(7) "GACT" means any generally available control technology emission standard applied to an area source or facility pursuant to Section 112 of the federal Clean Air Act.

(8) "Hexane isomers except n-hexane" means 2-methyl pentane, 3-methyl pentane, 2,2-dimethyl butane, 2,3-dimethyl butane, or any combination of these compounds.

(9) "MACT" means any maximum achievable control technology emission standard applied to a source or facility pursuant to Section 112 of the federal Clean Air Act.

(10) “Nickel, soluble compounds” means the soluble nickel salts of chloride ($NiCl_2$, CAS No. 7718-54-9), sulfate ($NiSO_4$, CAS No. 7786-81-4), and nitrate ($Ni(NO_3)_2$, CAS No. 13138-45-9).

(11) "Polychlorinated biphenyls" means any chlorinated biphenyl compound or mixture of chlorinated biphenyl compounds.

(12) “Soluble chromate compounds” means the group of chromium (VI) compounds consisting of ammonium chromate (CAS No. 7788-98-9), ammonium dichromate (CAS No. 7789-09-5), chromic acid (CAS No. 7738-94-5), potassium chromate (CAS No. 7789-00-6), potassium dichromate (CAS No. 7778-50-9), sodium chromate (CAS No. 7775-11-3), and sodium dichromate (CAS No. 10588-01-9).

(13) "Toxic air pollutant" means any of those carcinogens, chronic toxicants, acute systemic toxicants, or acute irritants that are listed in Sec. 3D-1104. (Ord. No. 9-94, 12-19-94, 9-14-98, 05-14-01)

Sec. 3D-1104. Toxic air pollutant guidelines

A facility shall not emit any of the following toxic air pollutants in such quantities that may cause or contribute beyond the premises (adjacent property boundary) to any significant ambient air concentration that may adversely affect human health. In determining these significant ambient air concentrations, the Office of Environmental Assistance and Protection shall be guided by the following list of acceptable ambient levels in milligrams per cubic meter at 77E F (25E C) and 29.92 inches (760 mm) of mercury pressure (except for asbestos):

Pollutant (CAS Number)	Annual (Carcinogens)	24-Hour (Chronic Toxicants)	1-Hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
acetaldehyde (75-07-0)				27
acetic acid (64-19-7)				3.7
acrolein (107-02-8)				0.08
acrylonitrile (107-13-1)		0.03	1	
ammonia (7664-41-7)				2.7
aniline (62-53-3)			1	
arsenic and inorganic arsenic compounds	2.1×10^{-6}			
asbestos (1332-21-4)	2.8×10^{-6} fibers/ml			
aziridine (151-56-4)		0.006		
benzene (71-43-2)	1.2×10^{-4}			
benzidine and salts (92-87-5)	1.5×10^{-8}			
benzo(a)pyrene (50-32-8)	3.3×10^{-5}			

Pollutant (CAS Number)	Annual (Carcinogens)	24-Hour (Chronic Toxicants)	1-Hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
benzyl chloride (100-44-7)			0.5	
beryllium (7440-41-7)	4.1×10^{-6}			
beryllium chloride (7787-47-5)	4.1×10^{-6}			
beryllium fluoride (7787-49-7)	4.1×10^{-6}			
beryllium nitrate (13597-99-4)	4.1×10^{-6}			
bioavailable chromate pigments, as chromium (VI) equivalent	8.3×10^{-8}			
bis-chloromethyl ether (542-88-1)	3.7×10^{-7}			
bromine (7726-95-6)				0.2
1,3-butadiene (106-99-0)	4.4×10^{-4}			
cadmium (7440-43-9)	5.5×10^{-6}			
cadmium acetate (543-90-8)	5.5×10^{-6}			
cadmium bromide (7789-42-6)	5.5×10^{-6}			
carbon disulfide (75-15-0)		0.186		
carbon tetrachloride (56-23-5)	6.7×10^{-3}			
chlorine (7782-50-5)		0.0375		0.9
chlorobenzene (108-90-7)		2.2		
chloroform (67-66-3)	4.3×10^{-3}			
chloroprene (126-99-8)		0.44	3.5	
cresol (1319-77-3)			2.2	
p-dichlorobenzene (106-46-7)				66
dichlorodifluoromethane (75-71-8)		248		
Dichlorofluoromethane (75-43-4)		0.5		
di(2-ethylhexyl)phthalate (117-81-7)		0.03		
dimethyl sulfate (77-78-1)		0.003		
1,4-dioxane (123-91-1)		0.56		
epichlorohydrin (106-89-8)	8.3×10^{-2}			
ethyl acetate (141-78-6)			140	

Pollutant (CAS Number)	Annual (Carcinogens)	24-Hour (Chronic Toxicants)	1-Hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
ethylenediamine (107-15-3)		0.3	2.5	
ethylene dibromide (106-93-4)	4.0×10^{-4}			
ethylene dichloride (107-06-2)	3.8×10^{-3}			
ethylene glycol monoethyl ether (110-80-5)		0.12	1.9	
ethylene oxide (75-21-8)	2.7×10^{-5}			
ethyl mercaptan (75-08-1)			0.1	
fluorides		0.016	0.25	
formaldehyde (50-00-0)				0.15
hexachlorocyclopentadiene (77-47-4)		0.0006	0.01	
hexachlorodibenzo-p-dioxin (57653-85-7)	7.6×10^{-8}			
n-hexane (110-54-3)		1.1		
hexane isomers except n-hexane				360
hydrazine (302-01-2)		0.0006		
hydrogen chloride (7647-01-0)				0.7
hydrogen cyanide (74-90-8)		0.14	1.1	
hydrogen fluoride (7664-39-3)		0.03		0.25
hydrogen sulfide (7783-06-4)		0.12		
maleic anhydride (108-31-6)		0.012	0.1	
manganese and compounds		0.031		
manganese cyclopentadienyl tricarbonyl (12079-65-1)		0.0006		
manganese tetroxide (1317-35-7)		0.0062		
mercury, alkyl		0.00006		
mercury, aryl and inorganic compounds		0.0006		
mercury, vapor (7439-97-6)		0.0006		
methyl chloroform (71-55-6)		12		245
methylene chloride (75-09-2)	2.4×10^{-2}		1.7	

Pollutant (CAS Number)	Annual (Carcinogens)	24-Hour (Chronic Toxicants)	1-Hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
methyl ethyl ketone (78-93-3)		3.7		88.5
methyl isobutyl ketone (108-10-1)		2.56		30
methyl mercaptan (74-93-1)			0.05	
nickel carbonyl (13463-39-3)		0.0006		
nickel metal (7440-02-0)		0.006		
nickel, soluble compounds, as nickel		0.0006		
nickel subsulfide (12035-72-2)	2.1×10^{-6}			
nitric acid (7697-37-2)				1
nitrobenzene (98-95-3)		0.06	0.5	
n-nitrosodimethylamine (62-75-9)	5.0×10^{-5}			
non-specific chromium (VI) compounds, as chromium (VI) equivalent	8.3×10^{-8}			
pentachlorophenol (87-86-5)		0.003	.025	
perchloroethylene (127-18-4)	1.9×10^{-1}			
phenol (108-95-2)			0.95	
phosgene (75-44-5)		0.0025		
phosphine (7803-51-2)				0.13
polychlorinated biphenyls (1336-36-3)	8.3×10^{-5}			
soluble chromate compounds as chromium (VI) equivalent		6.2×10^{-4}		
styrene (100-42-5)			10.6	
sulfuric acid (7664-93-9)		0.012	0.1	
tetrachlorodibenzo-p-dioxin (1746-01-6)	3.0×10^{-9}			
1,1,1,2-tetrachloro-2,2-difluoroethane (76-11-9)		52		
1,1,2,2-tetrachloro-1,2-		52		

Pollutant (CAS Number)	Annual (Carcinogens)	24-Hour (Chronic Toxicants)	1-Hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
difluoroethane (76-12-0)				
1,1,2,2-tetrachloroethane (79-34-5)	6.3×10^{-3}			
toluene (108-88-3)		4.7		56
toluene-2, 4-diisocyanate (584-84-9) and 2,6- isomers (91-08-7)		0.0002		
trichloroethylene (79-01-6)	5.9×10^{-2}			
Trichlorofluoromethane (75-69-4)			560	
1,1,2-trichloro-1,2,2-trifluoroethane (76-13-1)				950
vinyl chloride (75-01-4)	3.8×10^{-4}			
vinylidene chloride (75-35-4)		0.12		
xylene (1330-20-7)		2.7		65

(Ord. No. 9-94, 12-19-94, 9-14-98, 5-24-99, 05-14-01)

Sec. 3D-1105. Facility reporting, recordkeeping

The Director may require, according to Section 3D-0600, the owner or operator of a source subject to this Section to monitor emissions of toxic air pollutants, to maintain records of these emissions, and to report these emissions. The owner or operator of any toxic air pollutant emission source subject to the requirements of this Section shall comply with the monitoring, recordkeeping, and reporting requirements in Section 3D-0600. (Ord. No. 9-94, 12-19-94, 5-24-99)

Sec. 3D-1106. Determination of ambient air concentration

(a) Modeling shall not be used for enforcement. Modeling shall be used to determine process operational and air pollution control parameters and emission rates for toxic air pollutants to place in the air quality permit for that facility that will prevent any of the acceptable ambient levels in Sec. 3D-1104 from being exceeded, with such exceptions as may be allowed under Forsyth County Code, Section 3Q 0700. Enforcing these permit stipulations and conditions shall be the mechanism used to ensure that the requirements of Sec. 3D-1104, with such exceptions as may be allowed by Forsyth County Code, Section 3Q 0700, are met.

(b) The owner or operator of the facility may request the Office to perform a modeling analysis of the facility or provide the analysis himself. If the owner or operator of the facility requests the Office to perform the modeling analysis, he shall provide emissions rates, stack parameters, and other

information that the Office needs to do the modeling. The data that the owner or operator of the facility provides the Office to use in the model or in deriving the data used in the model shall be the process, operational and air pollution control equipment parameters and emission rates that will be contained in the facility's permit. If the Office's initial review of the modeling request indicates extensive or inappropriate use of Office resources or if the Office's modeling analysis fails to show compliance with the acceptable ambient levels in Sec. 3D-1104, the modeling demonstration becomes the responsibility of the owner or operator of the facility.

(c) When the owner or operator of the facility is responsible for providing the modeling demonstration and the data used in the modeling, the owner or operator of the facility shall use in the model or in deriving data used in the model the process operational and air pollution control equipment parameters and emission rates that will be contained in his permit. Sources that are not required to be included in the model will not be included in the permit to emit toxic air pollutants.

(d) For the following pollutants, modeled emission rates shall be based on the highest emissions occurring in any single 15 minute period. The resultant modeled 1-hour concentrations shall then be compared to the applicable 1-hour acceptable ambient levels to determine compliance. These pollutants are:

acetaldehyde (75-07-0)
acetic acid (64-19-7)
acrolein (107-02-8)
ammonia (7664-41-7)
bromine (7726-95-6)
chlorine (7782-50-5)
formaldehyde (50-00-0)
hydrogen chloride (7647-01-0)
hydrogen fluoride (7664-39-3)
nitric acid (7697-37-2)

(e) The owner or operator of the facility and the Office may use any model allowed by 40 CFR 51.166(l) provided that the model is appropriate for the facility being modeled. The owner or operator or the Office may use a model other than one allowed by 40 CFR 51.166(l) provided that the Director determines that the model is equivalent to the model allowed by 40 CFR 51.166(l). Regardless of model used, the owner or operator and the Office shall model for cavity effects and shall comply with the modeling requirements for stack height set out in Sec. 3D-0533.

(f) Ambient air concentrations are to be evaluated for annual periods over a calendar year, for 24-hour periods from midnight to midnight, and for one-hour periods beginning on the hour.

(g) The owner or operator of the facility shall identify each toxic air pollutant emitted and its corresponding emission rate using mass balancing analysis, source testing, or other methods that the Director may approve as providing an equivalently accurate estimate of the emission rate.

(h) The owner or operator of the facility shall submit a modeling plan to the Director and shall have received approval of that plan from the Director before submitting a modeling demonstration to the Director. The modeling plan shall include:

(1) a diagram of the plant site, including locations of all stacks and associated buildings;

(2) on-site building dimensions;
(3) a diagram showing property boundaries, including a scale, key and north indicator;
(4) the location of the site on a United States Geological Survey (USGS) map;
(5) discussion of good engineering stack height and building wake effects for each stack;
(6) discussion of cavity calculations, impact on rolling and complex terrain, building wake effects, and urban/rural considerations;
(7) discussion of reasons for model selection;
(8) discussion of meteorological data to be used;
(9) discussion of sources emitting the pollutant that are not to be included in the model with an explanation of why they are being excluded (i.e. why the source will not affect the modeling analysis); and
(10) any other pertinent information. (Ord. No. 9-94, 12-19-94, 9-14-98)

Sec. 3D-1107. Multiple facilities

(a) If an acceptable ambient level in Sec. 3D-1104 is exceeded because of emissions of two or more facilities and if public exposure is such that the Director has evidence that human health may be adversely affected, then the Director shall require the subject facilities to apply additional controls or to otherwise reduce emissions. The type of evidence that the Director shall consider shall include one or more of the following:

(1) emissions inventory,
(2) ambient monitoring,
(3) modeling, or
(4) epidemiological study.

(b) The allocation of the additional reductions shall be based on the relative contributions to the pollutant concentrations unless the owners or operators agree otherwise.

(c) The owner or operator of a facility shall not be required to conduct the multi-facility ambient impact analysis described in Paragraph (a) of this Rule. This type of analysis shall be done by the Office of Environmental Assistance and Protection. In performing its analysis, the Office of Environmental Assistance and Protection shall:

(1) develop a modeling plan that includes the elements set out in Paragraph (f) of Sec. 3D-1106;
(2) use for the source modeling parameters, the modeling parameters used by the owner or operator of the source in his modeling demonstration, or if a modeling demonstration has not been done or if a needed parameter has not been used in the modeling demonstration, parameters contained in, or derived from data contained in, the source's permit;
(3) use a model allowed by Paragraph (c) of Sec. 3D-1106;
(4) model for cavity effects and comply with the modeling requirements for stack height set out in Sec. 3D-0533;
(5) use the time periods required by Paragraph (d) of Sec. 3D-1106; and

(6) only consider impacts of a facility's emissions beyond the premises of that facility. (Ord. No. 9-94, 12-19-94)

Sec. 3D-1108. Multiple pollutants

If the commission has evidence that two or more toxic air pollutants being emitted from a facility or combination of facilities act in the same way to affect human health so that their effects may be additive or enhanced and that public exposure is such that human health may be adversely affected, then the commission will consider developing acceptable ambient levels for the combination of toxic air pollutants or other appropriate control measures. (Ord. No. 9-94, 12-19-94)

Sec. 3D-1109. 112(j) case -by-case maximum achievable control technology

(a) Applicability. This Rule applies only to sources of hazardous air pollutants required to have a permit under Section 3Q-0500 and as described in 40 CFR 63.50. This Rule does not apply to research or laboratory activities as defined in Paragraph (b) of this Rule.

(b) Definitions. For the purposes of this Rule, the definitions in 40 CFR 63.2, 63.51, Sec. 3Q-0526, and the following definitions apply:

(1) "Affected source" means the collection of equipment, activities, or both within a single contiguous area and under common control that is in a section 112(c) source category or subcategory for that the Administrator has failed to promulgate an emission standard by the section 112(j) deadline, and that is addressed by an applicable MACT emission limitation established pursuant to 40 CFR Part 63 Subpart B:

(2) "Control technology" means measures, processes, methods, systems, or techniques to limit the emission of hazardous air pollutants including measures that;

(A) reduce the quantity, or eliminate emissions, of such pollutants through process changes, substitution of materials, or other modifications.

(B) enclose systems or processes to eliminate emissions;

(C) collect, capture, or treat such pollutants when released from a process, stack, storage, or fugitive emission point;

(D) are design, equipment, work practice, or operational standards (including requirements for operator training or certification) as provided in 42 USC 7412(h); or

(E) are a combination of Parts (A) through (D) of this definition.

(3) "EPA" means the United States Environmental Protection Agency or the Administrator of U.S. Environmental Protection Agency.

(4) "Hazardous air pollutant" means any pollutant listed under Section 112(b) of the federal Clean Air Act.

(5) "MACT" means maximum achievable control technology.

(6) "Maximum achievable control technology" means:

(A) for existing sources,
  (i) a MACT standard that EPA has proposed or promulgated for a particular category of facility or source.
  (ii) the average emission limitation achieved by the best performing 12 percent of the existing facilities or sources for which EPA has emissions information if the particular category of source contains 30 or more sources, or
  (iii) the average emission limitation achieved by the best performing five facilities or sources for which EPA has emissions information if the particular category of source contains fewer that 30 sources, or

(B) for new sources, the maximum degree of reduction in emissions that is deemed achievable but not less stringent than the emission control that is achieved in practice by the best controlled similar source.

(7) “MACT floor” means;

(A) for existing sources:
  (i) the average emission limitation achieved by the best performing 12 percent of the existing sources in the United States (for which EPA has emissions information) excluding those sources that have, within 18 months before the emission standard is proposed or within 30 months before such standard is promulgated, whichever is later, first achieved a level of emission rate or emission reduction which complies, or would comply if the source is not subject to such standard, with the lowest achievable emission rate (as defined in Section 171 of the federal Clean Air Act) applicable to the source category or subcategory for categories and subcategories with 30 or more sources, or
  (ii) the average emission limitation achieved by the best performing five sources(for which EPA has emissions or could reasonably obtain emissions information), in the category or subcategory,. of sources for categories or subcategories with fewer than 30 sources;

(B) for new sources, the emission limitation achieved in practice by the best controlled similar source.

(8) "New affected source" means the collection of equipment, activities, or both, that constructed after the issuance of a section 1121(j) permit for the source pursuant to 40 CFR 63.52 is subject to the applicable MACT emission limitation for new sources. Each permit shall define the term "new affected source." that will be the same as the "affected source" unless a different collection is warranted based on consideration of factors including.

(A) Emission reduction impacts of controlling individual sources versus groups of sources;

(B) Cost effectiveness of controlling individual equipment;

(C) Flexibility to accommodate common control strategies;:

(D) Cost/benefits of emissions averaging;
(E) Incentives for pollution prevention;
(F) Feasibility and cost of controlling processes that share common equipment (e.g. product recovery devices); and
(G) Feasibility and cost of monitoring.

(9) "New facility" means a facility for which construction is commenced after the Section 112(j) deadline, or after proposal of a relevant standard under Section 112(d) or (h) of the federal Clean Air Act, whichever comes first.

(10) "Research or laboratory activities" means activities whose primary purpose is to conduct research and development into new processes and products: where such activities are operated under the supervision of technically trained personnel and are not engaged in the manufacture of products for commercial sale in commerce, except in a de minimis manner, and where the source is not in a source category specifically addressing research or laboratory activities, that is listed pursuant to section 112(c){7) of the Clean Air Act.

(11) "Section 112(j) deadline" means the date 18 months after the date for which a relevant standard is scheduled to be promulgated under 40 CFR Part 63, except that for all major sources listed in the source category schedule for which a relevant standard is scheduled to be promulgated by November 15, 1994, the section 112(j) deadline is November 15, 1996. and for all major sources listed in the source category schedule for which a relevant standard is scheduled to be promulgated by November 15, 1997, the section 112(j) deadline is December 15, 1999.

(12) "Similar source" means that equipment or collection of equipment that, by virtue of its structure, operability, type of emissions and volume and concentration of emissions, is substantially equivalent to the new affected source and employs control technology for control of emissions of hazardous air pollutants that is practical for use on the new affected source.

(c) Missed promulgation dates: 112(j). If EPA fails to promulgate a standard for a category of source under Section 112 of the federal Clean Air Act by the date established pursuant to Sections 112(e)(1) or (3) of the federal Clean Air Act, the owner or operator of any source in such category shall submit, within 18 months after such date, a permit application, in accordance with the procedures in Sec. 3Q-0526, to the Director and to EPA to apply MACT to such sources. Sources subject to this Paragraph shall be in compliance with this Rule within three years from the date that the permit is issued.

(d) New facilities. The owner or operator of any new facility that is a major source of hazardous air pollutants (HAP) that is subject to this Rule shall apply MACT in accordance with the provisions of Sec. 3Q-1112, 3Q-0528 and 3Q-0526 (e).

(e) Case-by-case MACT determination. The Director shall determine MACT according to 40 CFR 63.55(a).

(f) Monitoring and recordkeeping. The owner or operator of a source subject to this Rule shall install, operate, and maintain monitoring capable of detecting deviations from each applicable emission limitation or other standards with sufficient reliability and timeliness to determine continuous compliance

over the applicable reporting period. Such monitoring data may be used as a basis for enforcing emissions limitations established under this Rule. (11-22-04)

Sec. 3D-1110. National emission standards for hazardous air pollutants

(a) With the exception of Paragraph (b) of this Rule, sources subject to national emission standards for hazardous air pollutants promulgated in 40 CFR Part 61 shall comply with emission standards, monitoring and reporting requirements, maintenance requirements, notification and record keeping requirements, performance test requirements, test method and procedural provisions, and any other provisions, as required therein, rather than with any otherwise-applicable Rule in Section 3D-0500 that would be in conflict therewith.

(b) Reserved

(c) New sources of volatile organic compounds that are located in an area designated in 40 CFR 81.334 as nonattainment for ozone or an area identified in accordance with Sec. 3D-0902 as in violation of the ambient air quality standard for ozone shall comply with the requirements of 40 CFR Part 61 that are not excluded by this Rule, as well as with any applicable requirements in Section 3D-0900.

(d) All requests, reports, applications, submittals, and other communications to the administrator required under Paragraph (a) of this Rule shall be submitted to the Director of the Office of Environmental Assistance and Protection rather than to the Environmental Protection Agency.

(e) In the application of this Rule, definitions contained in 40 CFR Part 61 shall apply rather than those of Section 3D-0100.

(f) Forsyth County Code, Sec. 3Q-0102 and 0302 are not applicable to any source to which this Rule applies. The owner or operator of the source shall apply for and receive a permit as required in Forsyth County Code, Section 3Q-0300 or 0500. (Ord. No. 9-94, 12-19-94, 11-11-96, 7-28-97)

Sec. 3D-1111. Maximum achievable control technology

(a) With the exception of Paragraph (b) or (c) of this Rule, sources subject to national emission standards for hazardous air pollutants for source categories promulgated in 40 CFR Part 63 shall comply with emission standards, monitoring and reporting requirements, maintenance requirements, notification and record keeping requirements, performance test requirements, test method and procedural provisions, and any other provisions, as required therein, rather than with any otherwise-applicable rule in Section 3D-0500 which would be in conflict therewith.

(b) The following are not included under this Rule:

(1) approval of county programs and delegation of federal authorities (40 CFR 63.90 to 63.96, Subpart E); and

(2) requirements for control technology determined for major sources in accordance with Clean Air Act Sections 112(g) and 112(j) (40 CFR 63.50 to 63.57, Subpart B).

(c) Reserved.

(d) New sources of volatile organic compounds that are located in an area designated in 40 CFR 81.334 as nonattainment for ozone or an area identified in accordance with Forsyth County Code, Sec.

3D-0902 as being in violation of the ambient air quality standard for ozone shall comply with the requirements of 40 CFR Part 63 that are not excluded by this Rule as well as with any applicable requirements in Section 3D-0900.

(e) All requests, reports, applications, submittals, and other communications to the administrator required under Paragraph (a) of this Rule shall be submitted to the Director of the Office of Environmental Assistance and Protection rather than to the Environmental Protection Agency.

(f) In the application of this Rule, definitions contained in 40 CFR Part 63 shall apply rather than those of Section 3D-0100 when conflict exists.

(g) Forsyth County Code, Sec. 3Q-0102 and 0302 are not applicable to any source to which this Rule applies if the source is required to be permitted under Forsyth County Code, Section 3Q-0500, Title V Procedures. The owner or operator of the source shall apply for and receive a permit as required in Forsyth County Code, Section 3Q-0300 or 0500. Sources that have heretofore been exempted from needing a permit and become subject to requirements promulgated under 40 CFR 63 shall apply for a permit in accordance to Forsyth County Code, Sec. 3Q-0109. (11-11-96)

Sec. 3D-1112. 112(g) case-by-case maximum achievable control technology

(a) Applicability. This Rule applies to the construction or reconstruction of major sources of hazardous air pollutants unless:

(1) the major source has been specifically regulated or exempted from regulation under:
  (A) Sec. 3D-1109 or 1111, or
  (B) a standard issued pursuant to Section 112(d), 112(h), or 112(j) of the federal Clean Air Act and incorporated in another Subpart of 40 CFR Part 63, or

(2) the owner or operator of such major source has received all necessary air quality permits for such construction or reconstruction project before July 1, 1998.

(b) Exclusions. The requirements of this Rule shall not apply to:

(1) electric utility steam generating units unless and until such time as these units are added to the source category list pursuant to Section 112(c)(5) of the federal Clean Air Act.

(2) stationary sources that are within a source category that has been deleted from the source category list pursuant to Section 112(c)(9) of the federal Clean Air Act.

(3) research and development activities.

(c) Definitions. For the purposes of this Rule, the following definitions apply:

(1) “Affected source” means the stationary source or group of stationary sources that, when fabricated (on site), erected, or installed meets the definition of "construct a major source" or the definition of "reconstruct a major source" contained in this Paragraph.

(2) “Affected States” means all States or local air pollution agencies whose areas of jurisdiction are:
  (A) contiguous to Forsyth County and located less than D=Q/12.5 from the facility, where:

(i) Q = emissions of the pollutant emitted at the highest permitted rate in tons per year, and

(ii) D = distance from the facility to the contiguous state or local air pollution control agency in miles; or

(B) within 50 miles of the permitted facility.

(3) "Available information" means, for purposes of identifying control technology options for the affected source, information contained in the following information sources as of the date of approval of the MACT determination by the Office:

(A) a relevant proposed regulation, including all supporting information;

(B) background information documents for a draft or proposed regulation;

(C) data and information available from the Control Technology Center developed pursuant to Section 113 of the federal Clean Air Act;

(D) data and information contained in the Aerometric Informational Retrieval System including information in the MACT data base;

(E) any additional information that can be expeditiously provided by the Office and EPA; and

(F) for the purpose of determinations by the Office, any additional information provided by the applicant or others, and any additional information considered available by the Office.

(4) "Construct a major source" means:

(A) To fabricate, erect, or install at any greenfield site a stationary source or group of stationary sources which is located within a contiguous area and under common control and which emits or has the potential to emit 10 tons per year of any HAP's or 25 tons per year of any combination of HAP, or

(B) To fabricate, erect, or install at any developed site a new process or production unit which in and of itself emits or has the potential to emit 10 tons per year of any HAP or 25 tons per year of any combination of HAP, unless the process or production unit satisfies Subparagraphs (i) through (vi) of this Paragraph:

(i) All HAP emitted by the process or production unit that would otherwise be controlled under the requirements of this Rule will be controlled by emission control equipment which was previously installed at the same site as the process or production unit;

(ii) The Office:

(I) has determined within a period of five years prior to the fabrication, erection, or installation of the process or production unit that the existing emission control equipment represented best available control technology (BACT) under Sec. 3D-0530 or lowest achievable emission rate (LAER) under Sec. 3D-0531 for the category of pollutants which includes those HAP's to be emitted by the process or production unit; or

(II) determines that the control of HAP emissions provided by the existing equipment will be equivalent to that level of control currently achieved by other well-controlled similar sources (i.e., equivalent to the level of control that would be provided by a current BACT, LAER, or MACT determination under Sec. 3D-1109);

(iii) The Office determines that the percent control efficiency for emissions of HAP from all sources to be controlled by the existing control equipment will be equivalent to the percent control efficiency provided by the control equipment prior to the inclusion of the new process or production unit;

(iv) The Office has provided notice and an opportunity for public comment concerning its determination that criteria in Parts (i), (ii), and (iii) of this Subparagraph apply and concerning the continued adequacy of any prior LAER, BACT, or MACT determination under Sec. 3D-1109;

(v) If any commenter has asserted that a prior LAER, BACT, or MACT determination under Sec. 3D-1109 determination is no longer adequate, the Office has determined that the level of control required by that prior determination remains adequate; and

(vi) Any emission limitations, work practice requirements, or other terms and conditions upon which the above determinations by the Office are predicated will be construed by the Office as applicable requirements under Section 504(a) of the federal Clean Air Act and either have been incorporated into an existing permit issued under Section 3Q-0500 for the affected facility or will be incorporated into such permit upon issuance.

(5) "Control technology" means measures, processes, methods, systems, or techniques to limit the emission of hazardous air pollutants including measures that:

(A) reduce the quantity of, or eliminate emissions of, such pollutants through process changes, substitution of materials or other modifications;

(B) enclose systems or processes to eliminate emissions;

(C) collect, capture or treat such pollutants when released from a process, stack, storage or fugitive emissions point;

(D) are design, equipment, work practice, or operational standards (including requirements for operator training or certification) as provided in 42 U.S.C. 7412(h); or

(E) are a combination of Parts (A) through (D) of this definition.

(6) "Electric utility steam generating unit" means any fossil fuel fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A unit that co-generates steam and electricity and supplies more than one-third of its potential electric output capacity and more than 25 megawatts electric output to any

utility power distribution system for sale shall be considered an electric utility steam generating unit.

(7) "Greenfield site" means a contiguous area under common control that is an undeveloped site.

(8) "HAP" means hazardous air pollutants.

(9) "Hazardous air pollutant" means any pollutant listed under Section 112 (b) of the federal Clean Air Act.

(10) "List of source categories" means the source category list required by Section 112(c) of the federal Clean Air Act.

(11) "MACT" means maximum achievable control technology.

(12) "Maximum achievable control technology emission limitation for new sources" means the emission limitation which is not less stringent than the emission limitation achieved in practice by the best controlled similar source, and which reflects the maximum degree of reduction in emissions that the permitting authority, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable by the constructed or reconstructed major source.

(13) "Process or production unit" means any collection of structures or equipment, that processes, assembles, applies, or otherwise uses material inputs to produce or store an intermediate or final product. A single facility may contain more than one process or production unit.

(14) "Reconstruct a major source" means the replacement of components at an existing process or production unit that in and of itself emits or has the potential to emit 10 tons per year of any HAP or 25 tons per year of any combination of HAP, whenever:

(A) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable process or production unit; and

(B) It is technically and economically feasible for the reconstructed major source to meet the applicable maximum achievable control technology emission limitation for new sources established under this Subpart.

(15) "Research and development activities" means activities conducted at a research or laboratory facility whose primary purpose is to conduct research and development into new processes and products, where such source is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for sale or exchange for commercial profit, except in a *de minimis* manner.

(16) "Similar source" means a stationary source or process that has comparable emissions and is structurally similar in design and capacity to a constructed or reconstructed major source such that the source could be controlled using the same control technology.

(d) Principles of MACT determinations. The following general principles shall be used to make a case-by-case MACT determination concerning construction or reconstruction of a major source under this Rule:

(1) The MACT emission limitation or MACT requirements recommended by the applicant and approved by the Office shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source, as determined by the Office.

(2) Based upon available information, the MACT emission limitation and control technology (including any requirements under Subparagraph (3) of this Paragraph) recommended by the applicant and approved by the Office shall achieve the maximum degree of reduction in emissions of HAP that can be achieved by utilizing those control technologies that can be identified from the available information, taking into consideration the costs of achieving such emission reduction and any non-air quality health and environmental impacts and energy requirements associated with the emission reduction.

(3) The owner or operator may recommend a specific design, equipment, work practice, or operational standard, or a combination thereof, and the Director may approve such a standard if the Office specifically determines that it is not feasible to prescribe or enforce an emission limitation under the criteria set forth in Section 112(h)(2) of the federal Clean Air Act.

(4) If the EPA has either proposed a relevant emission standard pursuant to Section 112(d) or 112(h) of the federal Clean Air Act or adopted a presumptive MACT determination for the source category that includes the constructed or reconstructed major source, then the MACT requirements applied to the constructed or reconstructed major source shall have considered those MACT emission limitations and requirements of the proposed standard or presumptive MACT determination.

(e) Effective date of MACT determination. The effective date of a MACT determination shall be the date of issuance of a permit under procedures of Section 3Q-0300 or 0500 incorporating a MACT determination.

(f) Compliance date. On and after the date of start-up, a constructed or reconstructed major source that is subject to the requirements of this Rule shall be in compliance with all applicable requirements specified in the MACT determination.

(g) Compliance with MACT determinations. The owner or operator of a constructed or reconstructed major source that:

(1) is subject to a MACT determination shall comply with all requirements set forth in the permit issued under Section 3Q-0300 or 0500, including any MACT emission limitation or MACT work practice standard, and any notification, operation and maintenance, performance testing, monitoring, reporting, and recordkeeping requirements; or

(2) has obtained a MACT determination shall be deemed to be in compliance with Section 112(g)(2)(B) of the federal Clean Air Act only to the extent that the

constructed or reconstructed major source is in compliance with all requirements set forth in the permit issued under Section 3Q-0300 or 0500. Any violation of such requirements by the owner of operator shall be deemed by the Office and by EPA to be a violation of the prohibition on construction or reconstruction in Section 112(g)(2)(B) of the federal Clean Air Act for whatever period the owner or operator is determined to be in violation of such requirements, and shall subject the owner or operator to appropriate enforcement action under the General Statutes and the federal Clean Air Act.

(h) Requirements for constructed or reconstructed major sources subject to a subsequently promulgated MACT standard or MACT requirement. If EPA promulgates an emission standard under Section 112(d) or 112(h) of the federal Clean Air Act or the Office issues a determination under Sec. 3D-1109 that is applicable to a stationary source or group of sources that would be deemed to be a constructed or reconstructed major source under this Rule:

(1) before the date that the owner or operator has obtained a final and legally effective MACT determination under Section 3Q-0300 or 0500, the owner or operator of the source(s) shall comply with the promulgated standard or determination rather than any MACT determination under this Rule by the compliance date in the promulgated standard; or

(2) after the source has been subject to a prior case-by-case MACT under this Rule, and the owner or operator obtained a final and legally effective case-by-case MACT determination prior to the promulgation date of such emission standard, the Office shall (if the initial permit has not yet been issued under Section 3Q-0500) issue an initial permit that incorporates the emission standard or determination, or shall (if the initial permit has been issued under Section 3Q-0500) revise the permit according to the reopening procedures in Sec. 3Q-0517, Reopening for Cause, whichever is relevant, to incorporate the emission standard or determination.

(i) Compliance with subsequent 112 (d), 112(h),or 112 (j) standards. EPA may include in the emission standard established under Section 112(d) or 112(h) of the federal Clean Air Act a specific compliance date for those sources that have obtained a final and legally effective MACT determination under this Rule and that have submitted the information required by 40 CFR 63.43 to EPA before the close of the public comment period for the standard established under section 112(d) of the federal Clean Air Act. Such date shall assure that the owner or operator shall comply with the promulgated standard as expeditiously as practicable, but not longer than eight years after such standard is promulgated. In that event, the Office shall incorporate the applicable compliance date in the permit issued under Section 3Q-0500. If no compliance date has been established in the promulgated 112(d) or 112(h) standard or determination under Sec. 3Q-1109, for those sources that have obtained a final and legally effective MACT determination under this Rule, then the Director shall establish a compliance date in the permit that assures that the owner or operator shall comply with the promulgated standard or determination as expeditiously as practicable, but not longer than eight years after such standard is promulgated or a determination is made under Sec. 3D-1109.

(j) Revision of permit to incorporate less stringent control. Notwithstanding the requirements of Paragraph (h) of this Rule, if the Administrator of EPA promulgates an emission standard under Section 112(d) or Section 112(h) of the federal Clean Air Act or the Office issues a determination under Sec. 3D-1109 that is applicable to a stationary source or group of sources that was deemed to be a constructed or reconstructed major source under this Rule and that is the subject of a prior case-by-case MACT determination pursuant to 40 CFR 63.43, and the level of control required by the emission standard issued under Section 112(d) or 112(h) or the determination issued under . Sec. 3D-1109 is less stringent than the level of control required by any emission limitation or standard in the prior MACT determination, the Office is not required to incorporate any less stringent terms of the promulgated standard in the permit issued under Section 3Q-0500 applicable to such source(s) and may consider any more stringent provisions of the prior MACT determination to be applicable legal requirements when issuing or revising such an operating permit. (9-14-98)

SECTION 3D-1200. CONTROL OF EMISSIONS FROM INCINERATORS

Sec. 3D-1201. Purpose and scope

(a) The rules in this Section shall apply to incinerators and combustor units regulated pursuant to Sec. 3D-1208.

(b) This Section does not apply to:

(1) afterburners, flares, fume incinerators, and other similar devices used to reduce the emissions of air pollutants from processes, whose emissions shall be regulated as process emissions;

(2) any boilers or industrial furnaces that burn waste as a fuel, except hazardous waste as defined in 40 CFR 260.10;

(3) air curtain incinerators, which shall comply with Section 3D-1900 of this Subchapter; or

(4) incinerators used to dispose of dead animals or poultry that meet the following requirements:

(A) The incinerator is located on a farm and is operated by the farm owner or by the farm operator;

(B) The incinerator is used solely to dispose of animals or poultry originating on the farm where the incinerator is located;

(C) The incinerator is not charged at a rate that exceeds its design capacity; and

(D) The incinerator complies with Sec. 3D-0521 (visible emissions) and 0522 (odorous emissions).

(d) If an incinerator is more than one type of incinerator, then the following order shall be used to determine the standards and requirements to apply:

(1) hazardous waste incinerators;

(2) sewage sludge incinerators;

(3) sludge incinerators;

(4) municipal waste combustors;

(5) commercial and industrial solid waste incinerators;

(6) hospital, medical, or infectious waste incinerators (HMIWIs);

(7) other solid waste incinerators:

(8) conical incinerators;

(9) crematory incinerators; and

(10) other incinerators.

Sec. 3D-1202. Definitions

For the purposes of this Section, the following definitions shall apply. If a term in this Rule is also defined at Sec. 3D-0101, then the definition in this Rule controls.

(1) "Air curtain incinerator," also referred to as an "air curtain burner," means an incinerator that operates by forcefully projecting a curtain of air across an open chamber or pit in which combustion occurs as defined in 40 CFR 60.2875.

(2) "Crematory incinerator" means any incinerator located at a crematory regulated under 21 NCAC 34C that is used solely for the cremation of human remains.

Sec. 3D-1203. Repealed

Sec. 3D-1204. Repealed

Sec. 3D-1205. Repealed

Sec. 3D-1206. Repealed

Sec. 3D-1207. Repealed

Sec. 3D-1208. Other incinerators

(a) Applicability.

(1) This Rule applies to any incinerator not covered under Sec. 3D-0524, 1110 or 1111.

(2) Paragraphs (b)(8) and (b)(9) of this rule apply to any incinerator covered under Sec. 3D-0524, 1110 or 1111 as provided in paragraph(b)(1) of this rule.

(3) If any incinerator subject to this Rule:

(A) is used solely to cremate pets; or

(B) if the emissions of all toxic air pollutants from an incinerator subject to this Rule and associated waste handling and storage are less than the levels listed in Sec. 3Q 0711;

the incinerator is exempt from Subparagraphs (b)(6) through (b)(9) and Paragraph (c) of this Rule.

(b) Emission Standards.

(1) The emission standards in this Rule apply to any incinerator subject to this Rule except where Sec. 3D-0524, 1110 or 1111 apply. However, when Subparagraph (8) or (9) of this Paragraph and Sec. 3D-0524, 1110 or 1111 regulate the same pollutant, the more restrictive provision for each pollutant applies notwithstanding provisions of Sec. 3D-0524, 1110 or 1111 to the contrary.

(2) Particulate Matter. Any incinerator subject to this Rule shall comply with one of the following emission standards for particulate matter:

(A) For refuse charge rates between 100 and 2000 pounds per hour, the allowable emissions rate for particulate matter from any stack or chimney of any incinerator subject to this Rule shall not exceed the level calculated with the equation E=0.002P calculated to two significant figures, where “E” equals the allowable emission rate for particulate matter in pounds per hour and “P” equals the refuse charge rate in pounds per hour. For refuse charge rates of 0 to 100 pounds per hour the allowable emission rate shall be 0.2 pounds per hour. For refuse charge rates of 2000 pounds per hour or greater the allowable

emission rate shall be 4.0 pounds per hour. Compliance with this Part shall be determined by averaging emissions over a three-hour block period.

(B) Instead of meeting the standards in Part (A) of this Subparagraph, the owner or operator of any incinerator subject to this Rule may choose to limit particulate emissions from the incinerator to 0.08 grains per dry standard cubic foot corrected to 12 percent carbon dioxide. In order to choose this option, the owner or operator of the incinerator shall demonstrate that the particulate ambient air quality standards will not be violated. To correct to 12 percent carbon dioxide, the measured concentration of particulate matter is multiplied by 12 and divided by the measured percent carbon dioxide. Compliance with this Part shall be determined by averaging emissions over a three-hour block period.

(3) Visible Emissions. Any incinerator subject to this Rule shall comply with Sec. 3D-0521 for the control of visible emissions.

(4) Sulfur Dioxide. Any incinerator subject to this Rule shall comply with Sec. 3D- 0516 for the control of sulfur dioxide emissions.

(5) Odorous Emissions. Any incinerator subject to this Rule shall comply with Sec. 3D-0522 for the control of odorous emissions.

(6) Hydrogen Chloride. Any incinerator subject to this Rule shall control emissions of hydrogen chloride such that they do not exceed four pounds per hour unless they are reduced by at least 90 percent by weight or to no more than 50 parts per million by volume corrected to seven percent oxygen (dry basis). Compliance with this Subparagraph shall be determined by averaging emissions over a one-hour period.

(7) Mercury Emissions. Emissions of mercury and mercury compounds from the stack or chimney of any incinerator subject to this Rule shall not exceed 0.032 pounds per hour. Compliance with this Subparagraph shall be determined by averaging emissions over a one-hour period.

(8) Toxic Emissions. The owner or operator of any incinerator subject to this Rule shall demonstrate compliance with Section 3D-1100 according to Section 3Q-0700.

(9) Ambient Standards.

(A) In addition to the ambient air quality standards in Section 3D-0400, the following ambient air quality standards, which are an annual average, in milligrams per cubic meter at 77°F (25°C) and 29.92 inches (760 mm) of mercury pressure, and which are increments above background concentrations, apply aggregately to all incinerators at a facility subject to this Rule:

(i)	arsenic and its compounds	2.1×10^{-6}
(ii)	beryllium and its compounds	4.1×10^{-6}
(iii)	cadmium and its compounds	5.5×10^{-6}
(iv)	chromium (VI) and its compounds	8.3×10^{-8}

(B) The owner or operator of a facility with incinerators subject to this Rule shall demonstrate compliance with the ambient standards in Subparts (i) through (iv)

of Part (A) of this Subparagraph by following the procedures set out in Sec. 3D-1106. Modeling demonstrations shall comply with the requirements of Sec. 3D-0533.

(C) The emission rates computed or used under Part (B) of this Subparagraph that demonstrate compliance with the ambient standards under Part (A) of this Subparagraph shall be specified as a permit condition for the facility with incinerators subject to this Rule as their allowable emission limits unless Sec. 3D- 0524, 1110 or 1111 requires more restrictive rates.

(c) Operational Standards.

(1) The operational standards in this Rule do not apply to any incinerator subject to this Rule when applicable operational standards in Sec. 3D-0524, 1110 or 1111 apply.

(2) Crematory Incinerators. Gases generated by the combustion shall be subjected to a minimum temperature of 1600°F for a period of not less than one second.

(3) Other Incinerators. All incinerators not subject to any other rule in this Section shall meet the following requirement: Gases generated by the combustion shall be subjected to a minimum temperature of 1800°F for a period of not less than one second. The temperature of 1800°F shall be maintained at least 55 minutes out of each 60-minute period, but at no time shall the temperature go below 1600°F.

(4) Except during start-up where the procedure has been approved according to Sec. 3D-0535 (g), waste material shall not be loaded into any incinerator subject to this Rule when the temperature is below the minimum required temperature. Start-up procedures may be determined on a case-by-case basis according to Sec. 3D-0535 (g). Any incinerator subject to this Rule shall have automatic auxiliary burners that are capable of maintaining the required minimum temperature in the secondary chamber excluding the heat content of the wastes.

(d) Test Methods and Procedures.

(1) The test methods and procedures described in Section 3D-2600 and in 40 CFR Part 60 Appendix A and 40 CFR Part 61 Appendix B shall be used to determine compliance with emission rates. Method 29 of 40 CFR Part 60 shall be used to determine emission rates for metals. However, Method 29 shall be used to sample for chromium (VI), and SW 846 Method 0060 shall be used for the analysis.

(2) The Director shall require the owner or operator to test his incinerator to demonstrate compliance with the emission standards listed in Paragraph (b) of this Rule if necessary to determine compliance with the emission standards of Paragraph (b) of this Rule.

(e) Monitoring, Recordkeeping, and Reporting.

(1) The owner or operator of an incinerator subject to the requirements of this Rule shall comply with the monitoring, recordkeeping, and reporting requirements in Section 3D-0600.

(2) The owner or operator of an incinerator, except an incinerator meeting the requirements of Sec. 3D-1201 (b)(4)(A) through (D) of this Section, shall maintain

and operate a continuous temperature monitoring and recording device for the primary chamber and, where there is a secondary chamber, for the secondary chamber. The Director shall require a temperature monitoring device for incinerators meeting the requirements of Sec. 3D-1201 (b)(4)(A) through (D) of this Section if the incinerator is in violation of the requirements of Sec. 3D-1201 (b)(4)(D) of this Section. The owner or operator of an incinerator that has installed air pollution abatement equipment to reduce emissions of hydrogen chloride shall install, operate, and maintain continuous monitoring equipment to measure pH for wet scrubber systems and rate of alkaline injection for dry scrubber systems. The Director shall require the owner or operator of an incinerator with a permitted charge rate of 750 pounds per hour or more to install, operate, and maintain continuous monitors for oxygen or for carbon monoxide or both as necessary to determine proper operation of the incinerator. The Director shall require the owner or operator of an incinerator with a permitted charge rate of less than 750 pounds per hour to install, operate, and maintain monitors for oxygen or for carbon monoxide or both if necessary to determine proper operation of the incinerator.

(f) Excess Emissions and Start-up and Shut-down. Any incinerator subject to this Rule shall comply with Sec. 3D-0535, Excess Emissions Reporting and Malfunctions, of this Subchapter.

Sec. 3D-1209. Repealed

Sec. 3D-1210. Repealed

Sec. 3D-1211. Repealed

Sec. 3D-1212. Repealed

FORSYTH COUNTY, NC - AIR QUALITY CONTROL

SECTION 3D-1300. OXYGENATED GASOLINE STANDARD

(NCDAQ RETAINED JURISDICTION OVER OXYGENATED GASOLINE STANDARDS)

SECTION 3D-1400. NITROGEN OXIDES

Sec. 3D-1401. Definitions

(a) For the purpose of this Section, the definitions at N.C.G.S 143-212 and 143-213, and Sec. 3D-0101 shall apply, and in addition the following definitions apply. If a term in this Rule is also defined at Sec. 3D-0101, then the definition in this Rule controls.

(1) "Acid rain program" means the federal program for the reduction of acid rain including 40 CFR Parts 72, 75, 76, and 77.

(2) "Actual emissions" means for Sec. 3D-1416 through 1422, emissions of nitrogen oxides as measured and calculated according to 40 CFR Part 75, Subpart H.

(3) "Actual heat input" means for Sec. 3D-1416 through 1422, heat input as measured and calculated according to 40 CFR Part 75, Subpart H.

(4) "Averaging set of sources" means all the stationary sources included in an emissions averaging plan according to Sec. 3D-1410.

(5) "Averaging source" means a stationary source that is included in an emissions averaging plan in accordance to Sec. 3D-1410.

(6) "Boiler" means an enclosed fossil or other fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.

(7) "Combined cycle system" means a system consisting of one or more combustion turbines, heat recovery steam generators, and steam turbines configured to improve overall efficiency of electricity generation or steam production.

(8) "Combustion turbine" means an enclosed fossil or other fuel-fired device that is comprised of a compressor, a combustor, and a turbine, and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine.

(9) "Diesel engine" means a compression ignited two- or four-stroke engine in which liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition.

(10) "Dual fuel engine" means a compression ignited stationary internal combustion engine that is burning liquid fuel and gaseous fuel simultaneously.

(11) "Emergency generator" means a stationary internal combustion engine used to generate electricity only during:

(A) the loss of primary power at the facility that is beyond the control of the owner or operator of the facility or

(B) maintenance when maintenance is being performed on the power supply to equipment that is essential in protecting the environment or to such equipment itself.

An emergency generator may be operated periodically to ensure that it will operate.

(12) "Emergency use internal combustion engines" means stationary internal combustion engines used to drive pumps, aerators, and other equipment only during:

(A) the loss of primary power at the facility that is beyond the control of the owner or operator of the facility or

(B) during maintenance when maintenance is being performed on the power supply to equipment that is essential in protecting the environment or to such equipment itself.

An emergency use internal combustion engine may be operated periodically to ensure that it will operate.

(13) "Excess emissions" means an emission rate that exceeds the applicable limitation or standard; for the purposes of this definition, nitrogen oxides emitted by a source covered under Sec. 3D-1416, 1417 or 1418 during the ozone season above its allocation, as may be adjusted under Sec. 3D-1419, are not considered excess emissions.

(14) "Fossil fuel fired" means

(A) for sources that began operation before January 1, 1996, where fossil fuel actually combusted either alone or in combination with any other fuel, comprises more than 50 percent of the annual heat input on a Btu basis during 1995, or, if a source had no heat input in 1995, during the last year of operation of the unit before 1995;

(B) for sources that began operation on or after January 1, 1996 and before January 1, 1997, where fossil fuel actually combusted either alone or in combination with any other fuel, comprises more than 50 percent of the annual heat input on a Btu basis during 1996; or

(C) For sources that began operation on or after January 1, 1997:

(i) where fossil fuel actually combusted either alone or in combination with any other fuel, comprises more than 50 percent of the annual heat input on a Btu basis during any year; or

(ii) where fossil fuel combusted either alone or in combination with any other fuel, is projected to comprise more than 50 percent of the annual heat input on a Btu basis during any year, provided that the unit shall be "fossil fuel-fired" as of the date, during such year, on which the source begins combusting fossil fuel.

(15) "Indirect-fired process heater" means an enclosed device using controlled flame where the device's primary purpose is to transfer heat by indirect heat exchange to a process fluid, a process material that is not a fluid, or a heat transfer material, instead of steam, for use in a process.

(16) "Lean-burn internal combustion engine" means a spark ignition internal combustion engine originally designed and manufactured to operate with an exhaust oxygen concentration greater than one percent.

(17) "NO_x" means nitrogen oxides.

(18) "Ozone season" means the period beginning May 31 and ending September 30 for 2004 and beginning May 1 and ending September 30 for all other years.

(19) "Potential emissions" means the quantity of NO_x that would be emitted at the maximum capacity of a stationary source to emit NO_x under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit NO_x shall be treated as a part of its design if the limitation is federally enforceable. Such physical or operational limitations include air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed.

(20) "Projected seasonal energy input" means the maximum design heat input per hour times 3300 hours.

(21) "Projected seasonal energy output" means the maximum design energy output per hour times 3300 hours.

(22) "Reasonable assurance" means a demonstration to the Director that a method, procedure, or technique is possible and practical for a source or facility under the expected operating conditions.

(23) "Reasonably Available Control Technology" or "RACT" means the lowest emission limitation for NO_x that a particular source can meet by the application of control technology that is reasonably available considering technological and economic feasibility.

(24) "Reasonable effort" means the proper installation of technology designed to meet the requirements of Sec. 3D-1407, 1408 or 1409 and the utilization this technology, according to the manufacturer's recommendations or other similar guidance for not less than six months, in an effort to meet the applicable limitation for a source.

(25) "Rich-burn internal combustion engine" means a spark ignition internal combustion engine originally designed and manufactured to operate with an exhaust oxygen concentration less than or equal to one percent.

(26) "Seasonal energy input" means the total energy input of a combustion source during the period beginning May 1 and ending September 30.

(27) "Seasonal energy output" means the total energy output of a combustion source during the period beginning May 1 and ending September 30.

(28) "Shutdown" means the cessation of operation of a source or its emission control equipment.

(29) "Source" means a stationary boiler, combustion turbine, combined cycle system, reciprocating internal combustion engine, indirect-fired process heater, or a stationary article, machine, process equipment, or other contrivance, or combination thereof, from which nitrogen oxides emanate or are emitted.

(30) "Startup" means the commencement of operation of any source that has shutdown or ceased operation for a period sufficient to cause temperature, pressure, process, chemical, or pollution control device imbalance that would result in excess emissions.

(31) "Stationary internal combustion engine" means a reciprocating internal combustion engine that is not self propelled; however, it may be mounted on a vehicle for portability.

(b) Whenever reference is made to the Code of Federal Regulations in this Section, the definitions in the Code of Federal Regulations shall apply unless specifically stated otherwise in a particular rule. (8-14-95, 7-22-02)

Sec. 3D-1402. Applicability

(a) The rules in this Section do not apply except as specifically set out in this Rule. Section 3D-2400 applies rather than the nitrogen oxide (NOx) state implementation plan (SIP) call (40 CFR 51.121) provisions of Sec. 3D-1402 (c) and (h), 1403 (a) and (d) through (e), 1404 (a), (b), and (d) through (j), 1409 (c), (d) and (h), and 1416 through 1423.

(b) The requirements of this Section apply to all sources May 1 through September 30 of each year.

(c) Sec. 3D-1409 (c) and 1416 through 1423 apply in Forsyth County.

(d) Reserved.

(e) If a violation of the ambient air quality standard for ozone is measured according to 40 CFR 50.9 in Forsyth County the NCDAQ Director shall initiate analysis to determine the control measures needed to attain and maintain the ambient air quality standard for ozone. By the following May 1, the Director shall implement the specific stationary source control measures contained in this Section that are required as part of the control strategy necessary to bring the area into compliance and to maintain compliance with the ambient air quality standard for ozone. The NCDAQ Director shall implement the rules in this Section identified as necessary by the analysis by notice in the North Carolina Register. The notice shall identify the rules that are to be implemented and shall identify whether the rules implemented are to apply in Forsyth County. At least one week before the scheduled publication date of the North Carolina Register containing the NCDAQ Director's notice implementing rules in this Section, the Director shall send written notification to all permitted facilities within the county in which the rules are being implemented that are or may be subject to the requirements of this Section informing them that they are or may be subject to the requirements of this Section. Compliance shall be according to Sec. 3D-1403.

(f) Reserved.

(g) Reserved.

(h) Regardless of any other statement of applicability of this Section, this Section does not apply to any:

(1) source not required to obtain an air permit under Sec. 3Q-0102 or is an insignificant activity as defined at Sec. 3Q-0103 (20);

(2) incinerator or thermal or catalytic oxidizer used primarily for the control of air pollution;

(3) emergency generator;

(4) emergency use internal combustion engine;

(5) stationary internal combustion engine less than 2400 brake horsepower that operates no more than the following hours between May 1 and September 30:

(A) for diesel engines:

$$t = \frac{833{,}333}{}$$

$$\frac{}{ES}$$

(B) for natural gas-fired engines:

$$t = \frac{700,280}{ES}$$

where *t* equals time in hours and ES equals engine size in horsepower. (8-14-95; 11-13-95, 11-11-96, 7-28-97, 7-22-02)

Sec. 3D-1403. Compliance schedules

(a) Applicability. This Rule applies to sources covered by Paragraph (d), (e), (f), or (g) of Sec. 3D-1402.

(b) Maintenance areas. The owner or operator of a source subject to this Rule because of the applicability of Paragraphs (e) or (f) of Sec. 3D-1402, shall adhere to the following increments of progress and schedules:

(1) If compliance with this Section is to be achieved through a demonstration to certify compliance without source modification:

(A) the owner or operator shall notify the Director in writing within six months after the NCDAQ Director's notice in the North Carolina Register that the source is in compliance with the applicable limitation or standard;

(B) the owner or operator shall perform any required testing, according to Sec. 3D-1415, within 12 months after the NCDAQ Director's notice in the North Carolina Register to demonstrate compliance with the applicable and

(C) the owner or operator shall implement any required recordkeeping and reporting requirements, according to Sec. 3D-1404, within 12 months after the NCDAQ Director's notice in the North Carolina Register to demonstrate compliance with the applicable limitation. according to Sec. 3D-1404.

(2) If compliance with this Section is to be achieved through the installation of combustion modification technology or other source modification:

(A) the owner or operator shall submit a permit application and a compliance schedule within six months after the NCDAQ Director's notice in the North Carolina Register.

(B) the compliance schedule shall contain the following increments of progress:

(i) a date by which contracts for installation of the modification shall be awarded or orders shall be issued for purchase of component parts;

(ii) a date by which installation of the modification shall begin;

(iii) a date by which installation of the modification shall be completed; and

(iv) if the source is subject to a limitation, a date by which compliance testing shall be completed.

(C) final compliance shall be achieved within three years after the NCDAQ Director's notice in the North Carolina Register unless the owner or operator of the source petitions the Director for an alternative limitation according to Sec.

3D-1412. If such a petition is made, final compliance shall be achieved within four years after the NCDAQ Director's notice in the North Carolina Register.

(3) If compliance with this Section is to be achieved through the implementation of an emissions averaging plan as provided for in Sec. 3D-1410:

(A) the owner or operator shall abide by the applicable requirements of Subparagraphs (b)(1) or (b)(2) of this Rule for certification or modification of each source to be included under the averaging plan;

(B) the owner or operator shall submit a plan to implement an emissions averaging plan according to Sec. 3D-1410 within six months after the NCDAQ Director's notice in the North Carolina Register.

(C) final compliance shall be achieved within one year after the NCDAQ Director's notice in the North Carolina Register unless implementation of the emissions averaging plan requires the modification of one or more of the averaging sources. If modification of one or more of the averaging sources is required, final compliance shall be achieved within three years.

(4) If compliance with this Section is to be achieved through the implementation of a seasonal fuel switching program as provided for in Sec. 3D-1411:

(A) the owner or operator shall make all necessary modifications according to Subparagraph (b)(2) of this Rule.

(B) the owner or operator shall include a plan for complying with the requirements of Sec. 3D-1411 with the permit application required under Part (A) of this Subparagraph.

(C) final compliance shall be achieved within three years after the NCDAQ Director's notice in the North Carolina Register.

(c) Reserved.

(d) Sources already in compliance.

(1) Maintenance Areas. Paragraph (b) of this Rule shall not apply to sources that are in compliance with applicable rules of this Section when the NCDAQ Director notices the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone and that have determined and certified compliance to the satisfaction of the Director within six months after the NCDAQ Director notices the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone.

(2) Reserved.

(e) New sources.

(1) Maintenance areas. The owner or operator of any new source of nitrogen oxides not permitted before the date the NCDAQ Director notices in the North Carolina Register according to Paragraphs (e), (f), or (g) of Sec. 3D-1402, shall comply with all applicable rules in this Section upon start-up of the source. The owner or operator of any new source covered under Sec. 3D-1407, 1408, 1409, 1413 or 1418 shall comply with all applicable rules in this Section upon start-up of the source.

(2) Reserved. (8-14-95, 7-28-97, 7-22-02)

Sec. 3D-1404. Recordkeeping: reporting: monitoring:

(a) General requirements. The owner or operator of any source shall comply with the monitoring, recordkeeping and reporting requirements in Section 3D-0600 and shall maintain all records necessary for determining compliance with all applicable limitations and standards of this Section for five years.

(b) Submittal of information to show compliance status. The owner or operator of any source shall maintain and, when requested by the Director, submit any information required by this Section to determine the compliance status of an affected source.

(c) Excess emissions reporting. The owner or operator shall report excess emissions following the procedures under Sec. 3D-0535.

(d) Continuous emissions monitors.

(1) The owner or operator shall install, operate, and maintain a continuous emission monitoring system according to 40 CFR Part 75, Subpart H, with such exceptions as may be allowed under 40 CFR Part 75, Subpart H or 40 CFR Part 96 if the source is covered under Sec. 3D-1418 except internal combustion engines.

(2) The owner or operator of a source that is subject to the requirements of this Section but not covered under Subparagraph (1) of this Paragraph and that uses a continuous emissions monitoring system to measure emissions of nitrogen oxides shall operate and maintain the continuous emission monitoring system according to 40 CFR Part 60, Appendix B, Specification 2, and Appendix F or Part 75, Subpart H. If diluent monitoring is required, 40 CFR Part 60, Appendix B, Specification 3, shall be used. If flow monitoring is required, 40 CFR Part 60, Appendix B, Specification 6, shall be used.

(3) The owner or operator of the following sources is not required to use continuous emission monitors unless the Director determines that a continuous emission monitor is necessary under Sec. 3D-0611 to show compliance with the rules of this Section:

(A) a boiler or indirect-fired process heater covered under Sec. 3D-1407 with a maximum heat input less than or equal to 250 million Btu per hour;

(B) stationary internal combustion engines covered under Sec. 3D-1409 except for engines covered under Sec. 3D-1409 (b) and 1418.

(e) Missing data.

(1) If data from continuous emission monitoring systems required to meet the requirements of 40 CFR Part 75 are not available at a time that the source is operated, the procedures in 40 CFR Part 75 shall be used to supply the missing data.

(2) For continuous emissions monitors not covered under Subparagraph (1) of this Paragraph, data shall be available for at least 95 percent of the emission sources operating hours for the applicable averaging period, where four equally spaced readings constitute a valid hour. If data from continuous emission monitoring systems

are not available for at least 95 percent of the time that the source is operated, the owner or operator of the monitor shall:

(A) use the procedures in 40 CFR 75.33 through 75.37 to supply the missing data: or

(B) document that the combustion source or process equipment and the control device were being properly operated (acceptable operating and maintenance procedures are being used, such as, compliance with permit conditions, operating and maintenance procedures, and preventative maintenance program, and monitoring results and compliance history) when the monitoring measurements were missing.

(f) Quality assurance for continuous emissions monitors.

(1) The owner or operator of a continuous emission monitor required to meet 40 CFR Part 75, Subpart H, shall follow the quality assurance and quality control requirements of 40 CFR Part 75, Subpart H.

(2) For a continuous emissions monitor not covered under Subparagraph (1) of this Paragraph, the owner or operator of the continuous emissions monitor shall follow the quality assurance and quality control requirements of 40 CFR Part 60, Appendix F, if the monitor is required to be operated annually under another rule. If the continuous emissions monitor is being operated only to satisfy the requirements of this Section, then the quality assurance and quality control requirements of 40 CFR Part 60, Appendix F, shall apply except that:

(A) a relative accuracy test audit shall be conducted after January 1 and before May 1 of each year;

(B) one of the following shall be conducted at least once between May 1 and September 30 of each year:

(i) a linearity test, according to 40 CFR Part 75, Appendix A, Section 3.2, 6.2, and 7.1;

(ii) a relative accuracy audit, according to 40 CFR Part 60, Appendix F, Section 5 and 6; or

(iii) a cylinder gas audit according to 40 CFR Part 60, Appendix F, Section 5 and 6; and

(C) a daily calibration drift test shall be conducted according to 40 CFR Part 60, Appendix F, Section 4.0.

(g) Averaging time for continuous emissions monitors. When compliance with a limitation established for a source subject to the requirements of this Section is determined using a continuous emissions monitoring system, a 24-hour block average as described under Sec. 3D-0606 shall be recorded for each day beginning May 1 through September 30 unless a specific rule requires a different averaging time or procedure. A 24-hour block average described in Sec. 3D-0606 shall be used when a continuous emissions monitoring system is used to determine compliance with a short-term pounds-per-million-Btu standard in Sec. 3D-1418.

(h) Heat input. Heat input shall be determined:

(1) for sources required to use a monitoring system meeting the requirements of 40 CFR Part 75, using the procedures in 40 CFR Part 75; or

(2) for sources not required to use a monitoring system meeting the requirements of 40 CFR Part 75, using:

(A) 40 CFR Part 75,

(B) a method in Sec. 3D-0501, or

(C) the best available heat input data if approved by the Director (the Director shall grant approval if he finds that the heat input data is the best available).

(i) Source testing. When compliance with a limitation established for a source subject to the requirements of this Section is determined using source testing, the source testing shall follow the procedures of Sec. 3D-1415.

(j) Alternative monitoring and reporting procedures. The owner or operator of a source covered under this Rule may request alternative monitoring or reporting procedures under Sec. 3D-0612, Alternative Monitoring and Reporting Procedures. (8-14-95, 5-24-99, 7-22-02, 11-22-04, 5-8-06)

Sec. 3D-1405. Circumvention

(a) An owner or operator subject to this Section shall not build, erect install or use any article, machine, equipment, process, or method of which conceals an emission which would otherwise constitute a violation of an applicable rule.

(b) Paragraph (a) of this Rule includes the use of gaseous diluent to achieve compliance and the piecemeal carrying out of an operation to avoid coverage by a rule that applies only to operations larger than a specified size. (8-14-95, 7-22-02)

Sec. 3D-1406. Repealed

(8-14-95, 7-22-02)

Sec. 3D-1407. Boilers and indirect-fired process heaters

(a) This Rule applies geographically according to Sec. 3D-1402.

(b) The owner or operator of a boiler or indirect-fired process heater with a maximum heat input rate of less than or equal to 50 million Btu per hour shall comply with the annual tune-up requirements of Sec. 3D-1414. The owner or operator of a boiler or indirect-fired process heater subject to the requirements of this Paragraph shall maintain records of all tune-ups performed for each source according to Sec. 3D-1404.

(c) The owner or operator of a fossil fuel-fired boiler with a maximum heat input rate less than or equal to 250 million Btu per hour but greater than 50 million Btu per hour, a boiler with a maximum heat input greater than 50 million Btu per hour that is not a fossil fuel-fired boiler, or an indirect-fired process heater with a maximum heat input greater than 50 million Btu per hour shall comply by:

(1) installation of, if necessary, combustion modification technology or other NO_x control technology and maintenance, including annual tune-ups and recordkeeping; and

(2) demonstration through source testing or continuous emission monitoring that the source complies with the following applicable limitation:

MAXIMUM ALLOWABLE NO_X EMISSION RATES FOR BOILERS AND INDIRECT PROCESS HEATERS
(POUNDS PER MILLION BTU)

	Firing Method		
Fuel/Boiler Type	Tangential	Wall	Stoker or Other
Coal (Wet Bottom)	1.0	1.0	N/A
Coal (Dry Bottom)	0.45	0.50	0.40
Wood or Refuse	0.20	0.30	0.20
Oil	0.30	0.30	0.30
Gas	0.20	0.20	0.20

(d) If the emissions are greater than the applicable limitation in Paragraph (c) of this Rule after reasonable effort as defined in Sec. 3D-1401, or if the requirements of this Rule are not RACT, the owner or operator may petition the Director for an alternative limitation or standard in accordance with Sec. 3D-1412.

(e) Compliance with the limitation established for a boiler or indirect-fired process heater under this Rule shall be determined:

(1) using a continuous emission monitoring system if the boiler or indirect-fired process heater is required to use a continuous emissions monitoring system under Sec. 3D-0524 or 40 CFR Part 60 to measure emissions of nitrogen oxides; or

(2) using annual source testing according to Sec. 3D-1415 for boilers or indirect-fired process heaters with a maximum heat input rate less than or equal to 250 million Btu per hour but greater than 50 million BTU per hour with the exception allowed under Paragraph (f) of this Rule.

(f) If a source covered under this rule can burn more than one fuel, the owner or operator of the source may choose not to burn one or more of these fuels during the ozone season. If the owner or operator chooses not to burn a particular fuel, the sources testing required under Subparagraph (e)(2) this Rule shall not be required for that fuel.

(g) If two consecutive annual source tests show compliance, the Director may reduce the frequency of testing up to once every five years. In years that a source test is not done, the boiler or indirect-fired process heater shall comply with the annual tune-up requirements of Sec. 3D-1414. If after the Director reduces the frequency of testing, a source test shows that the emission limit under this Rule is exceeded, the Director shall require the boiler or indirect-fired process heater to be tested annually until two consecutive annual tests show compliance. Then the Director may again reduce the frequency of testing. (8-14-95, 7-22-02)

Sec. 3D-1408. Stationary combustion turbines

(a) This Rule applies geographically according to Sec. 3D-1402.

(b) Unless the owner or operator chooses the option of emission averaging under Sec. 3D-1410, the owner or operator of a stationary combustion turbine with a heat input rate greater than 100 million Btu per hour but less than or equal to 250 million Btu per hour shall comply with the following limitations:

(1) Emissions of NO_x shall not exceed 75 ppm by volume corrected to 15 percent oxygen for gas-fired turbines, or

(2) Emissions of NO_x shall not exceed 95 ppm by volume corrected to 15 percent oxygen for oil-fired turbines.

If necessary, the owner or operator shall install combustion modification technology or other NO_x control technology to comply with the applicable limitation set forth in this Paragraph.

(c) If the emissions are greater than the applicable limitation in Paragraph (b) of this Rule after reasonable effort as defined in Sec. 3D-1401, or if the requirements of this Rule are not RACT for the particular stationary combustion turbine, the owner or operator may petition the Director for an alternative limitation or standard according to Sec. 3D-1412.

(d) Compliance with the limitation established for a stationary combustion turbine under this Rule shall be determined:

(1) using a continuous emissions monitoring system, or

(2) using annual source testing according to Sec. 3D-1415.

(e) If a source covered under this rule can burn more than one fuel, the owner or operator of the source may choose not to burn one or more of these fuels during the ozone season. If the owner or operator chooses not to burn a particular fuel, the sources testing required under this Rule is not required for that fuel. (8-14-95, 7-22-02)

Sec. 3D-1409. Stationary internal combustion engines

(a) This Rule applies geographically according to Sec. 3D-1402.

(b) The owner or operator of a stationary internal combustion engine having a rated capacity of 650 horsepower or more that is not covered under Paragraph (c) of this Rule or Sec. 3D-1418 shall not allow emissions of NO_x from the stationary internal combustion engine to exceed the following limitations:

MAXIMUM ALLOWABLE NO_X EMISSION RATES FOR
STATIONARY INTERNAL COMBUSTION ENGINES
(GRAMS PER HORSEPOWER HOUR)

Engine Type	Fuel Type	Limitation
Rich-burn	Gaseous	2.5
Lean-burn	Gaseous	2.5
Compression Ignition	Liquid	8.0

(c) Reserved.

(d) If the emissions from that stationary internal combustion engine are greater than the applicable limitation in Paragraph (b) of this Rule after reasonable effort as defined in Sec. 3D-1401, or if the requirements of this Rule are not RACT for the particular stationary internal combustion engine, the owner or operator may petition the Director for an alternative limitation or standard according to Sec. 3D-1412.

(e) Reserved.

(f) If a stationary internal combustion engine is permitted to operate more than 475 hours during the ozone season, compliance with the limitation established for a stationary internal combustion engine under Paragraph (b) of this Rule shall be determined using annual source testing according to Sec. 3D-1415. If a source covered under this rule can burn more than one fuel, then the owner or operator of the source may choose not to burn one or more of these fuels during the ozone season. If the owner or operator chooses not to burn a particular fuel, the source testing required under this Rule is not required for that fuel.

(g) If a stationary internal combustion engine is permitted to operate no more than 475 hours during the ozone season, the owner or operator of the stationary internal combustion engine shall show compliance with the limitation under Paragraph (b) of this Rule with source testing during the first ozone season of operation according to Sec. 3D-1415. Each year after that, the owner or operator of the stationary internal combustion engine shall comply with the annual tune-up requirements of Sec. 3D-1414.

(h) Reserved. (8-14-95, 7-22-02)

Sec. 3D-1410. Emissions averaging

(a) This Rule shall not apply to sources covered under Sec. 3D-1418. Sources that have obtained an alternative limitation as provided by Sec. 3D-1412 or that apply seasonal fuel switching as provided by Sec. 3D-1411 are not eligible to participate in an emissions averaging plan under this Rule.

(b) With the exceptions in Paragraph (a) of this Rule, the owner or operator of a facility with two or more sources with comparable plume rise and subject to the requirements of this Section for all such sources as determined by Sec. 3D-1402 may elect to apply an emissions averaging plan according to Paragraph (c) of this Rule. An emission averaging plan may be used if the total NO_x emissions from the

averaged set of sources based on the total heat input are equal to or less than the NO_x emissions that would have occurred if each source complied with the applicable limitation.

(c) To request approval of an emissions averaging plan to comply with the requirements of this Section, the owner or operator of a facility shall submit a written request to the Director including the following information:

(1) the name and location of the facility;
(2) information identifying each source to be included under the averaging plan;
(3) the maximum heat input rate for each source;
(4) the fuel or fuels combusted in each source;
(5) the maximum allowable NO_x emission rate proposed for each averaging source;
(6) a demonstration that the nitrogen oxide emissions of the sources being averaged when operated together at the maximum daily heat input rate, will be less than or equal to the total NO_x emissions if each source complied with the applicable limitation of this Section individually;
(7) an operational plan to provide reasonable assurance that the sources being averaged will satisfy Subparagraph (5) of this Paragraph when the combined maximum daily heat input rate is less than the permitted maximum heat input rate; and
(8) the method to be used to determine the actual NO_x emissions from each source. (8-14-95, 7-22-02)

Sec. 3D-1411. Seasonal fuel switching

(a) This Rule shall not apply to sources covered under Sec. 3D-1418.

(b) The owner or operator of a coal-fired or oil-fired boiler subject to the requirements of Sec. 3D-1407 may elect to comply by applying seasonal combustion of natural gas according to Paragraph (c) of this Rule. This option is not available to a boiler that used natural gas as its primary fuel in or since 1990. Compliance with this Section according to this Rule does not remove or reduce any applicable requirement of the Acid Rain Program.

(c) The owner or operator electing to comply with the requirements of this Section through the seasonal combustion of natural gas shall establish a NO_x emission limit beginning October 1 and ending April 30 that will result in annual NO_x emissions of less than or equal to the NO_x that would have been emitted if the source complied with the applicable limitation for the combustion of coal for the entire calendar year. Compliance with this Section according to this Rule does not remove or reduce any applicable requirement of the Acid Rain Program.

(d) To comply with the requirements of this Section through the seasonal combustion of natural gas, the owner or operator shall submit to the Director the following information:

(1) the name and location of the facility;
(2) information identifying the source to use seasonal combustion of natural gas for compliance;
(3) the maximum heat input rate for each source;

(4) a demonstration that the source will comply with the applicable limitation for the combustion of coal during the ozone season;

(5) a demonstration that the source will comply with the NO_x emission limitation established under Paragraph (c) of this Rule beginning October 1 and ending April 30; and

(6) a written statement from the natural gas supplier providing reasonable assurance that the fuel will be available beginning during the ozone season. (8-14-95, 7-22-02)

Sec. 3D-1412. Petition for alternative limitations

(a) If the owner or operator of a source subject to the requirements of Sec. 3D-1407, 1408 or 1409 (b):

(1) cannot achieve compliance with the applicable limitation after reasonable effort to satisfy the requirements of Sec. 3D-1407, 1408 or 1409 or if the requirements of Sec. 3D-1407, 1408 or 1409 are not RACT for the particular source; and

(2) cannot provide reasonable assurance for overall compliance at a facility through the implementation of an emissions averaging plan as provided for in Sec. 3D-1410;

the owner or operator may petition the Director for an alternative limitation according to Paragraph (b) or (c) of this Rule.

(b) To petition the Director for an alternative limitation, the owner or operator of the source shall submit;

(1) the name and location of the facility;

(2) information identifying the source for which an alternative limitation is being requested;

(3) the maximum heat input rate for the source;

(4) the fuel or fuels combusted in the source;

(5) the maximum allowable NO_x emission rate proposed for the source for each fuel;

(6) a demonstration that the source has satisfied the requirements to apply for an alternative limitation under Paragraph (a) of this Rule; and

(7) a demonstration that the proposed alternative limitation is RACT for that source.

(c) If the source is required to comply with best achievable control technology under Sec. 3D-0530, Prevention of Significant Deterioration, of this Subchapter, the owner or operator of the source shall provide the information required under Subparagraphs (b)(1) through (6) of this Rule and documentation that the source is required to use best available control technology and is complying with that requirement. For this source, its best available control technology shall be considered RACT without any further demonstrations.

(d) The Director shall approve the alternative limitation if he finds that:

(1) all the information required by Paragraph (b) of this Rule has been submitted,

(2) the requirements of Paragraph (a) of this Rule have been satisfied, and

(3) the proposed alternative limitation is RACT for that source. (8-14-95, 7-22-02)

Sec. 3D-1413. Sources not otherwise listed in this section

(a) The owner or operator of any source of nitrogen oxides, except boilers, indirect-fired process heaters, stationary combustion turbines, or stationary internal combustion engines, at a facility that has the potential to emit 100 tons per year or more of nitrogen oxides or 560 pounds per calendar day or more from May 1 through September 30 shall apply RACT according to Paragraph (b) of this Rule.

(b) To apply RACT to a source of nitrogen oxides covered under this Rule, the owner or operator of the source shall submit;

(1) the name and location of the facility;
(2) information identifying the source for which RACT is being proposed;
(3) a demonstration that shows the proposed limitation is RACT for the source and
(4) a proposal for demonstrating compliance with the proposed RACT.

(c) The Director shall approve the proposed limitation if he finds that:

(1) the owner or operator of the source has submitted all the information required under Paragraph (b),
(2) the sources is covered under this Rule, and
(3) the proposed limitation is RACT for this source. (8-14-95, 7-22-02)

Sec. 3D-1414. Tune-up requirements

(a) This Rule applies to boilers and indirect-fired process heaters subject to the requirements of Sec. 3D-1407 or stationary internal combustion engines subject to the requirements of Sec.3D-1409 of this Section that are complying with Sec. 3D-1407 or 1409 through an annual tune-up.

(b) When a tune-up to a boiler or indirect-fired process heater is required for compliance with this Section, the owner or operator shall at least annually and according to the manufacturer's recommendations:

(1) inspect each burner and clean or replace any component of the burner as required;
(2) inspect the flame pattern and make any adjustments to the burner, or burners, necessary to optimize the flame pattern to minimize total emissions of NO_x and carbon monoxide;
(3) inspect the combustion control system to ensure proper operation and correct calibration of components that control the air to fuel ratio and adjust components to meet the manufacturer's established operating parameters; and
(4) inspect any other component of the boiler or indirect-fired process heater and make adjustments or repairs as necessary to improve combustion efficiency.

The owner or operator shall perform the tune-up according to a unit specific protocol approved by the Director. The Director shall approve the protocol if it meets the requirements of this Rule.

(c) When a tune-up to a stationary internal combustion engine is required for compliance with this Section, the owner or operator shall at least annually inspect, adjust, and repair or replace according to the manufacturer's recommendation, the following, as equipped:

(1) engine air cleaners, fuel filters, and water traps;
(2) turbo chargers and superchargers;

(3) spark plugs;
(4) valve lash;
(5) ignition systems, including ignition coils and wiring;
(6) aftercooler cores;
(7) any other component of the engine as necessary to improve engine efficiency; and
(8) emission control systems.

The owner or operator shall perform the tune-up according to a unit specific protocol, including inspection, maintenance, and performance procedures as recommended by the manufacturer, approved by the Director. The Director shall approve the protocol if it meets the requirements of this Rule.

(d) The owner or operator shall maintain records of tune-ups performed to comply with this Section according to Sec. 3D-1404. The following information shall be included for each source:

(1) identification of the source;
(2) the date and time the tune-up started and ended;
(3) the person responsible for performing the tune-up;
(4) for boilers and indirect-fired process heaters, the checklist for inspection of the burner, flame pattern, combustion control system, and all other components of the boiler or indirect-fired process heater identified in the protocol, noting any repairs or replacements made;
(5) for stationary internal combustion engines, the checklist for engine air cleaners, turbo chargers, spark plugs, valve lash, ignition coils and wiring, aftercooler cores, and all other components of the engine identified in the protocol, noting any repairs or replacements made.
(6) any stack gas analyses performed after the completion of all adjustments to show that the operating parameters of the boiler, indirect-fired process heater, or stationary internal combustion engine have been optimized with respect to fuel consumption and output; at a minimum these parameters shall be within the range established by the equipment manufacturer to ensure that the emission limitation for nitrogen oxides has not been exceeded; and
(7) any other information requested by the Director to show that the boiler, indirect-fired process heater, or stationary internal combustion engine is being operated and maintained in a manner to minimize the emissions of nitrogen oxides. (8-14-95, 7-22-02)

Sec. 3D-1415. Test methods and procedures

(a) When source testing is used to determine compliance with rules in this Section, the methods and procedures in Section 3D-2600 shall be used.

(b) The owner or operator shall maintain records of tests performed to demonstrate compliance with this Section according to Sec. 3D-1404. (8-14-95, 7-22-02)

Sec. 3D-1416. Reserved

(7-22-02)

Sec. 3D-1417. Reserved

(7-22-02, 11-22-04)

Sec. 3D-1418. New electric generating units, large boilers, and large i/c engines

(a) Electric generating units. Emissions of nitrogen oxides from any fossil fuel-fired stationary boiler, combustion turbine, or combined cycle system permitted after October 31, 2000, serving a generator with a nameplate capacity greater than 25 megawatts electrical and selling any amount of electricity shall not exceed:

(1) 0.15 pounds per million Btu for gaseous and solid fuels and 0.18 pounds per million Btu for liquid fuels if it is not covered under Sec. 3D-0530 (prevention of significant deterioration) or 0531 (nonattainment area major new source review) of this Subchapter;

(2) 0.15 pounds per million Btu for gaseous and solid fuels and 0.18 pounds per million Btu for liquid fuels or best available control technology requirements of Sec. 3D-0530, whichever requires the greater degree of reduction, if it is covered under Sec. 3D-0530; or

(3) lowest available emission rate technology requirements of Sec. 3D-0531 if it is covered under Sec. 3D-0531.

(b) Large boilers. Emissions of nitrogen oxides from any fossil fuel-fired stationary boiler, combustion turbine, or combined cycle system having a maximum design heat input greater than 250 million Btu per hour which is permitted after October 31, 2000, and not covered under Paragraph (a) of this Rule, shall not exceed:

(1) 0.17 pounds per million Btu for gaseous and solid fuels and 0.18 pounds per million Btu for liquid fuels if it is not covered under Sec. 3D-0530 (prevention of significant deterioration) or 0531 (nonattainment area major new source review) of this Subchapter;

(2) 0.17 pounds per million Btu for gaseous and solid fuels and 0.18 pounds per million Btu for liquid fuels or best available control technology requirements of Sec. 3D-0530, whichever requires the greater degree of reduction, if it is covered under Sec. 3D-0530; or

(3) lowest available emission rate technology requirements of Sec. 3D-0531 if it is covered under Sec. 3D-0531.

(c) Internal combustion engines. The following reciprocating internal combustion engines permitted after October 31, 2000, shall comply with the applicable requirements in Sec. 3D-1423 if the engine is not covered under Sec. 3D-0530 (prevention of significant deterioration) or 0531 (nonattainment area major source review):

(1) rich burn stationary internal combustion engines rated at equal to or greater than 2,400 brake horsepower,
(2) lean burn stationary internal combustion engines rated at equal to or greater than 2,400 brake horsepower,
(3) diesel stationary internal combustion engines rated at equal to or greater than 3,000 brake horsepower, or
(4) dual fuel stationary internal combustion engines rated at equal to or greater than 4,400 brake horsepower,

If the engine is covered under Sec. 3D-0530, it shall comply with the requirements of Sec. 3D-1423 of this Section or the best available control technology requirements of Sec. 3D-0530, whichever requires the greater degree of reduction. If the engine is covered under Sec. 3D-0531, it shall comply with lowest available emission rate technology requirements of Sec. 3D-0531.

(d) Monitoring. The owner or operator of a source subject to this Rule, except internal combustion engines, shall show compliance using a continuous emission monitor that meets the requirements of Sec. 3D-1404 (d). Internal combustion engines shall comply with the monitoring requirements in Sec. 3D-1423. Monitors shall be installed before the first ozone season in which the source will operate and shall be operated each day during the ozone season that the source operates. (7-22-02, 11-22-04)

Sec. 3D-1419. Reserved.

(7-22-02. 11-22-04)

Sec. 3D-1420. Reserved

(7-22-02)

Sec. 3D-1421. Reserved

(7-22-02)

Sec. 3D-1422. Reserved.

Sec. 3D-1423. Large internal combustion engines

(a) Applicability. This rule applies to the following internal combustion engines permitted after October 30, 2000 that are subject to Sec. 3D-1418 but are not subject to Sec. 3D-0530 (prevention of significant deterioration) or 0531 (nonattainment area major new source review):

(1) rich burn stationary internal combustion engines rated at equal or greater than 2,400 brake horsepower,
(2) lean burn stationary internal combustion engines rated at equal or greater than 2,400 brake horsepower,

(3) diesel stationary internal combustion engines rated at equal or greater than 3,000 brake horsepower, or

(4) dual fuel stationary internal combustion engines rated at equal or greater than 4,400 brake horsepower,

(b) Emission limitation. The owner or operator of a stationary internal combustion engine shall not cause to be emitted into the atmosphere nitrogen oxides in excess of the following applicable limit, expressed as nitrogen dioxide corrected to 15 percent parts per million by volume (ppmv) stack gas oxygen on a dry basis, averaged over a rolling 30-day period, as may be adjusted under Paragraph (c) of this Rule:

MAXIMUM ALLOWABLE EMISSION CONCENTRATION FOR STATIONARY INTERNAL COMBUSTION ENGINES (parts per million)	
Engine Type	Limitation
Rich-burn	110
Lean-burn	125
Diesel	175
Dual fuel	125

(c) Adjustment. Each emission limit expressed in Paragraph (b) of this Rule may be multiplied by X, where X equals the engine efficiency (E) divided by a reference efficiency of 30 percent. Engine efficiency (E) shall be determined using one of the methods specified in Subparagraph (1) or (2) of this Paragraph, whichever provides a higher value. However, engine efficiency (E) shall not be less than 30 percent. An engine with an efficiency lower than 30 percent shall be assigned an efficiency of 30 percent.

(1) $E = \frac{\text{(Energy Output)} * (100)}{\text{Energy Input}}$

where energy input is determined by a fuel measuring device accurate to plus or minus 5 percent and is based on the higher heating value (HHV) of the fuel. Percent efficiency (E) shall be averaged over 15 consecutive minutes and measured at peak load for the applicable engine.

(2) $E = \frac{\text{(Manufacturer's Rated Efficiency [Continuous] at LHV)} * (\text{LHV})}{\text{HHV}}$

where LHV is the lower heating value of the fuel; and HHV is the higher heating value of the fuel.

(d) Compliance determination and monitoring. The owner or operator of an internal combustion engine subject to the requirements of this Rule shall determine compliance using:

(1) a continuous emissions monitoring system (CEMS) which meets the applicable requirements of Appendices B and F of 40 CFR part 60, excluding data obtained

during periods specified in Paragraph (g) of this Rule and Sec. 3D-1404 of this Section; or

(2) an alternate calculated and recordkeeping procedure based on actual emissions testing and correlation with operating parameters. The installation, implementation, and use of this alternate procedure shall be approved by the Director before it may be used. The Director may approve the alternative procedure if he finds that it can show the compliance status of the engine.

(e) Reporting requirements. The owner or operator of a stationary internal combustion engine subject to this Rule shall submit:

(1) a report documenting the engine's total nitrogen oxide emissions beginning May 1 and ending September 30 of each year to the Director and the NCDAQ Director by October 31 of each year, beginning with the year of first ozone season that the engine operates.

(2) an excess emissions and monitoring systems performance report, according to the requirements of 40 CFR 60.7(c) and 60.13, if a continuous emissions monitoring system is used.

(f) Recordkeeping requirements. The owner or operator of a stationary internal combustion engine subject to this Rule shall maintain all records necessary to demonstrate compliance with the Rule for two calendar years at the facility at which the engine is located. The records shall be made available to the Director upon request. The owner or operator shall maintain records of the following information for each day the engine operates:

(1) identification and location of the engine;

(2) calendar date of record;

(3) the number of hours the engine operated during each day, including startups, shutdowns, and malfunctions, and the type and duration of maintenance and repairs;

(4) date and results of each emissions inspection;

(5) a summary of any emissions corrective maintenance taken;

(6) the results of all compliance tests;

(7) if a unit is equipped with a continuous emission monitoring system:

(A) identification of time periods during which nitrogen oxide standards are exceeded, the reason for the excess emissions, and action taken to correct the excess emissions and to prevent similar future excess emissions; and

(B) identification of the time periods for which operating conditions and pollutant data were not obtained including reasons for not obtaining sufficient data and a description of corrective actions taken.

(g) Exemptions. The emission standards of this Rule shall not apply to the following periods of operation:

(1) start-up and shut-down periods and periods of malfunction, not to exceed 36 consecutive hours; and

(2) regularly scheduled maintenance activities. (7-22-02)

FORSYTH COUNTY, NC - AIR QUALITY CONTROL

SECTION 3D-1500. REPEALED

Sec. 3D-1501. - Sec. 3D-1504. Repealed

SECTION 3D-1600. GENERAL CONFORMITY

Sec. 3D-1601. Purpose, scope and applicability

(a) The purpose of this Section is also to assure that a federal action conforms with all plans required of areas designated as nonattainment or maintenance under 40 CFR 81.334 and listed in Paragraph (b) or (c) of this Rule. No Department , agency, or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to these maintenance plans.

(b) This Section applies to the emissions of volatile organic compounds, nitrogen oxides and carbon monoxide in Forsyth County.

(c) Reserved.

(d) This Section applies, in the areas identified in Paragraph (b) or (c) of this Rule for the pollutants identified in Paragraph (b) or (c) of this Rule, to federal actions not covered by Section 3D-2000. (8-14-95, 5-24-99)

Sec. 3D-1602. Definitions

For the purposes of this Section, the definitions contained in 40 CFR 51.852 apply. (8-14-95)

Sec. 3D-1603. General conformity determination

(a) The appropriate federal agency shall make a determination that a federal action conforms with the maintenance plans for the areas identified in Sec. 3D-1601 in accordance with the requirements of this Section before the action is taken with the exceptions specified in 40 CFR 51.850(c). A conformity determination is required for each pollutant where the total of direct and indirect emissions caused by a federal action would equal or exceed 100 tons per year of carbon monoxide, nitrogen oxides, or volatile organic compounds, with the exceptions specified in 40 CFR 51.853(c), (d), or (e). The Office of Environmental Assistance and Protection shall provide technical assistance for the analysis necessary to determine the conformity of the federal action.

(b) Notwithstanding any other requirements of this Section, actions specified by individual federal agencies that have met the requirements of 40 CFR 51.853(g) and (h) are presumed to conform, except as provided in 40 CFR 51.853(j). Where 40 CFR 51.853(j) is applicable, the requirements of 40 CFR 51.853(j) shall apply.

(c) Any federal Department, agency, or instrumentality of the federal government taking an action subject to this Section shall comply with the requirements of 40 CFR 51.854 through 51.859. Any measures that are intended to mitigate air quality impacts shall comply with the requirements of 40 CFR 51.860.

(d) Notwithstanding any other requirement of this Section, when the total direct and indirect emissions of any pollutant from a federal action does not equal or exceed the rates specified in 40 CFR 51.853(b), but represents ten percent or more of the maintenance area's total emissions of that pollutant,

the action is defined as a regionally significant action and the requirements of 40 CFR 51.850 and 51.855 through 51.860 shall apply for the federal action.

(e) Notwithstanding any provision of this Section, a determination that an action is in conformance with the applicable maintenance plan does not exempt the action from any other requirement of the applicable maintenance plan, the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.), or the federal Clean Air Act. (8-14-95)

SECTION 3D-1700. MUNICIPAL SOLID WASTE LANDFILLS

Sec. 3D-1701. Definitions

For the purpose of this Rule the definitions contained in 40 CFR 60.751 shall apply. (9-14-98)

Sec. 3D-1702. Applicability

(a) All existing MSW landfills that meet the following conditions are subject to this Section:

(1) The landfill has accepted waste at any time since November 8, 1987, or has additional permitted capacity available for future waste deposition and has not been documented as being permanently closed; and

(2) The landfill was in operation, or construction, reconstruction, or modification was commenced before May 30, 1991.

(b) Physical or operational changes made to an existing MSW landfill solely to comply with an emission standard under this Section are not considered a modification or reconstruction, and do not subject an existing MSW landfill to the requirements of 40 CFR 60, Subpart WWW or Sec. 3D-0524. (9-14-98)

Sec. 3D-1703. Emission standards

(a) Any MSW landfill subject to this Section and meeting the following two conditions shall meet the gas collection and control requirements of Paragraph (b) of this Rule:

(1) The landfill has a design capacity greater than or equal to 2.75 million tons and 2.5 million cubic meters. The owner or operator of the landfill may calculate the design capacity in either tons or cubic meters for comparison with the exemption values. Any density conversion shall be documented and submitted along with the initial reporting requirements of Sec. 3D-1708 (a); and

(2) The landfill has a non-methane organic compound (NMOC) emission rate of 55 tons per year or more. The NMOC emission rate shall be calculated by following the procedures outlined in 40 CFR 60.754.

(b) Each owner or operator of a MSW landfill meeting the conditions of Paragraph (a) of this Rule shall:

(1) submit to the Director a site-specific design plan for the gas collection and control system that meets the requirements of 40 CFR 60.752(b)(2)(i);

(2) install a gas collection system that meets the requirements of 40 CFR 60.752(b)(2)(ii); and

(3) control the collected emissions of MSW landfill gas through the use of one or more of the following control devices:

(A) An open flare designed and operated in accordance with the parameters established in 40 CFR 60.18;

(B) A control system designed and operated to reduce NMOC by 98 weight percent; or

(C) An enclosed combustor designed and operated to reduce the outlet NMOC concentration to 20 parts per million as hexane by volume, on a dry basis at three percent oxygen, or less.

(c) The gas collection and control system required under Paragraph (b) of this Rule may be capped or removed provided that all the conditions of 40 CFR 60.752(b)(2)(v)(A), (B) and (C) are met. (9-14-98, 7-24-00)

Sec. 3D-1704. Test methods and procedures

The MSW landfill NMOC emission rate shall be calculated by following the procedures in 40 CFR 60.754, as applicable, in order to determine whether the landfill meets the conditions of Sec. 3D-1703 (a)(2). (9-14-98)

Sec. 3D-1705. Operational standards

The owner and operator of a MSW landfill required to install a landfill gas collection and control system to comply with Sec. 3D-1703 (b) shall:

(1) operate the collection system in accordance with 40 CFR 60.753(a);

(2) operate the collection system with negative pressure at each wellhead in accordance with 40 CFR 60.753(b);

(3) operate each interior wellhead in the collection system in accordance with 40 CFR 60.753(c);

(4) operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner and operator shall follow the procedures given in 40 CFR 60.753(d);

(5) operate the collection system such that all collected gases are vented to a control system designed and operated in compliance with Sec. 3D-1703 (b)(3). In the event that the gas collection and control system is inoperable, measures shall be taken as outlined in 40 CFR 60.753(e);

(6) operate the control system at all times when the collected gas is routed to the control system;

(7) take corrective action as specified in 40 CFR 60.755(c) if monitoring demonstrates that the operation standards and requirements of Paragraphs (2), (3), and (4) of this Rule are not met. If the required corrective actions are taken, the emissions monitored shall not be considered a violation of the operational standards of this Rule.

Sec. 3D-1706. Compliance provisions

(a) Compliance with Sec. 3D-1703 (b) shall be determined using the provisions of 40 CFR 60.755(a).

(b) Compliance with Sec 3D-1705 (1) shall be determined using the provisions of 40 CFR 60.755(b).

(c) Compliance with the surface methane operational standards of Sec. 3D-1705 (4) shall be achieved using the procedures of 40 CFR 60.755(c) and (d).

(d) The provisions of this Rule apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed five days for collection systems and shall not exceed one hour for treatment or control devices. (9-14-98)

Sec. 3D-1707. Monitoring provisions

(a) The owner or operator of a MSW landfill who is required to comply with Sec. 3D-1703 (b)(2) for an active gas collection system shall perform the monitoring requirements as outlined in 40 CFR 60.756(a).

(b) The owner or operator of an MSW landfill seeking to comply with the provisions of Sec. 3D-1703 (b)(3)(C) using an enclosed combustor shall perform the monitoring requirements as outlined in 40 CFR 60.756(b).

(c) The owner or operator of an MSW landfill seeking to comply with the provisions of Sec. 3D-1703 (b)(3)(A) using an open flare shall perform the monitoring requirements as outlined in 40 CFR 60.756(c).

(d) The owner or operator of an MSW landfill seeking to comply with the provisions of Sec. 3D-1703 (b)(3) using a device other than an open flare or an enclosed combustor shall comply with the provisions of 40 CFR 60.756(d).

(e) The owner or operator of an MSW landfill seeking to comply with the provisions of Sec. 3D-1703 (b)(3)(B) using an active collection system or seeking to monitor alternative parameters to those required by Sec. 3D-1704 through 1707 shall comply with the provisions of 40 CFR 60.756(e).

(f) The owner or operator of an MSW landfill seeking to comply with the provisions of Sec. 3D-1706 (c) shall do so in accordance with 40 CFR 60.756(f). (9-14-98)

Sec. 3D-1708. Reporting requirements

(a) The owner or operator of a MSW landfill subject to this Rule according to Sec. 3D-1702 shall submit an initial design capacity report to the Director in accordance with the following:

(1) The initial design capacity report shall fulfill the requirements of the notification of the date construction is commenced as required under 40 CFR 60.7(a)(1) and shall be submitted no later than the earliest of the day from the dates given in 40 CFR 60.757(a)(1)(i) through 40 CFR 60.757(a)(1)(iii);

(2) The initial design capacity report shall contain the information given in 40 CFR 60.757(a)(2)(i) and 40 CFR 60.757(a)(2)(ii); and

(3) An amended design capacity report shall be submitted to the Director in accordance with 40 CFR 60.757(a)(3) whenever an increase in the design capacity of the landfill results in the design capacity of the landfill to exceed 2.5 million cubic meters and 2.75 million tons.

(b) The owner or operator of a MSW landfill subject to this Section shall submit a NMOC emission report to the Director initially and annually thereafter, except as provided for in 40 CFR 60.757(b)(1)(ii) or (b)(3). The initial NMOC emission rate report shall be submitted within 90 days of the day waste acceptance commences and may be combined with the initial design capacity report required in Paragraph (a) of this Section. The NMOC emission rate report shall:

(1) contain an annual or five-year estimate of the NMOC emission rate calculated using the formula and procedures provided in 40 CFR 60.754(a) or (b), as applicable; and

(2) include all the data, calculations, sample reports and measurements used to estimate the annual or five-year emissions.

(c) The owner or operator of a MSW landfill subject to Sec. 3D-1703 (b) shall submit a collection and control system design plan to the Director within one year of the first report, required under Paragraph (b) of this Rule, in which the emission rate exceeds 55 tons per year, except as provided for in 40 CFR 60.757(c)(1) and (2).

(d) The owner or operator of a controlled landfill shall submit a closure report to the Director within 30 days of cessation of waste acceptance. If a closure report has been submitted to the Director, no additional waste shall be placed into the landfill without first filing a notification of modification as described under 40 CFR 60.7(a)(4). The Director may request such additional information as may be necessary to verify that permanent closure of the MSW landfill has taken place in accordance with the requirements of 40 CFR 258.60.

(e) The owner or operator of a controlled MSW landfill shall submit an equipment removal report 30 days prior to removal or cessation of operation of the control equipment according to Sec. 3D-1703 (c). The report shall contain the items listed in 40 CFR 60.757(e)(1). The Director may request such additional information as may be reasonably necessary to verify that all the conditions for removal in 40 CFR 60.752(b)(2)(v) have been met.

(f) The owner or operator of a MSW landfill seeking to comply with Sec. 3D-1703 (b)(2) using an active collection system designed in accordance with 40 CFR 60.752(b)(2)(ii) shall submit annual reports of the recorded information in 40 CFR 60.757(f)(1) through (f)(6). The initial annual report shall be submitted within 180 days of installation and start-up of the collection and control system, and shall include the initial performance test report required under 40 CFR 60.8.

(g) The owner or operator of a MSW landfill seeking to comply with Sec. 3D-1703 (b)(3) using an enclosed combustion device or flare shall report the excess as defined in 40 CFR 60.758(c)(1).

(h) The owner or operator of a MSW landfill required to comply with Sec. 3D-1703 (b)(1) shall include the information given in 40 CFR 60.757(g)(1) through (6) with the initial performance test report required under 40 CFR 60.8. (9-14-98, 7-24-00)

Sec. 3D-1709. Recordkeeping requirements

(a) The owner or operator of a MSW landfill subject to this Section and having a maximum design capacity equal to or greater than 2.5 million cubic meters and 2.75 million tons shall keep on-site for at least five years records of the information listed in 40 CFR 60.758(a). Off-site records may be maintained if they are retrievable within four hours. Either paper copy or electronic formats of the records shall be acceptable.

(b) The owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in 40 CFR 60.757(b)(1) through (b)(4) as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of five years. Records of the control device vendor specifications shall be maintained until removal.

(c) Each owner or operator of a MSW landfill subject to this Section shall keep for five years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in Sec. 3D-1707 and records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded. The parameter boundaries considered in excess of those established during the performance test are defined in 40 CFR 60.757(c)(1)(i) and (ii) and are also required to be reported under Sec. 3D-1708 (g).

(d) The owner or operator of a MSW landfill subject to Sec. 3D-1703 (b) shall keep for the life of the collection system an up-to-date, readily accessible plot map showing existing and planned collectors in the system and provide unique identification location labels for each collector. Records of newly installed collectors shall be maintained in accordance with 40 CFR 60.758(d)(1) and documentation of asbestos-containing or nondegradable waste excluded from collection shall be kept in accordance with 40 CFR 60.758(d)(2).

(e) The owner or operator of a MSW landfill subject to Sec. 3D-1703 (b) shall keep for at least five years records of emissions from the collection and control system exceeding the emission standards in accordance with 40 CFR 60.758(e).

(f) The owner or operator of MSW landfill subject to Sec. 3D-1703 (b) shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under 40 CFR 60.756.

(g) The owner or operator of MSW landfill subject to Sec. 3D-1703 (b) who uses a boiler or process heater with a design heat input capacity of 44 megawatts or greater to comply with 40 CFR 60.752(b)(2)(iii) shall keep an up-to-date, readily accessible record of all periods of operation of the boiler or process heater.

(h) The owner or operator of MSW landfill seeking to comply with the provisions of Sec. 3D-1703 (b) by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under 40 CFR 60 .756(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame in absent. (9-14-98, 7-24-00)

Sec. 3D-1710. Compliance schedules

(a) Except as provided for in Paragraph (b) of this Rule, the schedule for compliance with the requirements of this Section shall meet the following deadlines:

(1) Each existing MSW landfill subject to this Section according to Sec. 3D-1702 and exceeding the design capacity limitation of Sec. 3D-1703 (a)(1) shall submit an application for a permit under Section 3Q-0500 by July 1, 1999.

(2) Each existing MSW landfill subject to this Section according to Sec. 3D-1702 and exceeding the design capacity and NMOC emission rate limitations of Sec. 3D-1703 (a)(1) and (2) shall:

(A) submit a site-specific design plan for the gas collection and control system to the Director by July 1, 1999; and

(B) plan, award contracts, and install MSW landfill air emission collection and control system capable of meeting the emission standards established under Sec. 3D-1703 by January 1, 2001. (9-14-98)

(b) For each existing MSW landfill subject to this Section as specified in Sec. 3D-1702 and meeting the design capacity condition of Sec. 3D-1703 (a)(1) whose NMOC emission rate is less than 55 tons per year on July 1, 1998, shall:

(1) submit a site-specific design plan for the gas collection and control system to the Director within 12 months of first exceeding the NMOC emission rate of 55 tons per year; and

(2) plan, award contracts, and install MSW landfill air emission collection and control system capable of meeting the emission standards established under Sec. 3D-1703 within 30 months of the date when the conditions in Sec. 3D-1703 (a)(2) are met. (9-14-98)

FORSYTH COUNTY, NC - AIR QUALITY CONTROL

SECTION 3D-1800. CONTROL OF ODORS

Sec. 3D-1801. Definitions

For the purpose of this Section, the following definitions apply:

(1) "Animal operation" means animal operation as defined in G.S. 143-215.10B.

(2) "Child care center" means child care centers as defined in G.S. 110-86 licensed under Article 7 of Chapter 110 of the General Statutes.

(3) "Construction" means any physical change (including fabrication, erection, installation, replacement, demolition, excavation, or other modification) at any contiguous area under common control.

(4) "Control technology" means economically feasible control devices installed to effectively reduce objectionable odors from animal operations.

(5) "Existing animal operation" means an animal operation that is in operation or commences construction on or before February 28, 1999.

(6) "Historic properties" means historic properties acquired by the State pursuant to G.S. 121-9 or listed in the North Carolina Register of Historic Places pursuant to G.S. 121-4.1.

(7) "Modified animal operation" means an animal operation that commences construction after February 28, 1999, to increase the steady state live weight that can be housed at that animal operation. Modified animal operation does not include renovating existing barns, relocating barns, or replacing existing lagoons or barns if the new barn or lagoon is no closer to the nearest property and if the new barn or lagoon does not increase the steady state live weight that can be housed at that animal operation.

(8) "New animal operation" means an animal operation that commences construction after February 28, 1999.

(9) "Objectionable odor" means any odor present in the ambient air that by itself, or in combination with other odors, is or may be harmful or injurious to human health or welfare, or may unreasonably interfere with the comfortable use and enjoyment of life or property. Odors are harmful or injurious to human health if they tend to lessen human food and water intake, interfere with sleep, upset appetite, produce irritation of the upper respiratory tract, or cause symptoms of nausea, or if their chemical or physical nature is, or may be, detrimental or dangerous to human health.

(10) "Occupied residence" means occupied residence as defined in G.S. 106-802.

(11) "State Parks" means State Parks as defined in G.S. 113-44.9.

(12) "Technologically feasible" means that an odor control device or a proposed solution to an odor problem has previously been demonstrated to accomplish its intended objective, and is generally accepted within the technical community. It is possible for technologically feasible solutions to have demonstrated their suitability on similar, but not identical, sources for which they are proposed to control. (7-24-00)

Sec. 3D-1802. Control of odors from animal operations using liquid animal waste management systems

(a) Purpose. The purpose of this Rule is to control objectionable odors from animal operations beyond the boundaries of animal operations.

(b) Applicability. This Rule shall apply to all animal operations.

(c) Required management practices. All animal operations shall be required to implement applicable management practices for the control of odors as follows:

(1) The carcasses of dead animals shall be disposed of within 24 hours after becoming aware of the death of the animal according to the methods approved by the State Veterinarian for disposal of dead domesticated animals under G. S. 106-403;

(2) Waste from animal wastewater application spray systems shall be applied in such a manner and under such conditions to prevent drift from the irrigation field of the wastewater spray beyond the boundary of the animal operation, except waste from application spray systems may be applied in an emergency to maintain safe lagoon freeboard if the owner or operator notifies the Office and resolves the emergency with the Office as written in Section III.6 of the Swine Waste Operation General Permit;

(3) Animal wastewater application spray system intakes shall be located near the liquid surface of the animal wastewater lagoon;

(4) Ventilation fans shall be maintained according to the manufacturer's specifications; and

(5) Animal feed storage containers located outside of animal containment buildings shall be covered except when necessary to remove or add feed; this Subparagraph does not apply to the storage of silage or hay or to commodity boxes with roofs.

All animal operations shall be in compliance with this Paragraph by June 1, 1999.

(d) Odor management plan for existing animal operations for swine. Animal operations for swine that meet the criteria in the table in this Paragraph shall submit an odor management plan to the Director according to the schedule in the table in this Paragraph. The odor management plan shall describe how odors are currently being controlled and how these odors will be controlled in the future. The odor management plan shall contain the elements described in Sec. 3D-1803 (a). The animal operation shall only be required to submit its odor management plan only once.

100 pounds steady state live weight of swine		Distance in feet to the boundary of the nearest neighboring occupied property with an inhabitable structure, business, school, hospital, church, outdoor recreational facility, national park, State Park, historic property, or child care center	Date by when the odor management plan is to be submitted
at least	but less than		
10,000	20,000	less than or equal to 3,000	January 15, 2002
20,000	40,000	less than or equal to 4,000	July 15, 2001
40,000		less than or equal to 5,000	January 15, 2001

For the purposes of this Rule, the distance shall be measured from the edge of the barn or lagoon, whichever is closer, to the boundary of the neighboring occupied property with an inhabitable structure, business, school, hospital, church, outdoor recreational facility, national park, State Park, historic property, or child care center. All animal operations for swine that are of the size in the table in this Paragraph shall submit by the date specified in this table either an odor management plan or documentation that no neighboring occupied property with an inhabitable structure, business, school, hospital, church, outdoor recreational facility, national park, State Park, historic property, or child care center are within the distances specified in the table as of the date that the submittal is due. After July 15, 2002, the Director may require existing animal operations for swine with a steady state live weight of swine between 1,000 to 10,000 hundredweights to submit an odor management plan if the Director determines that these animal operations may cause or contribute to an objectionable odor. The Director may require an existing animal operation to submit a best management plan under Paragraph (h) of this Rule if the existing animal operation fails to submit an odor management plan by the schedule in this Paragraph of this Rule.

(e) Location of objectionable odor determinations.

(1) For an existing animal operation that does not meet the following siting requirements:

(A) at least 1500 feet from any occupied residence not owned by the owner of the animal operation;

(B) at least 2500 feet from the property boundary of any school, hospital, church, outdoor recreation facility, national park, state park, historic property, or child care center; and

(C) at least 500 feet from the boundary of any other property not owned by the owner of the animal operation;

objectionable odors shall be determined at neighboring occupied property not owned by the owner of the animal operation, businesses, schools, hospitals, churches, outdoor recreation facilities, national parks, State Parks, historic properties, or child care centers that are affected.

(2) For a new animal operation or existing animal operation that meets the siting requirements in Subparagraph (1) of this Paragraph, objectionable odors shall be determined beyond the boundary of the animal operation.

(f) Complaints. The Director shall respond to complaints about objectionable odors from animal operations as follows:

(1) Complaints shall be investigated to the extent practicable.

(2) Complaints may be used to assist in determination of a best management plan failure or a control technology failure.

(3) The Director shall respond to complaints within 30 days.

(4) Complaint response shall at least include a written response of the Director's evaluation of the complaint.

(5) The investigation of a complaint shall be completed as expeditiously as possible considering the meteorology, activities at the animal operation, and other conditions occurring at the time of the complaint.

(g) Determination of the existence of an objectionable odor. In deciding if an animal operation is causing or contributing to an objectionable odor, the Director may consider one or more of the following:

(1) the nature, intensity, frequency, pervasiveness, and duration of the odors from the animal operation;

(2) complaints received about objectionable odors from the animal operation;

(3) emissions from the animal operation of known odor causing compounds, such as ammonia, total volatile organics, hydrogen sulfide or other sulfur compounds at levels that could cause or contribute to an objectionable odor;

(4) any epidemiological studies associating health problems with odors from the animal operation or documented health problems associated with odors from the animal operation provided by the State Health Director; or

(5) any other evidence, including records maintained by neighbors, that show that the animal operation is causing or contributing to an objectionable odor.

(h) Requirement for a best management plan for controlling odors from existing animal operations. If the Director finds that an existing animal operation is causing or contributing to an objectionable odor, the owner or operator of the animal operation shall:

(1) submit to the Director as soon as practical, but not to exceed 90 days after receipt of written notification from the Director that the animal operation is causing or contributing to an objectionable odor, a best management plan for odor control as described in Sec. 3D-1803; and

(2) be in compliance with the terms of the plan within 30 days after the Director approves the best management plan (compliance with an approved compliance schedule in the best management plan is deemed to be in compliance with the plan).

(i) Requirement for amendment to best management plan. No later than 60 days from completion of a compliance schedule in an approved best management plan, or if the best management

plan contains no compliance schedule, no later than 60 days from the implementation date of the best management plan, the Director shall determine whether the plan has been properly implemented.
If the Director determines that a plan submitted under Paragraph (h) of this Rule does not control objectionable odors from the animal operation, the Director shall require the owner or operator of the animal operation to amend the plan to incorporate additional or alternative measures to control objectionable odors from the animal operation. The owner or operator shall:

(1) submit a revised best management plan to the Director as soon as practical but not later than 60 days after receipt of written notification from the Director that the plan is inadequate; and

(2) be in compliance with the revised plan within 30 days after the Director approves the revisions to the best management plan (compliance with an approved compliance schedule in the best management plan is deemed to be in compliance with the plan).

(j) Plan failure. Any of the following conditions shall constitute failure of a best management plan:

(1) failing to submit the initial best management plan required under Paragraph (h) of this Rule within 90 days of receipt of written notification from the Director that the animal operation is causing or contributing to an objectionable odor;

(2) failing to submit a revised best management plan required under Paragraph (i) of this Rule within 60 days of receipt of written notification from the Director that the animal operation is causing or contributing to an objectionable odor;

(3) failing to correct all deficiencies in a submitted best management plan under Sec. 3D-1803 within 30 days of receipt of written notification from the Director to correct these deficiencies;

(4) failing to implement the best management plan after it has been approved; or

(5) finding by the Director, using the criteria under Paragraph (g) of this Rule, that, after the best management plan has been implemented and revised no more than one time (voluntary revisions and revisions made pursuant to Sec. 3D-1803 (c) shall not be counted as revisions under this Subparagraph), the best management plan does not adequately control objectionable odors from the animal operation and will not adequately control objectionable odors even with further amendments.

(k) Requirements for control technology. If a plan failure occurs, the Director shall require the owner or operator of the animal operation to install control technology to control odor from the animal operation. The owner or operator shall submit within 90 days from receipt of written notification from the Director of a plan failure, a permit application for control technology and an installation schedule. If the owner or operator demonstrates to the Director that a permit application cannot be submitted within 90 days, the Director may extend the time for submittal up to an additional 90 days. Control technology shall be determined according to Subparagraph (1) of this Paragraph. The installation schedule shall contain the increments of progress described in Subparagraph (2) of this Paragraph. The owner or operator may at any time request adjustments in the installation schedule and shall in his request explain why the schedule cannot be met. If the Director finds that the reason for not meeting the schedule is valid, the Director shall revise the installation schedule as requested; however, the Director shall not

extend the final compliance date beyond 24 months from the date that the permit was first issued for the control technology. The owner or operator shall certify to the Director within five days after the deadline for each increment of progress described in Subparagraph (2) of this Paragraph whether the required increment of progress has been met.

(1) Control technology. The owner or operator of an animal operation shall identify control technologies that are technologically feasible for his animal operation and shall select the control technology or control technologies that results in the greatest reduction of odors considering human health, energy, environmental, and economic impacts and other costs. The owner or operator shall explain the reasons for selecting the control technology or control technologies. If the Director finds that the selected control technology or control technologies will effectively control odors following the procedures in Section 3Q-0300 or 0500, he shall approve the installation of the control technology or control technologies for this animal operation. The owner or operator of the animal operation shall comply with all terms and conditions in the permit.

(2) Installation schedule. The installation schedule for control technology shall contain the following increments of progress:

(A) a date by which contracts for odor control technology shall be awarded or orders shall be issued for purchase of component parts;

(B) a date by which on-site construction or installation of the odor control technology shall begin;

(C) a date by which on-site construction or installation of the odor control technology shall be completed; and

(D) a date by which final compliance shall be achieved.

Control technology shall be in place and operating as soon as practical but not to exceed 12 months from the date that the permit is issued for control technology.

(l) New or modified animal operations. This Paragraph does not apply to activities exempted from the moratorium on construction or expansion of swine farms in S.L. 1997, c. 458, s. 1.1 provided that the owner or operator demonstrates to the Director that the activity will not result in an objectionable odor.

(1) Before beginning construction, the owner or operator of a new or modified animal operation raising or producing swine shall submit and have an approved best management plan and shall meet the following: A house or lagoon that is a component of an animal operation shall be constructed:

(A) at least 1500 feet from any occupied residence not owned by the owner of the animal operation;

(B) at least 2500 feet from any school, hospital, church, outdoor recreation facility, national park, State Park, historic property, or child care center; and

(C) at least 500 feet from any property boundary;

(2) Before beginning construction, the owner or operator of a new or modified animal operation other than swine shall submit and have an approved best management plan.

(3) For new or modified animal operations raising or producing swine, the outer perimeter of the land area onto which waste is applied that is a component of an animal operation shall be:

(A) at least 75 feet from any boundary of property on which an occupied residence not owned by the owner of the animal operation is located, and

(B) at least 200 feet from any occupied residence not owned by the owner of the animal operation.

(4) The Director shall either approve or disapprove the best management plan submitted under this Paragraph within 90 days after receipt of the plan. If the Director disapproves the plan, he shall identify the plan's deficiency. (7-24-00)

Sec. 3D-1803. Best management plans for animal operations

(a) Contents of a best management plan. The best management plan for animal operations shall:

(1) identify the name, location, and owner of the animal operation;

(2) identify the name, title, address, and telephone number of the person filing the plan;

(3) identify the sources of odor within the animal operation;

(4) describe how odor will be controlled from:

(A) the animal houses;

(B) the animal wastewater lagoon, if used;

(C) the animal wastewater application lands, if used;

(D) waste conveyances and temporary accumulation points; and

(E) other possible sources of odor within the animal operation;

(5) contain a diagram showing all structures and lagoons at the animal operation, forced air directions, and approximate distances to structures or groups of structures within 3000 feet of the property line of the animal operation; a recent or updated aerial photograph may be submitted in place of a diagram provided the items required under this Subparagraph of this Rule are shown;

(6) for existing animal operations, contain a schedule not to exceed six months by which the plan will be implemented (a new animal operation is to have and be in compliance with its best management plan when it begins operation); for an amended best management plan, the implementation schedule shall not exceed six months;

(7) describe how the plan will be implemented, including training of personnel;

(8) describe inspection and maintenance procedures; and

(9) describe methods of monitoring and recordkeeping to verify compliance with the plan.

(b) The Office shall review all best management plan submittals within 30 days of receipt of the submittal to determine if the submittal is complete or incomplete for processing purposes. To be complete, the submittal shall contain all the elements listed in Paragraph (a) of this Rule. The Office shall notify the person submitting the plan by letter stating that:

(1) the submittal is complete,

(2) the submittal is incomplete and identifying the missing elements and a date by which the missing elements need to be submitted to the Office, or

(3) the best management plan is incomplete and requesting that the person rewrite and resubmit the plan.

(c) Approval of the best management plan. The Director shall approve the plan if he finds that:

(1) the plan contains all the required elements in Paragraph (a) of this Rule;

(2) the proposed schedule contained in the plan will reduce objectionable odors in a timely manner;

(3) the methods used to control objectionable odors are likely to prevent objectionable odors beyond the property lines of the animal operation (the Director shall not consider impacts of objectionable odors on neighboring property if the owner of the neighboring property agrees in writing that he does not object to objectionable odors on his property and this written statement is included with the proposed best management plan; this agreement becomes void if the neighboring property changes ownership. If the neighboring property changes ownership, the plan shall be revised, if necessary, to prevent objectionable odors on this property unless the new owner agrees in writing that he does not object to objectionable odors on his property); and

(4) the described compliance verification methods are sufficient to verify compliance with the plan.

Within 90 days after receipt of a plan, the Director shall determine whether the proposed plan meets the requirements of this Paragraph of this Rule. If the Director finds that the proposed plan does not meet the requirements of this Paragraph, he shall notify the owner or operator of the animal operation in writing of the deficiencies in the proposed plan. The owner or operator shall have 30 days after receiving written notification from the Director to correct the deficiencies. If the Director finds that the proposed plan is acceptable, he shall notify the owner or operator in writing that the proposed plan has been approved. (7-24-00)

Sec. 3D-1804. Reporting requirements for animal operations

If the Office receives an odor complaint about an animal operation, the Office may require the owner or operator of the animal operation to submit the following information:

(1) the name and location of the animal operation;

(2) the name, title, address, and telephone number of the person filing the report;

(3) the type and number of animals at the animal operation;

(4) potential sources of odors, such as animal housing structures, lagoons, collection and handling devices, and storage containers, with a physical description of these sources;

(5) waste water land application procedures; and

(6) measures taken to reduce odors.

This information shall be submitted to the Office within 15 days after receipt of the request. (7-24-00)

Sec. 3D-1805. Reserved

(05-14-01)

Sec. 3D-1806. Reserved

(05-14-01)

Sec. 3D-1807. Reserved

(05-14-01)

Sec. 3D-1808. Reserved

FORSYTH COUNTY, NC - AIR QUALITY CONTROL

SECTION 3D-1900. OPEN BURNING

Sec. 3D-1901. Open burning: purpose: scope

(a) Open Burning Prohibited. A person shall not cause, allow, or permit open burning of combustible material except as allowed by Sec. 3D-1903 and Sec. 3D-1904

(b) Purpose. The purpose of this Section is to control air pollution resulting from the open burning of combustible materials and to protect the air quality in the immediate area of the open burning.

(c) Scope. This Section applies to all operations involving open burning. This Section does not authorize any open burning which is a crime under G.S. 14-136 through G.S. 14-140.1, or affect the authority of the North Carolina Forest Service to issue or deny permits for open burning in or adjacent to woodlands as provided in G.S. 113-60.21 through G.S. 113-60.31. This Section does not affect the authority of any local government to regulate open burning through its fire codes or other ordinances. The issuance of any open burning permit by the North Carolina Forest Service or any local government does not relieve any person from the necessity of complying with this Section or any other air quality rule. (11-11-96, 11-22-04)

Sec. 3D-1902. Definitions

For the purpose of this Section, the following definitions apply:

(1) "Air Curtain Burner" means a stationary or portable combustion device that directs a plane of high velocity forced draft air through a manifold head into a pit or container with vertical walls in such a manner as to maintain a curtain of air over the surface of the pit and a recirculating motion of air under the curtain.

(2) “Air Quality Action Day Code ‘Orange’ or above” means an air quality index greater than 100 as defined in 40 CFR Part 58, Appendix G,

(3) “Air Quality forecast area” means the Triad ozone forecast area, which includes Forsyth County, as well as Alamance, Caswell, Davidson, Davie, Guilford, Randolph, Rockingham, and Stokes Counties.

(4) "Dangerous materials" means explosives or containers used in the holding or transporting of explosives.

(5) "Permanent site" means for an air curtain burner, a place where an air curtain burner is operated for more than nine months.

(6) “Initiated” means start or ignite a fire or reignite or rekindle a fire.

(7) "Land clearing" means the uprooting or clearing of vegetation in connection with construction for buildings; right-of-way maintenance; agricultural, residential, commercial, institutional, or industrial development; mining activities; or the initial clearing of vegetation to enhance property value; but does not include routine maintenance or property clean-up activities.

(8) Reserved.

(9) “Nonattainment area” means an area identified in 40 CFR 81.334 as nonattainment.

(10) "Nuisance" means causing physical irritation exacerbating a documented medical condition, visibility impairment, or evidence of soot or ash on property or structure other than the property on which the burning is done.

(11) “Occupied structure” means a building in which people may live or work or one intended for housing farm or other domestic animals.

(12) “Off-site” means any area not on the premises of the land-clearing activities.

(13) "Open burning" means the burning of any matter in such a manner that the products of combustion resulting from the burning are emitted directly into the atmosphere without passing through a stack, chimney, or a permitted air pollution control device.

(14) “Operator” as used in Sec. 3D-1904 (b)(6) and 1904 (b)(2)(D), means the person in operational control over the open burning.

(15 Reserved.

(16) "Person" as used in Sec. 3D-1901 (c), means:

(A) the person in operational control over the open burning, or

(B) the landowner or person in possession or control of the land when he has directly or indirectly allowed the open burning or has benefited from it.

(17) “Pile” means a quantity of combustible material assembled together in a mass.

(18) “Premises of private residences” means the location identified as a residential building which contains one dwelling unit and occupies its own zoning lot.

(19) "Public pick-up" means the removal of refuse, yard trimmings, limbs, or other plant material from a residence by a governmental agency, private company contracted by a governmental agency or municipal service.

(20) "Public road" means any road that is part of the State highway system; or any road, street, or right-of-way dedicated or maintained for public use.

(21) "RACM" means regulated asbestos containing material as defined in 40 CFR 61.141.

(22 "Refuse" means any garbage, rubbish, or trade waste.

(23) Reserved.

(24) "Salvageable items" means any product or material that was first discarded or damaged and then all, or part, was saved for future use, and include insulated wire, electric motors, and electric transformers.

(25) “Smoke management plan” means the plan developed following the North Carolina Forest Service’s smoke management program and approved by the North Caroline Forest Service. The purpose of the smoke management plan is to manage smoke from prescribed burns of public and private forests to minimize the impact of smoke on air quality and visibility.

(26) "Synthetic material" means man-made material, including tires, asphalt materials such as shingles or asphaltic roofing materials, construction materials, packaging for construction materials, wire, electrical insulation, and treated or coated wood.

(27) Reserved. (11-11-96, 9-14-98,11-22-04 5-8-06)

Sec. 3D-1903. Permissible open burning

(a) All open burning is prohibited except open burning allowed under Paragraphs (b) and (d) of this Rule or Sec. 3D-1904. Except as allowed under Paragraphs (b)(3) through (b)(9) of this Rule, open burning shall not be initiated when the Office of Environmental Assistance and Protection has forecasted an Air Quality Action Day Code "Orange" or above during the time period covered by that forecast.

(b) The following types of open burning are permissible without an air quality permit:

(1) open burning of leaves, logs, stumps, tree branches or yard trimmings if the following conditions are met:

(A) The material burned originates on the premises of private residences and is burned on those premises;

(B) There are no public pickup services available;

(C) Non-vegetative materials, such as household garbage, lumber, or any other synthetic materials are not burned;

(D) The burning is initiated no earlier than 8:00 A.M. and no additional combustible material is added to the fire between 6:00 P.M. on one day and 8:00 A.M. on the following day;

(E) The burning does not create a nuisance; and

(F) Material is not burned when the North Carolina Forest Service has banned burning for that area;

The burning of logs or stumps of any size shall not be considered to create a nuisance for purposes of the application of the open burning air quality permitting exception described in this subsection.

(2) open burning for land clearing or right-of-way maintenance if the following conditions are met:

(A) The wind direction at the time that the burning is initiated and the wind direction as forecasted by the National Weather Service during the time of the burning are away from any area, including public roads within 250 feet of the burning as measured from the edge of the pavement or other roadway surface, which may be affected by smoke, ash, or other air pollutants from the burning;

(B) The location of the burning is at least 500 feet from any dwelling, group of dwellings, or commercial or institutional establishment, or other occupied structure not located on the property on which the burning is conducted. The Director may grant exceptions to the setback requirements if:

(i) a signed, written statement waiving objections to the open burning associated with the land clearing operation is obtained and submitted to and the exception granted by, the Director before the open burning begins from a resident or an owner of each dwelling, commercial or institutional establishment, or other occupied structure within 500 feet of the open burning site. In the case of a lease or rental agreement, the

lessee or renter shall be the person from whom permission shall be gained prior to any burning, or

(ii) an air curtain burner as described in Sec. 3D-1904, is utilized at the open burning site.

Factors that the Director shall consider in deciding to grant the exception include all the persons who need to sign the statement waiving the objection have signed it, the location of the burn, and the type, amount and nature of the combustible substances. The Director shall not grant a waiver if a college, school, licensed day care, hospital, licensed rest home, or other similar institution is less than 500 feet from the proposed burn site when such institution is occupied.

(C) Only land cleared plant growth is burned. Heavy oils, asphaltic materials such as shingles and other roofing materials, items containing natural or synthetic rubber, or any materials other than plant growth shall not be burned; however, kerosene, distillate oil, or diesel fuel may be used to start the fire;

(D) Initial burning begins only between the hours of 8:00 a.m. and 6:00 p.m., and no combustible material is added to the fire between 6:00 p.m. on one day and 8:00 a.m. on the following day;

(E) No fires are initiated or vegetation is added to existing fires when the North Carolina Forest Service has banned burning for that area; and

(F) Materials are not carried off-site or transported over public roads for open burning unless the materials are carried or transported to:

(i) Facilities permitted in accordance with Sec. 3D-1904 (Air Curtain Burners) for the operation of an air curtain burner at a permanent site; or

(ii) A location, where the material is burned not more than four times per year, that meets all of the following criteria:

(I) At least 500 feet from any dwelling, group of dwellings, or commercial or institutional establishment, or other occupied structure not located on the property on which the burning is conducted.

(II) There are no more than two piles, each 20 feet in diameter, being burned at one time.

(III) The location is not a permitted solid waste management facility.

(3) camp fires and fires used solely for outdoor cooking and other recreational purposes, or for ceremonial occasions, or for human warmth and comfort and which do not create a nuisance and do not use synthetic materials or refuse or salvageable materials for fuel;

(4) fires purposely set to public or private forest land for forest management practices for which burning is acceptable to the North Carolina Forest Service and which follows

the smoke management plan as outlined in the North Carolina Forest Service's smoke management program;

(5) fires purposely set to agricultural lands for disease and pest control and fires set for other agricultural or apicultural practices for which burning is currently acceptable to the Department of Agriculture;

(6) fires purposely set for wildlife management practices for which burning is currently acceptable to the Wildlife Resource Commission;

(7) fires for the disposal of dangerous materials when it is the safest and most practical method of disposal;

(8) fires purposely set by manufacturers of fire extinguishing materials or equipment, testing laboratories, or other persons, for the purpose of testing or developing these materials or equipment in accordance with a standard qualification program;

(9) fires purposely set for the instruction and training of fire-fighting personnel at permanent fire-fighting training facilities;

(10) fires purposely set for the instruction and training of fire-fighting personnel when conducted under the supervision of or with the cooperation of one or more of the following agencies:

(A) North Carolina Forest Service,

(B) the North Carolina Insurance Department,

(C) North Carolina technical institutes, or

(D) North Carolina community colleges, including:

(i) the North Carolina Fire College, or

(ii) the North Carolina Rescue College; and

(11) fires not described in Subparagraphs (9) or (10) of this Paragraph purposely set for the instruction and training of fire-fighting personnel, provided that:

(A) The Director has been notified according to the procedures and deadlines contained in the appropriate Forsyth County notification form. This form may be obtained by writing the Office of Environmental Assistance and Protection at the address in Sec. 3D-1905 and requesting it, and

(B) The Director has granted permission for the burning. Factors that the Director shall consider in granting permission for the burning include type, amount, and nature of combustible substances. The Director shall not grant permission for the burning of salvageable items, such as insulated wire and electric motors or if the primary purpose of the fire is to dispose of synthetic materials or refuse. The Director shall not consider previously demolished structures as having training value. However, the Director may allow an exercise involving the burning of motor vehicles burned over a period of time by a training unit or by several related training units. Any deviations from the dates and times of exercises, including additions, postponements, and deletions, submitted in the schedule in the approved plan shall be communicated verbally to the Director at least one hour before the burn is scheduled; and

(12) fires for the disposal of material generated as a result of a natural disaster, such as tornado, hurricane, or flood, if the Director grants permission for the burning. The person desiring to do the burning shall document and provide written notification to the Director that there is no other practical method of disposal of the waste. Factors that the Director shall consider in granting permission for the burning include type, amount, location of the burning, and nature of combustible substances. The Director shall not grant permission for the burning if the primary purpose of the fire is to dispose of synthetic materials or refuse or recovery of salvageable materials. Fires authorized under this Subparagraph shall comply with the conditions of Subparagraph (b)(2) of this Rule;

(c) The authority to conduct open burning under this Section does not exempt or excuse any person from the consequences, damages or injuries that may result from this conduct. It does not excuse or exempt any person from complying with all applicable laws, ordinances, rules or orders of any other governmental entity having jurisdiction even though the open burning is conducted in compliance with this Section.

(d) In Forsyth County a Burning Permit shall be obtained for intentional burning of any institutional, commercial, public, industrial, or residential structure, installation, or building, for the instruction and training of fire-fighting personnel. A permit application may be obtained from the Office of Environmental Assistance and Protection, at the address noted under Sec. 3D-1905. The permit shall be obtained prior to burning. Burning shall take place within the dates specified by the permit, or the Office shall be notified and the permit shall be revised, if necessary, prior to burning. (11-11-96, 7-28-97, 10-25-99, 11-22-04, 5-8-06)

Sec. 3D-1904. Air curtain burners

(a) Air quality permits are required for air curtain burners subject to 40 CFR 60.2245 through 60.2265, 60.2810 through 60.2870, 60.2970 through 60.2975, or 60.3062 through 60.3069 or located at permanent sites or where materials are transported in from another site. Air permits shall not be required for air curtain burners located at temporary land clearing or right-of-way maintenance sites for less than nine months unless they are subject to 40 CFR 60.2245 through 60.2265, 60.2810 through 60.2870, 60.2970 through 60.2975, or 60.3062 through 60.3069. The operation of air curtain burners in particulate and ozone nonattainment areas shall cease in any area that has been forecasted to be in an Air Quality Action Day Code “Orange” or above during the time period covered by that forecast.

(b) Air curtain burners shall comply with the following conditions and stipulations:

(1) The wind direction at the time that the burning is initiated and the wind direction as forecasted by the National Weather Service during the time of the burning shall be away from any area, including public roads within 250 feet of the burning as measured from the edge of the pavement or other roadway surface, which may be affected by smoke, ash, or other air pollutants from the burning;

(2) Only collected land clearing materials may be burned. Heavy oils, asphaltic materials, items containing natural or synthetic rubber, tires, grass clippings, collected

leaves, paper products, plastics, general trash, garbage, or any materials containing painted or treated wood materials shall not be burned. Leaves still on trees or brush may be burned;

(3) No fires shall be started or material added to existing fires when the North Carolina Forest Service has banned burning for that area;

(4) Burning shall be conducted only between the hours of 8:00 a.m. and 6:00 p.m.;

(5) The air curtain burner shall not be operated more than the maximum source operating hours-per-day and days-per-week. The maximum source operating hours-per-day and days-per-week shall be set to protect the ambient air quality standard and prevention of significant deterioration (PSD) increment for particulate. The maximum source operating hours-per-day and days-per-week shall be determined using the modeling procedures in Rule .1106(b), (c), and (f) of this Subchapter. This Subparagraph shall not apply to temporary air curtain burners;

(6) An air curtain burner with an air quality permit shall have onsite at all times during operation of the burner a visible emissions reader certified according to 40 CFR Part 60, Method 9 to read visible emissions, and the facility shall test for visible emissions within five days after initial operation and within 90 days before permit expiration;

(7) Air curtain burners shall meet manufacturer's specifications for operation and upkeep to ensure complete burning of material charged into the pit. Manufacturer's specifications shall be kept on site and be available for inspection by Office staff;

(8) Except during start-up, visible emissions shall not exceed ten percent opacity when averaged over a six-minute period except that one six-minute period with an average opacity of more than ten percent but no more than 35 percent shall be allowed for any one-hour period. During start-up, the visible emissions shall not exceed 35 percent opacity when averaged over a six-minute period. Start-up shall not last for more than 45 minutes, and there shall be no more than one start-up per day. Instead of complying with the opacity standards in the Subparagraph, air curtain burners subject to:

  (A) 40 CFR 60.2245 through 60.2265 shall comply with the opacity standards in 40 CFR 60.2250;

  (B) 40 CFR 60.2810 through 60.2870 shall comply with the opacity standards in 40 CFR 60.2260;

  (C) 40 CFR 60.2970 through 60.2975 shall comply with the opacity standards in 40 CFR 60.2271; or

  (D) 40 CFR 60.3062 through 60.3069 shall comply with the opacity standards in 40 CFR 60.3066;

(9) The owner or operator of an air curtain burner shall not allow ash to build up in the pit to a depth higher than one-third of the depth of the pit or to the point where the ash begins to impede combustion, whichever occurs first. The owner or operator of an air curtain burner shall allow the ashes to cool and water the ash prior to its removal to prevent the ash from becoming airborne;

(10) The owner or operator of an air curtain burner shall not load material into the air curtain burner such that it will protrude above the air curtain;

(11) Only distillate oil, kerosene, diesel fuel, natural gas, or liquefied petroleum gas may be used to start the fire; and

(12) The location of the burning at temporary sites shall be at least 300 feet from any dwelling, group of dwellings, or commercial or institutional establishment, or other occupied structure not located on the property on which the burning is conducted. The Director may grant exceptions to the setback requirements if a signed, written statement waiving objections to the air curtain burning is obtained from a resident or an owner of each dwelling, commercial or institutional establishment, or other occupied structure within 300 feet of the burning site. In case of a lease or rental agreement, the lessee or renter, and the property owner shall sign the statement waiving objections to the burning. The statement shall be submitted to and approved by the Director before initiation of the burn. Factors that the Director shall consider in deciding to grant the exception include: all the persons who need to sign the statement waiving the objection have signed it; the location of the burn; and the type, amount, and nature of the combustible substances.

Compliance with this Rule does not relieve any owner or operator of an air curtain burner from the necessity of complying with other rules in this Section or any other air quality rules.

(c) Recordkeeping Requirements. The owner or operator of an air curtain burner at a permanent site shall keep a daily log of specific materials burned and amounts of material burned in pounds per hour and tons per year. The logs at a permanent air curtain burner site shall be maintained on site for a minimum of two years and shall be available at all times for inspection by the Office of Environmental Assistance and Protection. The owner or operator of an air curtain burner at a temporary site shall keep a log of total number of tons burned per temporary site. Additionally, the owner or operator of an air curtain burners subject to:

(1) 40 CFR 60.2245 through 60.2265 shall comply with the monitoring, recordkeeping, and reporting requirement in 40 CFR 60.2245 through 60.2265;

(2) 40 CFR 60.2245 through 60.2265 shall comply with the monitoring, recordkeeping, and reporting requirement in 40 CFR 60.2245 through 60.2265;

(3) 40 CFR 60.2245 through 60.2265 shall comply with the monitoring, recordkeeping, and reporting requirement in 40 CFR 60.2245 through 60.2265;

(4) 40 CFR 60.2245 through 60.2265 shall comply with the monitoring, recordkeeping, and reporting requirement in 40 CFR 60.2245 through 60.2265.

(d) Title V Considerations. Burners that have the potential to burn 8,100 tons of material or more per year may be subject to Section 3Q-0500, Title V Procedures.

(e) Prevention of Significant Deterioration Consideration. Burners that burn 16,200 tons per year or more may be subject to Sec. 3D-0530, Prevention of Significant Deterioration.

(f) A person may use a burner using a different technology or method of operation than an air curtain burner as defined under Sec. 3D-1902 if he demonstrates to the Director that the burner is at least as effective as an air curtain burner in reducing emissions and if the Director approves the use of the

burner. The Director shall approve the burner if he finds that it is at least as effective as an air curtain burner. This burner shall comply with all the requirements of this Rule.

(g) In addition to complying with the requirements of this rule, an air curtain burner subject to:

(1) 40 CFR Part 60, Subpart CCCC that commenced construction after November 30, 1999, or that commenced reconstruction or modification on or after June 1, 2001, shall also comply with 40 CFR 60.2245 through 60.2265.

(2) 40 CFR Part 60, Subpart EEEE that commenced construction after December 9, 2004, or that commenced reconstruction or modification on or after June 16, 2006, shall also comply with 40 CFR 60.2970 through 60.2975. (11-11-96, 10-25-99. 5-8-06)

Sec. 3D-1905. Office location

Inquiries, requests and plans shall be handled by the Office of Environmental Assistance and Protection, located at Forsyth County Government Center, 201 N. Chestnut Street, Winston-Salem, NC 27101- 4120. (11-11-96)

Sec. 3D-1906. Reserved.

(11-11-96)

Sec. 3D-1907. Multiple violations and multiple penalties

(a) A single episode of open burning may result in multiple violations and multiple civil penalties. Factors the Director shall consider in determining the number of violations per episode of open burning includes:

(1) the type of material burned,

(2) the amount of material burned,

(3) the location of the burn, and

(4) any other factor relevant to the air pollution control or air quality.

(b) Each pile of land clearing or road maintenance debris that does not comply with the specifications of Sec. 3D-1903 (b)(2) shall constitute a separate violation.

FORSYTH COUNTY, NC - AIR QUALITY CONTROL

SECTION 3D-2000. TRANSPORTATION CONFORMITY

Sec. 3D-2001. Purpose, scope and applicability

(a) The purpose of this Section is to assure the conformity of transportation plans, programs, and projects that are developed, funded, or approved by the United States Department of Transportation and by metropolitan planning organizations or other recipients of funds under Title 23 U.S.C. or the Federal Transit Act (49 U.S.C. 1601 et seq.), or State or Local only sources of funds, with all plans required of areas designated as nonattainment or maintenance under 40 CFR 81.334 and listed in Paragraph (b), (c), or (d) of this Rule.

(b) This Section applies to the emissions of volatile organic compounds, nitrogen oxides and carbon monoxide in Forsyth County.

(c) Reserved.

(d) This Section applies to the emissions of:

(1) particulate matter in areas identified in 40 CFR 81.334 as nonattainment for fine particulate (PM2.5),

(2) volatile organic compounds or nitrogen oxides in areas identified in 40 CFR 81.334 as nonattainment for ozone.

(e) This Section applies to FHWA/FTA projects or regionally significant local projects. For FHWA/FTA projects or regionally significant local projects in the areas identified in Paragraph (b), (c), or (d) of this Rule and for the pollutants identified in Paragraph (b), (c), or (d) of this Rule, this Section applies to:

(1) the adoption, acceptance, approval, or support of transportation plans, and transportation plan amendments developed pursuant to 23 CFR Part 450 or 49 CFR Part 613 by a metropolitan planning organization or the United States Department of Transportation;

(2) the adoption, acceptance, approval, or support of transportation improvement programs or amendments to transportation improvement programs pursuant to 23 CFR Part 450 or 49 CFR Part 613 by a metropolitan planning organization or the United States Department of Transportation; or

(3) the approval, funding, or implementation of FHWA/FTA projects.

Conformity determinations are not required under this Section for individual projects that are not FHWA/FTA projects. However, 40 CFR 93.121 shall apply to these projects if they are regionally significant projects.

(f) This Section applies to maintenance areas for 20 years from the date the Environmental Protection Agency approves the area's request under Section 107(d) of the Clean Air Act for redesignation to attainment. (8-14-95, 5-24-99, 5-8-06)

Sec. 3D-2002. Definitions

For the purposes of this Section, the definitions contained in 40 CFR 93.101 and the following definitions apply:

(1) "Consultation" means that one party confers with another identified party, provides all information necessary to that party needed for meaningful input, and considers and responds to the views of that party in a timely, substantive written manner prior to any final decision.

(2) “Regionally significant project” means a transportation project (other than an exempt project under 40 CFR 93.126) that is on a facility that serves regional transportation needs (such as access to and from the area outside of the region, major activity centers in the region, major planned developments such as new retail malls and sports complexes, or transportation terminals as well as most terminals themselves) and would normally be included in the modeling of a metropolitan area’s transportation network, including at a minimum all principal arterial highways and all fixed guide way transit facilities that offer an alternative to regional highway travel.

(3) "Regionally significant State or local project" means any highway or transit project that is a regionally significant project and that is proposed to receive only funding assistance (receives no federal funding) or approval through the State or any local program. (8-14-95, 5-24-99)

Sec. 3D-2003. Transportation conformity determination

(a) Conformity analyses, determinations, and redeterminations for transportation plans, transportation improvement programs, FHWA/FTA projects, and State or local projects shall be made according to the requirements of 40 CFR 93.104 and shall comply with the applicable requirements of 40 CFR 93.119, 93.120, 93.124, 93.125, and 93.126. For the purposes of this Rule, regionally significant State or local projects shall be subject to the same requirements under 40 CFR Part 93 as FHWA/FTA projects except that State Environmental Policy Act procedures and requirements shall be substituted for National Environmental Policy Act procedures and requirements. Regionally significant State or local projects subject to this Section for which the State Environmental Policy Act process and a conformity determination have been completed may proceed toward implementation without further conformity determination unless more than three years have elapsed since the most recent major step (State Environmental Policy Act process completion, start of final design, acquisition of a significant portion of the right-of-way, or approval of the plans, specifications, and estimates) occurred. All phases of these projects considered in the conformity determination are also included if these phases were for the purpose of funding final design, right-of-way acquisition, construction, or any combination of these phases.

(b) Before making a conformity determination, the metropolitan planning organizations, local transportation Departments, North Carolina Department of Transportation, United States Department of Transportation, Office of Environmental Assistance and Protection and United States Environmental Protection Agency shall consult with each other on matters described in Sec. 3D-2005. Consultation shall begin as early as possible in the development of the emissions analysis used to support a conformity determination. The agency that performs the emissions analysis shall make the analysis available to the Office of Environmental Assistance and Protection; at least 21 days shall be allowed for review and comment on the emissions analysis. The 21-day review period shall begin upon receipt of the analysis by

the Director of the Office of Environmental Assistance and Protection. After review by the Office of Environmental Assistance and Protection the approving agency shall seek public comments in accordance with its public participation policy. The agency making the conformity determination shall address all written comments received prior to close of the public comment period, and these comments and responses thereto shall be included in the final document. If the Office of Environmental Assistance and Protection disagrees with the resolution of its comments, the conflict may be escalated to the Governor within 14 days and shall be resolved in accordance with 40 CFR 93.105(d). The 14-day appeal period shall begin upon receipt by the director of the Office of Environmental Assistance and Protection of the metropolitan planning organizations' resolution that determines conformity.

(c) The agency that performs the conformity analysis shall notify the Office of Environmental Assistance and Protection of:

(1) any changes in planning or analysis assumptions (including land use and vehicle miles traveled (VMT) forecasts), and

(2) any revisions to transportation plans or transportation improvement plans that add, delete, or change projects that require a new emissions analysis (including design scope and dates that change the transportation network existing in a horizon year).

Comments made by the Office of Environmental Assistance and Protection and responses thereto made by the agency shall become part of the final planning document.

(d) Transportation plans shall satisfy the requirements of 40 CFR 93.106. Transportation plans and transportation improvement programs shall satisfy the fiscal constraints specified in 40 CFR 93.108. Transportation plans, programs, and FHWA/FTA projects shall satisfy the applicable requirements of 40 CFR 93.109 through 93.118.

(e) Written commitments to implement control measures that are not included in the transportation plan and transportation improvement program (TIP) shall be obtained before a conformity determination and these commitments shall be fulfilled. Written commitments to implement mitigation measures shall be obtained before a positive conformity determination, and project sponsors shall comply with these commitments.

(f) A recipient of federal funds designated under Title 23 U.S.C. or the Federal Transit Act shall not adopt or approve a regionally significant highway or transit project, regardless of funding source, unless the requirements of 40 CFR Part 93 are fully complied with.

(g) The degree of specificity required in a transportation plan and the specific travel network assumed for air quality modeling shall not preclude the consideration of alternatives in the National Environmental Policy Act of 1969 process, in accordance with 40 CFR 93.107.

(h) When assisting or approving any action with air quality-related consequence, the Federal Highway Administration and the Federal Transit Administration of the Department of Transportation shall give priority to the implementation of those transportation portions of an applicable implementation plan prepared to attain and maintain the national ambient air quality standards as provided under 40 CFR 93.103. This priority shall be consistent with statutory requirements for allocation of funds among states or other jurisdictions. (8-14-95, 5-24-99, 10-25-99)

Sec. 3D-2004. Determining transportation-related emissions

(a) The procedures in 40 CFR 93.122 shall be used to determine regional transportation-related emissions.

(b) The procedures in 40 CFR 93.123 shall be used to determine localized carbon monoxide concentrations (hot-spot analysis). (8-14-95, 5-24-99)

Sec. 3D-2005. Memorandum of agreement

(a) The Office of Environmental Assistance and Protection shall sign and maintain a memorandum of agreement with the North Carolina Department of Transportation, the metropolitan planning organizations of the areas identified in Sec. 3D-2001 (b), (c) or (d), and the United States Department of Transportation to describe the participation and responsibilities of each of these agencies in implementing the requirements of this Section and 40 CFR Part 93. For those areas identified in Sec. 3D-2001 (b), (c) or (d) for which there is no metropolitan planning organization, the North Carolina Department of Transportation shall represent those areas for the purposes of the memorandum of agreement. The memorandum of agreement shall include:

(1) consultation procedures described under 40 CFR 93.105;

(2) the projected time allotted for each agency to review and comment on or to respond to comments on transportation improvement programs, transportation plans, and transportation projects; and

(3) consultation procedures for the development of State Implementation Plans that relate to transportation.

The contents of the Memorandum of Agreement shall comply with the criteria and procedures in the federal Clean Air Act Section 176(c) [42 U.S.C. 7401-7671q] and 40 CFR Part 51, Subpart T, 40 CFR Part 93, Subpart A, and Sec. 3D-2001 through 2004.

(b) No recipient of federal funds (as defined at 40 CFR 93.101) designated under Title 23 U.S.C. or the Federal Transit Act shall adopt or approve or take any action to develop or implement a regionally significant highway or transit project unless such recipient has signed the Memorandum of Agreement established under this Rule. This Memorandum of Agreement shall bind the recipient to adhere to the conformity criteria and procedures of this Section.

(c) No agency shall adopt or approve or take any action to implement or develop any transportation plan, transportation improvement program, or federally funded or approved FHWA/FTA highway or transit project unless the agency has signed the Memorandum of Agreement established under this Rule. This Memorandum of Agreement shall bind the recipient to adhere to the conformity criteria and procedures of this Section.

(d) Each federal agency that participates in determinations of conformity to state and federal implementation plans shall sign the Memorandum of Agreement established under this Rule. This Memorandum of Agreement shall bind the recipient to adhere to the conformity criteria and procedures of this Section. (5-24-99)

FORSYTH COUNTY, NC - AIR QUALITY CONTROL

SECTION 3D-2100. RISK MANAGEMENT PROGRAM

Sec. 3D-2101. Applicability

(a) This Section applies to any facility that has more than a threshold quantity of a regulated substance listed in 40 CFR 68.130 in a process as determined under 40 CFR 68.115, except for those exemptions listed in Paragraph (b). The facility shall comply with this Section no later than the latest of the following dates:

(1) July 1, 2000 [before the effective date of the rules in this Section, the U.S. Environmental Protection Agency is the implementing agency of 40 CFR Part 68. Under 40 CFR 68.10(a)(1) the facility is required to comply by June 21, 1999.];

(2) three years after the date on which a regulated substance is first listed under 40 CFR 68.130; or

(3) the date on which a regulated substance is first present above a threshold quantity in a process.

(b) The following substances are exempt from the provisions of this Section:

(1) exemptions listed in 40 CFR 68.125,

(2) flammable substances that are used as a fuel or held for sale as a fuel at a retail facility.

(c) A covered process that meets all the requirements of 40 CFR 68.10(b) is eligible for Program 1 requirements.

(d) A covered process that meets all the requirements of 40 CFR 68.10(c) is eligible for Program 2 requirements.

(e) A covered process that meets all the requirements of 40 CFR 68.10(d) is eligible for Program 3 requirements.

(f) If at any time a covered process no longer meets the eligibility criteria of its Program level, the owner or operator of the facility shall comply with the requirements of the new Program level that applies to the process and update the risk management plan as provided in 40 CFR 68.190. (10-25-99, 7-24-00)

Sec. 3D-2102. Definitions

For the purposes of this Section the definitions in 40 CFR 68.3 shall apply with the following exception: “Implementing agency” means Office of Environmental Assistance and Protection. (10-25-99, 7-24-00)

Sec. 3D-2103. Requirements

Except as provided in 40 CFR 68.2 and Sec. 3D-2101 (b), the owner or operator of any facility covered under this Section shall comply with all the applicable requirements in:

(1) 40 CFR 68.12, General Requirements,

(2) 40 CFR 68.15, Management,

(3) 40 CFR Part 68, Subpart B, Hazard Assessment, including 40 CFR Part 68, Appendix A, Table of Toxic Endpoints,
(4) 40 CFR Part 68, Subpart C, Program 2 Prevention Program,
(5) 40 CFR Part 68, Subpart D, Program 3 Prevention Program,
(6) 40 CFR Part 68, Subpart E, Emergency Response,
(7) 40 CFR Part 68, Subpart G, Risk Management Plan,
(8) 40 CFR 68.200, Recordkeeping, and
(9) 40 CFR 68.220(f). (10-25-99, 7-24-00)

Sec. 3D-2104. Implementation

(a) The owner or operator of each facility covered under this Section shall:
(1) submit a risk management plan or a revised plan when required by this Section to the Environmental Protection Agency; and
(2) submit a source certification or, in its absence, submit a compliance schedule consistent with Sec. 3Q-0508 (g)(2).

(b) The Office may initiate enforcement action against any facility that fails to comply with the requirements of this Section or any provision of its plan submitted pursuant to this Section.

(c) The Office may conduct completeness checks, source audits, record reviews, or facility inspections to ensure that facilities covered under this Section are in compliance with the requirements of this Section. In addition, the Office may conduct periodic audits following the audit procedures of 40 CFR 68.220. The Office may take enforcement action if the owner or operator fails to comply with the provisions of 40 CFR 68.220. (10-25-99, 7-24-00)

SECTION 3D-2200. SPECIAL ORDERS

Sec. 3D-2201. Purpose

The purpose of this Section is to implement the provisions of G.S. 143-215.110 pertaining to the issuance of air quality Special Orders by the Director.

Sec. 3D-2202. Definitions

For the purposes of this Section, the following definitions apply:

(1) "Special Order" means a directive of the Director to any person whom he finds responsible for causing or contributing to any pollution of the air of the County. The term includes all orders or instruments issued by the Director pursuant to G.S. 143-215.110.

(2) "Consent Order" means a Special Order into which the Director enters with the consent of the person who is subject to the order.

(3) “Special Order by Consent” means “Consent Order.”

Sec. 3D-2203. Public notice

(a) The requirements of this Rule for public notice and public hearing apply to Consent Orders. The Director may specify other conditions for Special Orders issued without consent if he finds such conditions are necessary to achieve or demonstrate compliance with a requirement under Subchapter 3D or Subchapter 3Q.

(b) Notice of proposed Consent Order:

(1) The Director shall give notice pursuant to G.S. 143-215.110(a1).

(2) The notice shall include at least the following:

(A) name, address, and telephone number of the Division;

(B) name and address of the person to whom the proposed order is directed;

(C) a brief summary of the conditions of the proposed order including the period of time in which action shall be taken to achieve compliance and the major permit conditions or emission standards that the source will be allowed to exceed during the pendency of the order;

(D) a brief description of the procedures to be followed by the Director in reaching a final decision on the proposed order, which shall include descriptions of the process for submitting comments and requesting a public hearing. The description shall specify that comments and requests for a public hearing are to be received by the Director within 30 days following the date of public notice; and

(E) a description of the information available for public review, where it can be found, and procedures for obtaining copies of pertinent documents.

(c) Notice of public hearing for proposed Consent Order:

(1) The Director shall consider all requests for a public hearing, and if he determines significant public interest for a public hearing exists, then he shall hold a public hearing.
(2) The Director shall give notice of the public hearing at least 30 days before the hearing.
(3) The notice shall be advertised in a local newspaper and provided to those persons specified in G.S. 143-215.110(a1)(2) for air quality special orders.
(4) The notice shall include the information specified in Subparagraph (b)(2) of this Rule. It shall also state the time and location for the hearing along with procedures for providing comment.
(5) The Environmental Assistance and Protection Advisory Board shall preside over the public hearing and receive written and oral comments. The Director, Secretary to the Board, shall develop a written report of the hearing, which shall include:
    (A) a copy of the public notice published in the newspaper,
    (B) a copy of all the written comments and supporting documentation received,
    (C) a summary of all the oral comments received,
    (D) recommendations of the Board to the Director, and
    (E) a proposed Consent Order for the Director's consideration.

(d) Any person may request to receive copies of all notices required by this Rule, and the Director shall mail copies of notices to those who have submitted a request.

(e) The Director may satisfy the requirements in Paragraphs (b) and (c) of this Rule by issuing a notice that complies with both Paragraphs.

(f) Any Consent Order may be amended by the Director to incorporate minor modifications, such as modification of standard conditions to reflect updated versions, correction of typographical errors, or interim date extensions, in a consent order without public notice provided that the modifications do not extend the final compliance date by more than four months.

Sec. 3D-2204. Final action on consent orders

(a) The Director shall take final action on Consent Orders for which a public hearing has not been held as provided in Sec. 3D-2203. The final action on the proposed order shall be taken no later than 60 days following publication of the notice.

(b) The Director shall take final action on Consent Orders for which a public hearing has been held as provided in Sec. 3D-2203. The final action on the proposed order shall be taken no later than 90 days following the hearing.

Sec. 3D-2205. Notification of right to contest special orders issued without consent

For any Special Orders other than Consent Orders, the Director shall notify the person subject to the order of the procedure set out in Sec. 0205, Appeals to and other appearances before board.

Sec. 3D-2206. Compliance bonds

A Special Order may provide that a bond or other surety be posted to ensure compliance. In determining the amount of such bond the Director shall consider the degree and extent of harm which may result if the person to whom the Special Order is directed fails to comply with the terms of the order, the cost of rectifying such harm, the economic consequences to the person to whom the Special Order is directed if the Special Order is issued as compared to the consequences of a denial, suspension, or revocation of the Special Order or permit, and the person's history of compliance with pollution control requirements, other Special Orders, history of payment of any penalties which may have been previously assessed by the Director. In the event of noncompliance with the Special Order or other instrument, the bond shall be forfeited and the entire amount of the bond shall be deposited in the Forsyth County General Fund. (Ord. No. 7-90, 6-11-90; Ord. No. 9-94, 12-19-94)

SECTION 3D-2300. BANKING EMISSION REDUCTION CREDITS

Sec. 3D-2301. Purpose

This Section provides for the creation, banking, transfer, and use of emission reduction credits for:

(1) nitrogen oxides (NOx),
(2) volatile organic compounds (VOC),
(3) sulfur dioxide (SO_2),
(4) fine particulate (PM2.5), and
(5) ammonia (NH_3)

for offsets under Sec. 3D-0531, Sources in Nonattainment Area. (5-8-06)

Sec. 3D-2302. Definitions

For the purposes of this Section, the following definitions shall apply:

(1) "Air permit" means a construction and operation permit issued under Section 3Q-0300, Construction and Operation Permits, or 3Q-0500, Title V Procedures.
(2) "Banking" means a system for recording emission reduction credits so that they may be used or transferred in the future.
(3) "Enforceable" means enforceable by the Director. Methods for ensuring that emission reduction credits are enforceable include conditions in air permits issued.
(4) "Federally designated ozone nonattainment area in North Carolina" means an area designated as nonattainment for ozone and described in 40 CFR 81.334.
(5) "Federally designated fine particulate (PM2.5) nonattainment area in North Carolina" means an area designated as nonattainment for fine particulate (PM2.5) and described in 40 CFR 81.334.
(6) "Netting Demonstration" means the act of calculating a "net emissions increase" under the preconstruction review requirements of Title I, Part D of the Federal Clean Air Act and the regulations promulgated there under Sec. 3D-0530, Prevention of Significant Deterioration, or 0531, Sources in Nonattainment Area.
(7) "Permanent" means assured for the life of the corresponding emission reduction credit through an enforceable mechanism such as a permit condition or revocation.
(8) "Quantifiable" means that the amount, rate, and characteristics of the emission reduction credit can be estimated through a reliable, reproducible method.
(9) "real" means a reduction in actual emissions emitted into the air.
(10) "Surplus" means not required by any local, State, or federal law, rule, order, or requirement and in excess of reductions used by the Director in issuing any air permit, in excess of any conditions in an air permit to avoid an otherwise applicable requirement, or to demonstrate attainment of ambient air quality standards in Section 3D-0400 or reasonable further progress towards achieving attainment of ambient air quality standards. For the purpose of determining the amount of surplus emission

reductions, any seasonal emission limitation or standard shall be assumed to apply throughout the year. The following are not considered surplus:

(A) emission reductions that have previously been used to avoid Sec. 3D-0530 or 0531 (new source review) through a netting demonstration;

(B) Emission reductions in hazardous air pollutants listed pursuant to Section 112(b) of the federal Clean Air Act to the extent needed to comply with Sec. 3D-1109, 1111 or 1112; however, emission reductions in hazardous air pollutants that are also volatile organic compounds beyond that necessary to comply with Sec. 3D-1109, 1111 or 1112 are surplus; or

(C) emission reductions used to offset excess emissions from another source as part of an alternative mix of controls ("bubble") demonstration under Sec. 3D-0501. (5-8-06)

Sec. 3D-2303. Applicability and eligibility

(a) Applicability. Any facility that has the potential to emit nitrogen oxides, volatile organic compounds, sulfur dioxide, ammonia, or fine particulate (PM2.5) in amounts greater than 25 tons per year and that is in a federally designated ozone or fine particulate (PM2.5) nonattainment area in North Carolina is eligible to create and bank nitrogen oxides, volatile organic compounds, sulfur dioxide, ammonia, or fine particulate (PM2.5) emission reduction credits.

(b) Eligibility of emission reductions.

(1) To be approved by the Director as an emission reduction credit, a reduction in emissions shall be real, permanent, quantifiable, enforceable, and surplus and shall have occurred:

(A) Reserved.

(B) for fine particulate (PM2.5) after December 31, 2002 for the Greensboro-Winston-Salem-High Point, NC nonattainment area.

(2) To be eligible for consideration as emission reduction credits, emission reductions may be created by any of the following methods:

(A) installation of control equipment beyond what is necessary to comply with existing rules;

(B) a change in process inputs, formulations, products or product mix, fuels, or raw materials;

(C) a reduction in actual emission rate;

(D) a reduction in operating hours;

(E) production curtailment or reduction in throughput;

(F) shutdown of emitting sources or facilities; or

(G) any other enforceable method that the Director finds resulting in real, permanent, quantifiable, enforceable, and surplus reduction of emissions.

(c) Ineligible for emission reduction credit. Emission reductions from the following are not eligible to be banked as emission reduction credits:

(1) sources covered under a special order or variance until compliance with the emission standards that are the subject of the special order or variance is achieved;
(2) sources that have operated less than 24 months; or
(3) emission allocations and allowances used in the budget trading program under Sec. 3D-1419 or 2408;
(4) emission reductions outside North Carolina; or
(5) mobile sources. (5-8-06)

Sec. 3D-2304. Qualification of emission reduction credits

For purposes of calculating the amount of emission reduction that can be quantified as an emission reduction credit, the following procedures shall be followed:

(1) The source's average actual annual emissions before the emission reduction shall be calculated in tons per year. In calculating average actual annual emissions before the emission reduction, data from the 24-month period immediately preceding the reduction in emissions shall be used. The Director may allow the use of a different time period, not to exceed seven years immediately preceding the reduction in emissions if the owner or operator of the source documents that such period is more representative of normal source operation.
(2) The emission reduction credit generated by the emission reduction shall be calculated by subtracting the allowable annual emissions rate following the reduction from the average actual annual emissions prior to the reduction. (5-8-06)

Sec. 3D-2305. Creating and banking emission reduction credits

(a) The owner or operator of a source seeking to create and bank emission reduction credits shall submit over the signature of the responsible official for a Title V facility or the official identified in Subparagraph Sec. 3Q-0304 (j) for a non-Title V facility the following information, which may be on an application form provided by the Director:

(1) the company name, contact person and telephone number, and street address of the source seeking the emission reduction credit;
(2) a description of the type of source where the proposed emission reduction occurred or will occur;
(3) a detailed description of the method or methods to be employed to create the emission reduction;
(4) the date that the emission reduction occurred or will occur;
(5) quantification of the emission reduction credit as described under Sec. 3D-2304;

(6) the proposed method for ensuring the reductions are permanent and enforceable, including any necessary application to amend the facility's air permit or, for a shutdown of an entire facility, a request for permit rescission;

(7) whether any portion of the reduction in emissions to be used to create the emission reduction credit has previously been used to avoid Sec. 3D-0530 (prevention of significant deterioration) or 0531 (nonattainment major new source review) through a netting demonstration;

(8) any other information necessary to demonstrate that the reduction in emissions is real, permanent, quantifiable, enforceable, and surplus, and

(9) a complete permit application if the permit needs to be modified to create or enforce the emission reduction credit.

(b) If the Director finds that

(1) all the information required to be submitted under Paragraph (a) of this Rule has been submitted;

(2) the source is eligible under Sec. 3D-2303;

(3) a complete permit application has been submitted, if necessary, to implement the reduction in emissions; and

(4) the reduction in emissions is real, permanent, quantifiable, enforceable, and surplus;

the Director shall issue the source a certificate of emission reduction credit once the facility's permit is modified, if necessary, to reflect permanently the reduction in emissions. The Director shall register the emission reduction credit for use only after the reduction has occurred.

(c) Processing schedule.

(1) The Director shall send written acknowledgement of receipt of the request to create and bank emission credits within 10 days of receipt of the request.

(2) The Director shall review all requests to create and bank emission credits within 30 days to determine whether the application is complete or incomplete for processing purposes. If the application is incomplete the Director shall notify the applicant of the deficiency. The applicant shall have 90 days to submit the requested information. If the applicant fails to provide the requested information within 90 days, the Director shall return the application.

(3) The Director shall either approve or disapprove the request within 90 days after receipt of a complete application requesting the banking of emission reduction credits. Upon approval the Director shall issue a certificate of emission reduction credit. (5-8-06)

Sec. 3D-2306. Duration of emission reduction credits

Banked emission reduction credits are permanent until withdrawn by the owner or until withdrawn by the Director under Sec. 3D-2310. (5-8-06)

Sec. 3D-2307. Use of emission reduction credits

(a) Persons holding emission reduction credits may withdraw the emission reduction credits and may use them in any manner consistent with this Section.

(b) An emission reduction credit may be withdrawn only by the owner of record or by the Director under Sec. 3D-2310 and may be withdrawn in whole or in part. In the case of a partial withdrawal, the Director shall issue a revised certificate of emission reduction credit to the owner of record reflecting the new amount of the credit and shall revoke the original certificate.

(c) Emission reduction credits may be used for the following purposes:

(1) as offsets or netting demonstrations required by Sec. 3D-0531 for a major new source of:

(A) nitrogen oxides or volatile organic compounds in a federally designated ozone nonattainment area, or

(B) fine particulate (PM2.5) in a federally designated PM2.5 nonattainment area;

(2) as offsets or netting demonstrations required by Sec. 3D-0531 for a major modification to an existing major source of:

(A) nitrogen oxides or volatile organic compounds in a federally designated ozone nonattainment area, or

(B) fine particulate (PM2.5) in a federally designated PM2.5 nonattainment area;

(3) as part of a netting demonstration required by Sec. 3D-0530 when the source using the emission reduction credits is the same source that created and banked the emission reduction credits; or

(4) to remove a permit condition that created an emission reduction credit.

(d) Emission reduction credits generated through reducing emissions of one pollutant shall not be used for trading with or offsetting of another pollutant, for example emission reduction credits for volatile organic compounds in an ozone nonattainment area shall not be used to offset nitrogen oxide emissions.

(e) Limitations on use of emission reduction credits.

(1) Emission reduction credits shall not be used to exempt a source from:

(A) prevention of significant deterioration requirements (Sec. 3D-0530) for netting demonstrations unless the emission reduction credits have been banked by the facility at which the new or modified source is located and have been banked during the period specified in Sec. 3D-0530. This Subparagraph does not preclude the use of emission reductions not banked as emission credits to complete netting demonstrations.

(B) nonattainment major new source review (Sec. 3D-0531) unless the emission reduction credits have been banked by the facility at which the new or modified source is located and have been banked during the period specified in Sec. 3D-0531. This Subparagraph does not preclude the use of emission reductions not banked as emission credits to complete netting demonstrations.

(C) new source performance standards (Sec. 3D-0524), national emission standards for hazardous air pollutants (Sec. 3D-1110), or maximum achievable control technology (Sec. 3D-1109, 1111 or 1112); or

(D) any other requirement of Subchapter 3D unless the emission reduction credits have been banked by the facility at which the new or modified source is located.

(2) Emission reduction credits shall not be used to allow a source to emit above the limit established by a rule in Subchapter 3D. (If the owner or operator wants to permit a source to emit above the limit established by a rule in Subchapter 3D, he needs to follow the procedures in Sec. 3D-0501 for an alternative mix of controls ["bubble"].) (5-8-06)

Sec. 3D-2308. Certificates and registry

(a) Certificates of emission reduction credit issued by the Director shall contain the following information:

(1) the pollutant reduced (nitrogen oxides, volatile organic compounds, sulfur dioxide, ammonia, or fine particulate);

(2) the amount of the credit in tons per year;

(3) the date the reduction occurred;

(4) company name, the street address and county of the source where the reduction occurred; and

(5) the date of issuance of the certificate.

(b) The Division shall maintain an emission reduction credit registry that constitutes the official record of all certificates of emission reduction credit issued and all withdrawals made. The registry shall be available for public review. For each certificate issued, the registry shall show the amount of the emission reduction credit, the pollutant reduced, the name and location of the facility generating the emission reduction credit, and the facility contact person. The Division shall maintain records of all deposits, deposit applications, withdrawals, and transactions. (5-8-06)

Sec. 3D-2309. Transferring emission reduction credits

(a) If the owner of a certificate of emission reduction credit transfers the certificate to a new owner, the Director shall issue a certificate of emission reduction credit to the new owner and shall revoke the certificate held by the current owner of record.

(b) If the owner of a certificate of emission reduction credit transfers part of the emission reduction credits represented by the certificate to a new owner, the Director shall issue a certificate of emission reduction credit to the new owner reflecting the transferred amount and shall issue a certificate of emission reduction credit to the current owner of record reflecting the amount of emission reduction credit remaining after the transfer. The Director shall revoke the original certificate of emission reduction credit.

(c) For any transferred emission reduction credits, the creator of the emission reduction credit shall continue to have enforceable conditions in the appropriate permit to assure permanency of the emission reduction and shall be held liable for compliance with those conditions; the user of any transferred emission reduction credits shall not be held liable for any failure of the creator to comply with its permit. (5-8-06)

Sec. 3D-2310. Revocation and changes of emission reduction credits

(a) The Director may withdraw emission reduction credits if the emission credits:

(1) have already been used;

(2) are incorrectly calculated; or

(3) achieved are less than those claimed.

(b) If a banked emission reduction credit were calculated using an emission factor and the emission factor changes, the Director shall revise the banked emission reductions credit to reflect the change in the emission factor. If a banked emission reduction credit has been used, then no change shall be made in the used credit.

(c) When a rule is adopted or amended in this Subchapter or Subchapter 3Q after November 1, 2005, the Director shall adjust the banked emission reduction credits to account for changes in emissions that would be allowed under the new emission limitation with which the source must currently comply if it is still operating. If a source has permanently ceased operations, then the Director shall make no adjustments in its banked emissions reduction credits. If a banked emission reduction credit has been used, no change shall be made in the used credit. (5-8-06)

Sec. 3D-2311. Monitoring

The Director shall require the owner or operator of a source whose emissions are being reduced to create an emission reduction credit to verify the reduction in emissions with a source test, continuous emission monitoring, or other methods that measure the actual emissions, or may require the use of parametric monitoring to show that the source or its control device is being operated in the manner that it is designed or is permitted. (5-8-06)

FORSYTH COUNTY, NC - AIR QUALITY CONTROL

SECTION 3D-2400. CLEAN AIR INTERSTATE RULES

Sec. 3D-2401. Purpose and applicability

(a) Purpose. The purpose of this Section is to implement the federal Clean Air Interstate Rule and thereby reduce the interstate transportation of fine particulate matter and ozone.

(b) Applicability. This Section applies to the following, which are CAIR NOx units, CAIR SO_2 units, and CAIR NOx Ozone Season units to the extent they are subject to the NOx annual trading program, SO_2 trading program, and NOx ozone season trading program, respectively, in this Section:

(1) any stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990 or the start-up of a unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for sale, provided that if a stationary boiler or stationary combustion turbine that does not meet these requirements begins to combust fossil fuel or to serve a generator with nameplate capacity of more than 25 MWe producing electricity for sale, the unit shall become subject to this Section under this Subparagraph on the first date on which the unit both combusts fossil fuel and serves such generator;

(2) notwithstanding Subparagraph (b)(1) of this Rule, a unit that meets the requirements in 40 CFR 96.104(b)(1)(i), (b)(2)(i), or (b)(2)(ii), 96.204(b)(1)(i), (b)(2)(i), or (b)(2)(ii), 96.304(b)(1)(i), (b)(2)(i), or (b)(2)(ii), shall not be subject to this Section under this Subparagraph and shall become subject to this Section under this Subparagraph as provided in 40 CFR 96.104(b)(1)(ii) or (b)(2)(iii), 96.204(b)(1)(ii) or (b)(2)(iii), or 96.304(b)(1)(ii) or (b)(2)(iii);

(3) solely for the purposes of the NOx ozone season trading program, fossil fuel-fired stationary boilers, combustion turbines, or combined cycle systems having a maximum design heat input greater than 250 million Btu per hour except stationary combustion turbines constructed before January 1, 1979, that have a federally enforceable permit that restricts:

(A) its potential emissions of nitrogen oxides to no more than 25 tons between May 1 and September 30;

(B) it to burning only natural gas or oil; and

(C) its hours of operation as described in 40 CFR 96.4(b)(1)(ii) and (iii).

(4) solely for the purposes of the NOx ozone season trading program, fossil-fuel fired stationary boilers, combustion turbines, or combined cycle systems serving a generator with a nameplate capacity greater than 25 MW electrical and selling any amount of electricity.

(c) Retired unit exemption. Any unit that is permanently retired and is not an opt-in unit under Sec. 3D-2411 shall be exempted from the annual trading program for:

(1) nitrogen oxides if it complies with the provisions of 40 CFR 96.105,

(2) sulfur dioxide if it complies with the provisions of 40 CFR 96.205, or

(3) ozone season nitrogen oxides if it complies with the provisions of 40 CFR 96.305.

(d) Effect on other authorities. No provision of this Section, any application submitted or any permit issued pursuant to Rule .2406 of this Section, or any exemption under 40 CFR 96.105, 96.205, or 96.305 shall be construed as exempting any source or facility covered under this Section or the owner or operator or designated representative of any source or facility covered under this Section from complying with any other requirements of this Subchapter or Subchapter 3Q or the Clean Air Act. The Environmental Management Commission may specify through rulemaking a specific emission limit lower than that established under this Rule for a specific source if compliance with the lower emission limit is required to attain or maintain the ambient air quality standard for ozone or fine particulate (PM2.5) or any other ambient air quality standard in Section 3D 0400.

Sec. 3D-2402. Definitions

(a) For the purpose of this Section, the definitions in 40 CFR 96.102, 96.202 and 96.302 shall apply except that solely for the purposes of units subject to Subparagraph 2401 (b)(3), 2301 (b)(4) or 2405(a)(2) of this Section, the term "fossil-fuel-fired" means:

(1) sources that began operation before January 1, 1996, where fossil fuel actually combusted either alone or in combination with any other fuel, comprised more than 50 percent of the annual heat input on a Btu basis during 1995, or, if a source had no heat input in 1995, during the last year of operation of the unit before 1995;

(2) sources that began operation on or after January 1, 1996 and before January 1, 1997, where fossil fuel actually combusted either alone or in combination with any other fuel, comprised more than 50 percent of the annual heat input on a Btu basis during 1996; or

(3) sources that began operation on or after January 1, 1997;

(A) Where fossil fuel actually combusted either alone or in combination with any other fuel, comprised more than 50 percent of the annual heat input on a Btu basis during any year as determined by the owner or operator of the source and verified by the Director; or

(B) Where fossil fuel combusted either alone or in combination with any other fuel, is projected to comprise more than 50 percent of the annual heat input on a Btu basis during any year, provided that the unit shall be "fossil-fuel-fired" as of the date, during such year, on which the source begins combusting fossil fuel.

(b) Notwithstanding the provisions of the definition of "commence commercial operation" in 40 CFR 96.302, for a unit under Subparagraphs 2401 (b)(3), 2301 (b)(4) or 2405 (a)(2) of this Section, and not serving a generator producing electricity for sale, the unit's date of commencement of operation shall also be the unit's date of commencement of commercial operation.

(c) Notwithstanding the provisions of the definition of "commence operation" in 40 CFR 96.302, and solely for the purposes of 40 CFR Part 96 Subpart HHHH, for a unit that is not a CAIR NOx Ozone Season unit, under Subparagraphs 2401 (b)(3), 2401 (b)(4) or 2405 (a)(2) of this Section on the later of November 15, 1990 or the date the unit commenced or commences operation as defined in the first provision of this definition in 40 CFR 96.302 and that subsequently becomes or became such a CAIR

NOx Ozone Season unit, the unit's date for commencement of operation shall be the date on which the unit becomes or became a CAIR NOx Ozone Season unit under Sec. 3D-2401 (b)(3), 2401 (b)(4) or 2405 (a)(2). For a unit with a date of commencement of operation as defined in the first sentence of this Subparagraph and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date shall remain the date of commencement of operation of the unit, which shall continue to be treated as the same unit. For a unit with a date of commencement of operation as defined in the first sentence of this Subparagraph and that subsequently is replaced by a unit at the same source (e.g., repowered), such date shall remain the replaced unit's date of commencement of operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of operation as defined in this Subparagraph.

(d) For the purposes of this Section, the following definitions apply:

(1) "Modification" means modification as defined in Sec. 3D-0101.

(2) "Reconstruction" means the replacement of components of an existing unit that meets the requirements of 40 CFR60.15(b)(1).

(3) "Replacement" means, solely for the purposes of Sec. 3D-2403 and 2405, removing an existing unit and putting in its place at the same facility a functionally equivalent new unit.

(e) For the purpose of this Section, the abbreviations and acronyms listed in 40 CFR 96.103, 96.203, 96.303 shall apply.

Sec. 3D-2403. Nitrogen oxide emissions

(a) Allocations. The annual allocations of nitrogen oxide allowances are:

FACILITY	ALLOCATIONS FOR 2009-2014 (TONS)	ALLOCATIONS FOR 2015 AND LATER (TONS)
Forsyth County has no sources in this category		

(b) Compliance. The emissions of nitrogen oxides of a CAIR NOx source shall not exceed the number of allowances that it has in its compliance account established and administered under Sec. 3D-2408.

(c) Emission measurement requirements. The emissions measurements recorded and reported according to 40 CFR Part 96 Subpart HH shall be used to determine compliance by each CAIR NOx source with its emissions limitation according to 40 CFR 96.106(c) including 96.106(c)(5) and (6).

(d) Excess emission requirements. The provisions of 40 CFR 96.106(d) shall be used for excess emissions.

(e) Liability. The owner or operator of any unit or source covered under this Section shall be subject to the provisions of 40 CFR 96.106(f).

(f) Modification and reconstruction, replacement, retirement, or change of ownership. The modification or reconstruction of a CAIR NOx unit shall not make that CAIR NOx unit a "new" CAIR NOx unit under Sec. 3D-2412. The CAIR NOx unit that is modified or reconstructed shall not change the emission allocation under Paragraph (a) of this Rule. If one or more CAIR NOx units at a facility covered under this Rule is replaced, the new CAIR NOx unit shall not receive an allocation under Sec. 3D-2412, nor shall it change the allocation of the facility. If the owner of a facility changes, the emission allocations under this Rule and revised emission allocations made under Sec. 3D-2413 shall remain with the facility. If a CAIR NOx unit is retired, the owner or operator and the designated representatives of the CAIR NOx unit shall follow the procedures in 40 CFR 96.105. The allocations of a retired CAIR NOx unit shall remain with the owner or operator of the retired CAIR NOx unit until a reallocation occurs under Sec. 3D-2413 when the allocation shall be removed and given to other CAIR NOx units if the retired CAIR NOx unit is still retired using the procedure in Sec. 3D-2413.

Sec. 3D-2404. Sulfur Dioxide

(a) Applicability. This Rule applies only to units that meet the description in Subparagraph 2401 (b)(1) or (2) of this Section.

(b) Allocations. The annual allocation of sulfur dioxide allowances shall be determined by EPA. The allocations for CAIR SO_2 units are in 40 CFR 73.10.

(c) Compliance. The emissions of sulfur dioxides of a source described in Paragraph (a) of this Rule shall not exceed the number of allowances that it has in its compliance account established and administered under Sec. 3D-2408.

(d) Emission measurement requirements. The emissions measurements recorded and reported according to 40 CFR Part 96 Subpart HHH shall be used to determine compliance by each CAIR SO_2 source with its emissions limitation according to 40 CFR 96.206(c), including 96.206(c)(5) and (6).

(e) Excess emission requirements. The provisions of 40 CFR 96.206(d) shall be used for excess emissions.

(f) Liability. The owner or operator of any unit or source covered under this Section shall be subject to the provisions of 40 CFR 96.206(f).

Sec. 3D-2405. Nitrogen oxide emissions during ozone season

(a) Allocations. The ozone season allocations of nitrogen oxide allowances are:

(1) Facilities that meet the description in Sec. 3D-2401 (b)(1) or (b)(2 of this Section.

FACILITY	ALLOCATIONS FOR 2009-2014 (TONS)	ALLOCATIONS FOR 2015 AND LATER (TONS)
Forsyth County has no sources in this category		

In the event that EPA determines that Craven County Wood Energy is not subject to the provisions of this Section, its allocation shall go to the new source growth pool.

(2) Facilities that meet the description in Subparagraph 2401 (b)(3) or (b)(4) of this Section.

FACILITY	ALLOCATION FOR 2009-2014 (TONS)	ALLOCATIONS FOR 2015 AND LATER (TONS)
Forsyth County has no sources in this category		

(b) Ozone season defined. The ozone season is from May 1 through September 30 of each year.

(c) Change in status. If a unit at a facility named in Subparagraph (a)(2) of this Rule meets the description under Subparagraphs (b)(1) or (b)(2) of Sec. 3D-2401, it shall lose its allocation under Subparagraph (a)(2) of this Rule and shall receive an allocation under Sec. 3D-2412 as a new unit until it receives an allocation under Sec. 3D-2413.

(d) Compliance. The nitrogen oxide ozone season emissions of a CAIR NOx Oxon Season source shall not exceed the number of allowances that it has in its compliance account established and administered under Sec. 3D-2408. For purposes of making deductions for excess emissions for the ozone season in 2008 under the NOx SIP Call (Section 3D-1400), the Administrator shall deduct allowances allocated under this Rule for the ozone season in 2009.

(e) Emission measurement requirements. The emissions measurements recorded and reported according to 40 CFR Part 96 Subpart HHHH shall be used to determine compliance by each CAIR NOx Ozone Season source with its emissions limitation according to 40 CFR 96.306(c) including 96.306(c)(5) and (6).

(f) Excess emission requirements. The provisions of 40 CFR 96.306(d) shall be used for excess emissions.

(g) Liability. The owner or operator of any unit or source covered under this Section shall be subject to the provisions of 40 CFR 96.306(f).

(h) Modification and reconstruction, replacement, retirement, or change of ownership. The modification or reconstruction of a CAIR NOx Ozone Season unit shall not make that CAIR NOx Ozone Season unit a "new" CAIR NOx Ozone Season unit under Sec. 3D-2412. The CAIR NOx Ozone Season unit that is modified or reconstructed shall not change the emission allocation under Paragraph (a) of this Rule. If one or more CAIR NOx Ozone Season units at a facility is replaced, the new CAIR NOx Ozone Season unit shall not receive an allocation under Sec. 3D-2412, nor shall it change the allocation of the facility. If the owner of a facility changes, the emission allocations under this Rule and revised emission allocations made under Sec. 3D-2413 shall remain with the facility. If a CAIR NOx Ozone Season unit is retired, the owner or operator, and designated representatives, of the CAIR NOx Ozone Season unit shall follow the procedures in 40 CFR 96.305. The allocations of a retired CAIR NOx Ozone Season unit shall

remain with the owner or operator of the retired CAIR NOx Ozone Season unit until a reallocation occurs under Sec. 3D-2413 when the allocation shall be removed and given to other CAIR NOx Ozone Season units if the retired CAIR NOx Ozone Season unit is still retired using the procedure in Sec. 3D-2413.

Sec. 3D-2406. Permitting

(a) The owner or operator of any source covered under this Section shall submit permit applications to comply with the requirements of this Section following the procedures and requirements in Section 3Q 0500 (Title V permitting procedures) and in:

(1) 40 CFR 96.106(a), 96.121, and 96.122 for each CAIR NOx source;

(2) 40 CFR 96.206(a), 96.221, and 96.222 for each CAIR SO_2 source; and

(3) 40 CFR 96.306(a), 96.321, and 96.322 for each CAIR NOx Ozone Season source.

(b) The Director shall review applications submitted under Paragraph (a) of this Rule and issue permits for compliance with this Section following the procedures and requirements in Section 3Q 0500 (Title V permitting procedures) and in:

(1) 40 CFR 96.106(a), 96.120, 96.123, and 96.124 for each CAIR NOx source;

(2) 40 CFR 96.206(a), 96.220, 96.223, and 96.224 for each CAIR SO_2 source; and

(3) 40 CFR 96.306(a), 96.320, 96.323, and 96.324 for each CAIR NOx Ozone Season source.

Sec. 3D-2407. Monitoring, reporting, and recordkeeping

(a) The owner or operator of a unit covered under this Section shall comply with the monitoring, recordkeeping, and reporting requirements in:

(1) 40 CFR 96.106(b) and (e) and in 40 CFR Part 96, Subpart HH for each CAIR NOx unit;

(2) 40 CFR 96.206(b) and (e) and in 40 CFR Part 96, Subpart HHH for each CAIR SO_2 unit; and

(3) 40 CFR 96.306(b) and (e) and in 40 CFR Part 96, Subpart HHHH for each CAIR Ozone Season NOx unit.

(b) To approve or disapprove monitors used to show compliance with Sec. 3D-2403, 2404 or 2405, the Division shall follow the procedures in:

(1) 40 CFR 96.171 and 40 CFR 96.172 for nitrogen oxides,

(2) 40 CFR 96.271 and 40 CFR 96.272 for sulfur dioxides, and

(3) 40 CFR 96.371 and 40 CFR 96.372 for ozone season nitrogen oxides.

Sec. 3D-2408. Trading program and banking

(a) EPA to administer. The United States Environmental Protection Agency (EPA) shall administer the allowance tracking system according to the procedures in:

(1) 40 CFR Part 96, Subpart FF and Subpart GG for nitrogen oxides;

(2) 40 CFR Part 96, Subpart FFF and Subpart GGG for sulfur dioxide; and

(3) 40 CFR Part 96, Subpart FFFF and Subpart GGGG for ozone season nitrogen oxides.

(b) Compliance account. The owners and operators of each source covered under this Section shall have a compliance account in the EPA administered tracking system that satisfies the requirements of:

(1) 40 CFR 96.151 for nitrogen oxides,
(2) 40 CFR 96.251 for sulfur dioxides, and
(3) 40 CFR 96.351 for ozone season nitrogen oxides.

(c) General account. Any person may apply to open a general account to hold and transfer allowances by using the procedures and meeting the requirements in:

(1) 40 CFR 96.151(b) for nitrogen oxides and may close that account using the procedures in 40 CFR 96.157,
(2) 40 CFR 96.251(b) for sulfur dioxides and may close that account using the procedures in 40 CFR 96.257, and
(3) 40 CFR 96.351(b) for ozone season nitrogen oxides and may close that account using the procedures in 40 CFR 96.357.

(d) Allowance transfers.

(1) Any person who has a compliance or general account established under 40 CFR 96.151 may transfer allowances using the procedures in 40 CFR 96.160.
(2) Any person who has a compliance or general account established under 40 CFR 96.251 may transfer allowances using the procedures in 40 CFR 96.260.
(3) Any person who has a compliance or general account established under 40 CFR 96.351 may transfer allowances using the procedures in 40 CFR 96.360.

(e) Submittal of information. Persons with accounts shall submit information to EPA following the requirements of:

(1) 40 CFR 96.152 for nitrogen oxides,
(2) 40 CFR 96.252 for sulfur dioxides, and
(3) 40 CFR 96.352 for ozone season nitrogen oxides.

(f) Banking. Any person who has a compliance account or a general account may bank allowances for future use or transfer under:

(1) 40 CFR 96.155 for nitrogen oxides,
(2) 40 CFR 96.255 for sulfur dioxides, and
(3) 40 CFR 96.355 for ozone season nitrogen oxides.

(g) Appeal Procedures. The appeal procedures for decisions of the Administrator are set forth in

(1) 40 CFR 96.108 for nitrogen oxides,
(2) 40 CFR 96.208 for sulfur dioxides, and
(3) 40 CFR 96.308 for ozone season nitrogen oxides.

Sec. 3D-2409. Designated representative

(a) Designated representative. The owners and operators of any source covered under this Section shall select a designated representative according to 40 CFR 96.110 for each CAIR NOx source,

96.210 for each CAIR SO_2 source, and 96.310 for each CAIR NOx Ozone Season source. The designated representative shall have the responsibilities and duties set out in 40 CFR 96.110 for 96.210 for a CAIR SO_2 source, and 96.310 for a CAIR NOx Ozone Season source.

(b) Alternate designated representative. The owners and operators of any source covered under this Section shall select an alternate designated representative according to 40 CFR 96.111 for each CAIR NOx source, 96.211 for each CAIR SO_2 source, and 96.311 for each CAIR NOx Ozone Season source. The alternate designated representative shall have the responsibilities and duties set out in 40 CFR 96.111 for a CAIR NOx source, 96.211 for CAIR SO_2 source, and 96.311 for a CAIR NOx Ozone Season source.

(c) Changing designated representative and alternate designated representative. The owner or operator of any source covered under this Section may change the designated representative or the alternate designated representative using:

(1) 40 CFR 96.112 for a CAIR NOx source;

(2) 40 CFR 96.212 for a CAIR SO_2 source; and

(3) 40 CFR 96.312 for a CAIR NOx Ozone Season source.

(d) A CAIR designated representative or alternative CAIR designated representative may delegate his or her authority to make an electronic submission to the Administrator using:

(1) 40 CFR 96.115 for a CAIR NOx source;

(2) 40 CFR 96.215 for a CAIR SO2 source; and

(3) 40 CFR 96.315 for a CAIR NOx Ozone Season source.

(e) Changes in owners and operators. Whenever the owner or operator of a source or unit covered under this Section changes, the following provisions shall be followed:

(1) 40 CFR 96.112(c) for a CAIR NOx source;

(2) 40 CFR 96.212(c) for a CAIR SO_2 source; and

(3) 40 CFR 96.312(c) for a CAIR NOx Ozone Season source.

(f) Certificate of representation. A complete certificate of representation for a CAIR designated representative or an alternate CAIR designated representative shall meet the requirements of 40 CFR 96.113 for nitrogen oxides, 40 CFR 96.213 for sulfur dioxide, and 40 CFR 96.313 for ozone season nitrogen oxides.

(g) Objections concerning CAIR designated representative. Objections concerning CAIR designated representative shall be handled according to the procedures in 40 CFR 96.114 for nitrogen oxides, 40 CFR 96.214 for sulfur dioxide, and 40 CFR 96.314 for ozone season nitrogen oxides.

Sec. 3D-2410. Computation of time

Time periods shall be determined as described in:

(1) 40 CFR 96.107 for nitrogen oxides;

(2) 40 CFR 96.207 for sulfur dioxide, and

(3) 40 CFR 96.307 for ozone season nitrogen oxides.

Sec. 3D-2411. Opt-in provisions

(a) Opting in. The owners and operators of a unit may opt into:

(1) the nitrogen oxide trading program by following the procedures in and meeting the requirements of 40 CFR Part 96 Subpart II,

(2) the sulfur dioxide trading program by following the procedures in and meeting the requirements of 40 CFR Part 96 Subpart III, and

(3) the ozone season nitrogen oxide trading program by following the procedures in and meeting the requirements of 40 CFR Part 96 Subpart IIII.

(b) Permitting. The Director shall permit opt-in units under Paragraph (a) of this Rule according to Subchapter 3Q, Section 0500 and

(1) 40 CFR 96.184 and 96.185 for nitrogen oxides and shall allocate allowances according to 40 CFR 96.188,

(2) 40 CFR 96.284 and 96.285 for sulfur dioxides and shall allocate allowances according to 40 CFR 96.288, and

(3) 40 CFR 96.384 and 96.385 for ozone season nitrogen oxides and shall allocate allowances according to 40 CFR 96.388.

(c) Withdrawing. The owners and operators of an opt-in unit under Paragraph (a) of this Rule may withdraw from the trading program according to:

(1) 40 CFR 96.186 for nitrogen oxides,

(2) 40 CFR 96.286 for sulfur dioxides, and

(3) 40 CFR 96.386 for ozone season nitrogen oxides.

(d) Change in regulatory status. If an opt-in unit becomes:

(1) a CAIR NOx unit under 40 CFR 96.104, then 40 CFR 96.187 shall apply,

(2) a CAIR SO_2 unit under 40 CFR 96.204, then 40 CFR 96.287 shall apply, or

(3) a CAIR ozone season NOx unit under 40 CFR 96.304, then 40 CFR 96.387 shall apply.

Sec. 3D-2412. New unit growth

(a) For nitrogen oxide emissions, the total nitrogen oxide allowances available for allocation in the new unit set-aside for each control period in 2009 through 2014 shall be 2638 tons and the total nitrogen oxide allowances available for allocation in each control period in 2015 and thereafter shall be 1154 tons. Except for the reference to 40 CFR 96.142(b), the procedures in 40 CFR 96.142(c)(2) through (4) shall be used to create allocations for units covered under this Section that commenced operations on or after January 1, 2001 and that are not covered in the table in Sec. 3D-2403.

(b) For ozone season nitrogen oxides emissions, the total ozone season nitrogen oxide allowances available for allocation in the new unit set-aside for each control period in 2009 through 2014 shall 1234 tons and the total ozone season nitrogen oxide allowances available for allocation in each control period in 2015 and thereafter shall be 555 tons. Except for the reference to 40 CFR 96.142(b) the procedures in 40 CFR 96.342(c)(2) through (4) shall be used to create allocations for units covered under this Section that commenced operations on or after January 1, 2001 and that are not listed in the table in

Sec. 3D-2405.

(c) New unit allowances in Paragraph (a) of this Rule that are not allocated in a given year shall be redistributed to units under .2401(b)(1)(A) and (B) according to the provisions of 40 CFR 96.142(d) and 96.342(d) except that the divisor used in calculating individual unit allocations:

(1) for nitrogen oxide allowances shall be 2638 tons for each control period in 2009 through 2014 and 1154 tons in each control period in 2015 and thereafter, and

(2) for ozone season nitrogen oxide allowances shall be 1234 tons for each control period in 2009 through 2014 and 555 tons for each control period in 2015 and thereafter.

(d) The Director shall report the allocations to new units to EPA in accordance with 40 CFR 51.123(o)(2) and (aa)(2).

Sec. 3D-2413. Periodic review and reallocations

In 2010 and every five years thereafter, the Environmental Management Commission shall review the emission allocations of units covered under Sec. 3D-2403 and 2405 and decide if any revisions are needed. In making this decision the Environmental Management Commission shall consider the following:

(1) the size of the allocation pool for new unit growth under Sec. 3D-2412;

(2) the amount of emissions allocations requested by units under Sec. 3D-2412;

(3) the amount of emissions allocations available through the respective trading programs under Sec. 3D-2408;

(4) the impact of reallocation on existing units;

(5) the impact of reallocations on units covered under Sec. 3D-2412;

(6) impact on future growth; and

(7) other relevant information on the impacts of reallocation.

Any revisions of allocations shall be consistent with the requirements in 40 CFR 51.123(o)(2)(ii) and (aa)(2)(iii) or 96.141 and 96.341.

FORSYTH COUNTY, NC - AIR QUALITY CONTROL

SECTION 3D-2500. MERCURY RULES FOR ELECTRIC GENERATORS

Section .2500 was not adopted because Forsyth County has no electric generators.

SECTION 3D-2600. SOURCE TESTING

Sec. 3D-2601. Purpose and scope

(a) The purpose of this Section is to assure consistent application of testing methods and methodologies to demonstrate compliance with emission standards.

(b) This Section shall apply to all air pollution sources.

(c) Emission compliance testing shall be by the procedures of this Section, except as may be otherwise required in Sec. 3D-0524, 0912, 1110, 1111 or 1415.

(d) The Director may approve using test methods other than those specified in this Section under Paragraph (i) of Sec. 3D-2602.

Sec. 3D-2602. General provisions on test methods and procedures

(a) The owner or operator of a source shall perform any required test at his own expense.

(b) The final test report shall describe the training and air testing experience of the person directing the air test.

(c) The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least 45 days before conducting the test.

(d) Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least 15 days before beginning the test so that the Director may at his option observe the test.

(e) For compliance determination, the owner and operator of the source shall provide:

(1) sampling ports, pipes, lines, or appurtenances for the collection of samples and data required by the test procedure;

(2) scaffolding and safe access to the sample and data collection locations; and

(3) light, electricity, and other utilities required for sample and data collection.

(f) Unless otherwise specified in the applicable permit or during the course of the protocol review, the results of the tests shall be expressed in the same units as the emission limits given in the rule for which compliance is being determined.

(g) The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.

(h) The final air emission test report shall be submitted to the Director not later than 30 days after sample collection. The owner or operator may request an extension to submit the final test report.

The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.

(i) The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:

(1) Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.

(2) Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.

(3) Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.

(j) Reserved.

Sec. 3D-2603. Testing protocol

(a) Testing protocols shall include:

(1) an introduction explaining the purpose of the proposed test, including identification of the regulations and permit requirements for which compliance is being demonstrated and the allowable emission limits;

(2) a description of the facility and the source to be tested;

(3) a description of the test procedures (sampling equipment, analytical procedures, sampling locations, reporting and data reduction requirements, and internal quality assurance and quality control activities);

(4) any modifications made to the test methods referenced in the protocol; and

(5) a description of how production or process data will be documented during testing.

(b) The tester shall not deviate from the protocol unless the tester documents the deviation.

Sec. 3D-2604. Number of test points

(a) Method 1 of Appendix A of 40 CFR Part 60 shall be used to select a suitable site and the appropriate number of test points for the following situations:

(1) particulate testing,

(2) volatile organic compounds,

(3) velocity and volume flow rate measurements,

(4) testing for acid mist or other pollutants that occur in liquid droplet form,

(5) any sampling for which velocity and volume flow rate measurements are necessary for computing final test results, or

(6) any sampling that specifies isokinetic sampling.

(b) Method 1 of Appendix A of 40 CFR Part 60 shall be used as written with the following clarifications:

(1) Testing installations with multiple breechings may be accomplished by testing the discharge stack(s) to which the multiple breechings exhaust. If the multiple

breechings are individually tested, then Method 1 shall be applied to each breeching individually.

(2) If test ports in a duct are less than two diameters downstream from any disturbance (fan, elbow, change in diameter, or any other physical feature that may disturb the gas flow) or less than one-half diameter upstream from any disturbance, the acceptability of the test location shall be determined by the Director before the test and after his review of technical and economic factors.

Sec. 3D-2605. Velocity and volume flow rate

Method 2 of Appendix A of 40 CFR Part 60 shall be applied as written and used concurrently with any test method in which velocity and volume flow rate measurements are required.

Sec. 3D-2606. Molecular weight

(a) With the exceptions allowed under Paragraph (b), Method 3 of Appendix A of 40 CFR Part 60 shall be applied as written and used concurrently with any test method when necessary to determine the molecular weight of the gas being sampled by determining the fraction of carbon dioxide, oxygen, carbon monoxide, and nitrogen.

(b) The grab sample technique may be substituted using instruments such as Bacharach Fyrite™ with the following restrictions:

(1) Instruments such as the Bacharach Fyrite™ may only be used for the measurement of carbon dioxide.

(2) Repeated samples shall be taken during the emission test run to account for variations in the carbon dioxide concentration. At least four samples shall be taken during a one-hour test run, but as many as necessary shall be taken to produce a reliable average.

(3) The total concentration of gases other than carbon dioxide, oxygen, and nitrogen shall be less than one percent.

Sec. 3D-2607. Determination of moisture content

Method 4 of Appendix A of 40 CFR Part 60 shall be applied as written and used concurrently with any test method requiring determination of gas moisture content.

Sec. 3D-2608. Number of runs and compliance determination

Each test (excluding fuel samples) shall consist of three repetitions or runs of the applicable test method. For determining compliance with an applicable emission standard, the average of results of all repetitions applies. On a case-by-case basis, compliance may be determined using the arithmetic average of two run results if the Director determines that an unavoidable and unforeseeable event happened beyond the owner's or operator's or tester's control and that a third run could be not be completed.

Sec. 3D-2609. Particulate testing methods

(a) With the exception allowed under Paragraph (b) of this Rule, Method 5 of Appendix A of 40 CFR Part 60 and Method 202 of Appendix M of 40 CFR Part 51 shall be used to demonstrate compliance

with particulate emission standards. The owner or operator may request an exemption from using Method 202 and the Director shall approve the exemption if the Director determines that the demonstration compliance with an applicable emission standard is unlikely to change with or without the Method 202 results included.

(b) Method 17 of Appendix A of 40 CFR Part 60 may be used instead of Method 5 if:

(1) The stack gas temperature does not exceed 320º F,

(2) Particulate matter concentrations are known to be independent of temperature over the normal range of temperatures characteristic of emissions from a specified source category, and

(3) The stack does not contain liquid droplets or is not saturated with water vapor.

(c) Particulate testing on steam generators that use soot blowing as a routine means for cleaning heat transfer surfaces shall be conducted so that the contribution of the soot blowing is represented as follows:

(1) If the soot blowing periods are expected to represent less than 50 percent of the total particulate emissions, only one of the test runs shall include a soot blowing cycle.

(2) If the soot blowing periods are expected to represent more than 50 percent of the total particulate emissions then two of the test runs shall each include a soot blowing cycle. Under no circumstances shall all three test runs include soot blowing. The average emission rate of particulate matter is calculated by the equation:

$$E_{AVG} = S(E_S)\{(A+B)/AR\} + E_N\{((R-S)/R) - (BS/AR)\}$$

where:

(A) E_{AVG} equals the average emission rate in pounds per million Btu for daily operating time.

(B) E_S equals the average emission rate in pounds per million Btu of sample(s) containing soot blowing.

(C) E_N equals the average emission rate in pounds per million Btu of sample(s) with no sootblowing.

(D) A equals hours of soot blowing during sample(s).

(E) B equals hours without soot blowing during sample(s) containing soot blowing.

(F) R equals average hours of operation per 24 hours.

(G) S equals average hours of soot blowing per 24 hours.

The Director may approve an alternate method of prorating the emission rate during soot blowing if the owner or operator of the source demonstrates that changes in boiler load or stack flow occur during soot blowing that are not representative of normal soot blowing operations.

(d) Unless otherwise specified by an applicable rule or federal subpart, the minimum time per test point for particulate testing shall be two minutes, and the minimum time per test run shall be one hour.

(e) Unless otherwise specified by an applicable rule or federal subpart, the sample gas drawn during each test run shall be at least 30 cubic feet.

(f) Method 201 or Method 201A in combination with Method 202 of Appendix M of 40 CFR Part 51 shall be used to determine compliance with PM_{10} emission standards. If the exhaust gas contains

entrained moisture droplets, Method 5 of Appendix A of 40 CFR Part 60 in combination with Method 202 of Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} emission compliance.

Sec. 3D-2610. Opacity

(a) Method 9 of Appendix A of 40 CFR 60 shall be used to show compliance with opacity standards when opacity is determined by visual observation.

(b) Method 22 Appendix A of 40 CFR 60 shall be used to determine compliance with opacity standards when such standards are based upon the frequency of fugitive emissions from stationary sources as specified in the applicable rule or by permit condition.

Sec. 3D-2611. Sulfur Dioxide testing methods

(a) If compliance is to be demonstrated for a combustion source through stack sampling the procedures described in Method 6 or Method 6C of Appendix A of 40 CFR Part 60 shall be used. When Method 6 of Appendix A of 40 CFR Part 60 is used to determine compliance, compliance shall be determined by averaging six 20-minute samples taken over such a period of time that no more than 20 minutes elapses between any two consecutive samples. The 20-minute run requirement only applies to Method 6 not to Method 6C. Method 6C is an instrumental method and the sampling is done continuously.

(b) Fuel burning sources not required to use continuous emissions monitoring to demonstrate compliance with sulfur dioxide emission standards, may determine compliance with sulfur dioxide emission standards by stack sampling or by analyzing sulfur content of the fuel.

(c) For stationary gas turbines, Method 20 of 40 CFR Part 60 shall be used to demonstrate compliance with applicable sulfur dioxide emissions standards.

(d) When compliance is to be demonstrated for a combustion source by analysis of sulfur in fuel, sampling, preparation, and analysis of fuels shall be according to the following American Society of Testing and Materials (ASTM) methods. The Director may approve ASTM methods different from those described in this Paragraph if they will provide equivalent or more reliable results. The Director may prescribe alternate ASTM methods on an individual basis if that action is necessary to secure reliable test data.

(1) Coal Sampling:

(A) Sampling Location. Coal shall be collected from a location in the handling or processing system that provides a sample representative of the fuel bunkered or burned during a boiler operating day. For the purpose of this method, a fuel lot size is defined as the weight of coal bunkered or consumed during each boiler-operating day. For reporting and calculation purposes, the gross sample shall be identified with the calendar day on which sampling began. The Director may approve alternate definitions of fuel lot sizes if the alternative will provide a more representative sample.

(B) Sample Increment Collection. A coal sampling procedure shall be used that meets the requirements of ASTM D 2234 Type I, condition A, B, and C, and systematic spacing for collection of sample increments. All requirements and

restrictions regarding increment distribution and sampling device constraints shall be observed.

(C) Gross Samples. ASTM D 2234, 7.1.2, Table 2 shall be used except as provided in 7.1.5.2 to determine the number and weight of increments (composite or gross samples).

(D) Preparation. ASTM D 2013 shall be used for sample preparation from a composite or gross sample.

(E) Gross Caloric Value (GCV). ASTM D 2015 or D 3286 shall be used to determine GCV on a dry basis from a composite or gross sample.

(F) Moisture Content. ASTM D 3173 shall be used to determine moisture from a composite or gross sample.

(G) Sulfur Content. ASTM D 3177 or D 4239 shall be used to determine the percent sulfur on a dry basis from a composite or gross sample.

(2) Oil Sampling

(A) Sample Collection. A sample shall be collected at the pipeline inlet to the fuel-burning unit after sufficient fuel has been drained from the line to remove all fuel that may have been standing in the line.

(B) Heat Of Combustion. ASTM Method D 240 or D 2015 shall be used to determine the heat of combustion.

(C) Sulfur Content. ASTM Method D 129 or D 1552 shall be used to determine the sulfur content.

The sulfur content and BTU content of the fuel shall be reported on a dry basis. When the test methods described in Subparagraph (d)(1) or (d)(2) of this Rule are used to demonstrate that the ambient air quality standards for sulfur dioxide are being protected, the sulfur content shall be determined at least once per year from a composite of at least three or 24 samples taken at equal time intervals from the fuel being burned over a three-hour or 24-hour period, respectively, whichever is the time period for which the ambient standard is most likely to be exceeded; this requirement shall not apply to sources that are only using fuel analysis in place of continuous monitoring to meet the requirements of Section 3D-0600.

(e) When compliance is shown for sulfuric acid manufacturing plants or spodumene ore roasting plants with Sec. 3D-0517 and 0527, respectively, of this Section through stack sampling, the procedures described in Method 8 of Appendix A of 40 CFR Part 60 shall be used. When Method 8 of Appendix A of 40 CFR Part 60 is used to determine compliance, compliance shall be determined by averaging emissions measured by three one-hour test runs unless otherwise specified in the applicable rule or federal subpart.

(f) When compliance is shown for a combustion source emitting sulfur dioxide not covered under Paragraph (a) through (e) of this Rule through stack sampling, the procedures described in Method 6 or Method 6C of Appendix A of 40 CFR Part 60 shall be used. When using Method 6 procedures to show compliance, compliance shall be determined by averaging six 20-minute samples taken over such a period of time that no more than 20 minutes elapses between any two consecutive samples. The 20-minute run requirement only applies to Method 6 not to Method 6C. Method 6C is an instrumental method and the sampling is done continuously.

Sec. 3D-2612. Nitrogen oxide testing methods

(a) Combustion sources not required to use continuous emissions monitoring to demonstrate compliance with nitrogen oxide emission standards shall demonstrate compliance with nitrogen oxide emission standards using Method 7 or Method 7E of Appendix A of 40 CFR Part 60.

(b) Method 20 of Appendix A of 40 CFR Part 60 shall be used to demonstrate compliance with nitrogen oxide emissions standards for stationary gas turbines.

Sec. 3D-2613. Volatile organic compound testing methods

(a) For surface coating material, such as paint, varnish, stain, and lacquer, the volatile matter content, water content, density, volume of solids, and weight of solids shall be determined by Method 24 of Appendix A of 40 CFR Part 60.

(b) For printing inks and related coatings, the volatile matter and density shall be determined by Method 24A of Appendix A of 40 CFR Part 60.

(c) For solvent metal cleaning equipment, the following procedure shall be followed to perform a material balance test:

(1) clean the degreaser sump before testing;

(2) record the amount of solvent added to the tank with a flow meter;

(3) record the weight and type of workload degreased each day;

(4) at the end of the test run, pump out the used solvent and measure the amount with a flow meter; also, estimate the volume of metal chips and other material remaining in the emptied sump;

(5) bottle a sample of the used solvent and analyze it to find the percent that is oil and other contaminants; the oil and solvent proportions may be estimated by weighing samples of used solvent before and after boiling off the solvent; and

(6) compute the volume of oils in the used solvent. The volume of solvent displaced by this oil along with the volume of makeup solvent added during operations is equal to the solvent emissions.

(d) For bulk gasoline terminals, emissions of volatile organic compounds shall be determined by the procedures set forth in 40 CFR 60.503.

(e) For organic process equipment, leaks of volatile organic compounds shall be determined by Method 21 of Appendix A of 40 CFR Part 60. Organic process equipment includes valves, flanges and other connections, pumps and compressors, pressure relief devices, process drains, open-ended valves, pump and compressor seal system degassing vents, accumulator vessel vents, access door seals, and agitator seals.

(f) For determination of solvent in filter waste (muck and distillation waste) in accordance with Sec. 3D-0912, the tester shall derive the quantity of volatile organic compounds per quantity of discarded filter muck. The procedure to be used in making this determination is the test method described by the American National Standards Institute's "Standard Method of Test for Dilution of Gasoline-Engine Crankcase Oils" (ASTM 322-67 or IP 23/68) except that filter muck is to be used instead of crankcase oil.

(g) For sources of volatile organic compounds not covered under the methods specified in Paragraphs (b) through (e) of this Rule, one of the applicable test methods in Appendix M in 40 CFR Part 51 or Appendix A in 40 CFR Part 60 shall be used to determine compliance with volatile organic compound emission standards.

(h) Compounds excluded from the definition of volatile organic compound under Sec. 3D-0901 shall be treated as water.

Sec. 3D-2614. Determination of voc emission control system efficiency

(a) The provisions of this Rule are applicable to any test method employed to determine the collection or control efficiency of any device or system designed, installed, and operated for the purpose of reducing volatile organic compound emissions.

(b) The following procedures shall be used to determine efficiency:

(1) The volatile organic compound containing material shall be sampled and analyzed using the procedures contained in this Section.

(2) Samples of the gas stream containing volatile organic compounds shall be taken simultaneously at the inlet and outlet of the emissions control device.

(3) The efficiency of the control device shall be expressed as the fraction of total combustible carbon content reduction achieved.

(4) The volatile organic compound mass emission rate shall be the sum of emissions from the control device and emissions not collected by the capture system.

(c) Capture efficiency performance of volatile organic compound emission control systems shall be determined using the EPA recommended capture efficiency protocols and test methods as described in the EPA document, EMTIC GD-035, "Guidelines for Determining Capture Efficiency."

(d) The EPA document, EMTIC GD-035, "Guidelines for Determining Capture Efficiency" cited in this Rule is hereby incorporated by reference including any subsequent amendments or editions. A copy of the referenced materials may be obtained free of charge via the Internet from the EPA TTN website at http://www.epa.gov/ttn/emc/guidlnd.html.

Sec. 3D-2615. Determination of leak tightness and vapor leaks

(a) Leak Testing. One of the following test methods from the EPA document "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection System," EPA-450/2-78-051, published by the U.S. Environmental Protection Agency, December 1978, shall be used to determine compliance with Sec. 3D-0932 Gasoline Truck Tanks And Vapor Collector Systems:

(1) The gasoline vapor leak detection procedure by combustible gas detector described in Appendix B of EPA-450/2-78-051 shall be used to determine leakage from gasoline truck tanks and vapor control systems.

(2) The leak detection procedure for bottom-loaded truck tanks by bag capture method described in Appendix C of EPA-450/2-78-051 shall be used to determine the leak tightness of truck tanks during bottom loading.

(b) Annual Certification. The pressure-vacuum test procedures for leak tightness of truck tanks described in Method 27 of Appendix A of 40 CFR Part 60 shall be used to determine the leak tightness of

gasoline truck tanks in use and equipped with vapor collection equipment. Method 27 of Appendix A of 40 CFR Part 60 is changed to read:

(1) 8.2.1.2 "Connect static electrical ground connections to tank."

(2) 8.2.1.3 "Attach test coupling to vapor return line."

(3) 16.0 No alternative procedure is applicable.

(c) Copies of Appendix B and C of the EPA document, "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection System," EPA-450/2-78-051, cited in this Rule, are hereby incorporated with subsequent amendments and editions by reference and are available on the N. C. Division of Air Quality's website http://daq.state.nc.us/enf/sourcetest.

Sec. 3D-2616. Fluorides

The procedures for determining compliance with fluoride emissions standards shall be by using:

(1) Method 13A or 13B of Appendix A of 40 CFR Part 60 for sampling emissions from stacks; or

(2) Method 14 of Appendix A of 40 CFR Part 60 for sampling emissions from roof monitors not employing stacks or pollutant collection systems.

Sec. 3D-2617. Total reduced Sulfur

(a) Method 16 of Appendix A of 40 CFR Part 60 or Method 16A of Appendix A of 40 CFR Part 60 shall be used to show compliance with total reduced sulfur emission standards.

(b) Method 15 of Appendix A of 40 CFR Part 60 may be used as an alternative method to determine total reduced sulfur emissions from tail gas control units of sulfur recovery plants, hydrogen sulfide in fuel gas for fuel gas combustion devices, and where specified in other applicable federal subparts.

Sec. 3D-2618. Mercury

Method 101 or 102 of Appendix b of 40 CFR Part 61 shall be used to show compliance with mercury emission standards.

Sec. 3D-2619. Arsenic, Beryllium, Cadmium, hexavalent Chromium

(a) Method 29 of 40 CFR Part 60 of Appendix A shall be used to show compliance for arsenic, beryllium, cadmium, and hexavalent chromium metals emission standards.

(b) SW 846 Method 3060 shall be used for the analysis to differentiate hexavalent from total chromium. The EPA publication SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," cited in this Rule is hereby incorporated by reference including any subsequent amendments or editions. A copy of the EPA publication SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," may be obtained free of charge via the Internet from the EPA website at http://www.epa.gov/epaoswer/hazwaste/test/sw846.htm.

Sec. 3D-2620. Dioxins and furans

Method 23 of Appendix A of 40 CFR Part 60 shall be used to show compliance with polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans emission standards.

Sec. 3D-2621. Determination of fuel heat content using F-factor

(a) Emission rates for wood or fuel burning sources that are expressed in units of pounds per million BTU shall be determined by the "Oxygen Based F Factor Procedure" described in Section 5 of Method 19 of Appendix A of 40 CFR Part 60. Other procedures described in Method 19 may be used if appropriate. To provide data of sufficient accuracy for use with the F-factor methods, an integrated (bag) sample shall be taken for the duration of each test run. For simultaneous testing of multiple ducts, there shall be a separate bag sample for each sampling train. The bag sample shall be analyzed with an Orsat analyzer by Method 3 of Appendix A of 40 CFR Part 60. (The number of analyses and the tolerance between analyses are specified in Method 3.) The specifications stated in Method 3 for the construction and operation of the bag sampling apparatus shall be followed.

(b) A continuous oxygen (O_2) and carbon dioxide (CO_2) monitor under Method 3E of Appendix A of 40 CFR Part 60 may be used if the average of all values during the run are used to compute the average concentrations.

(c) The Director may approve the use of alternative methods according to Sec. 3D-2602 if they meet the requirements of Method 3 of Appendix A of 40 CFR Part 60 .

SUBCHAPTER 3H - REPEALED

(Ord. No. 9-94, 12-19-94, 9-14-98)

FORSYTH COUNTY, NC - AIR QUALITY CONTROL

SUBCHAPTER 3Q - AIR QUALITY PERMITS

SECTION 3Q-0100. GENERAL PROVISIONS

Sec. 3Q-0101. Required air quality permits

(a) No owner or operator shall do any of the following activities, that is not otherwise exempted, without first applying for and obtaining an air quality permit:

(1) construct, operate, or modify a source subject to an applicable standard, requirement, or Rule that emits any regulated pollutant or one or more of the following:

(A) sulfur dioxide,
(B) total suspended particulates,
(C) particulate matter (PM10),
(D) carbon monoxide,
(E) nitrogen oxides,
(F) volatile organic compounds,
(G) lead and lead compounds,
(H) fluorides,
(I) total reduced sulfur,
(J) reduced sulfur compounds,
(K) hydrogen sulfide,
(L) sulfuric acid mist,
(M) asbestos,
(N) arsenic and arsenic compounds,
(O) beryllium and beryllium compounds,
(P) cadmium and cadmium compounds,
(Q) chromium (VI) and chromium (VI) compounds,
(R) mercury and mercury compounds,
(S) hydrogen chloride,
(T) vinyl chloride,
(U) benzene,
(V) ethylene oxide,
(W) dioxins and furans,
(X) ozone, or
(Y) any toxic air pollutant listed in Subchapter 3D-1104;

(2) construct, operate, or modify a facility that has the potential to emit at least 10 tons per year of any hazardous air pollutant or 25 tons per year of all hazardous air pollutants combined or that are subject to requirements established under the following sections of the federal Clean Air Act:

(A) Section 112(d), emissions standards;
(B) Section 112(f), standards to protect public health and the environment;

(C) Section 112(g), construction and reconstruction;
(D) Section 112(h), work practice standards and other requirements;
(E) Section 112(i)(5), early reduction;
(F) Section 112(j), federal failure to promulgate standards;
(G) Section 112(r), accidental releases.

(b) Stationary Source Construction and Operation Permit: With the exception allowed by G.S. 143-215.108A, the owner or operator of a new, modified, or existing facility or source shall not begin construction or operation without first obtaining a construction and operation permit in accordance with the standard procedures under Section .0300 of this Subchapter. Title V facilities shall be subject to the Title V procedures under Section .0500 of this Subchapter including the acid rain procedures under Section .0400 of this Subchapter. A facility may also be subject to the air toxic procedures under Section 3Q-0700.

(c) Fees shall be paid in accordance with the requirements of Section 3D-0200

Sec. 3Q-0102. Activities exempted from permit requirements

(a) For the purposes of this Rule, the definitions listed in Section 3D-0101 and Sec. 3Q-0103 shall apply.

(b) This Rule does not apply to:

(1) facilities whose potential emissions require a permit under Section 3Q-0500 (Title V Procedures); or

(2) a source emitting a pollutant that is part of the facility's Section 3D-1100 (Control of Toxic Air Pollutants) modeling demonstration if that source is not exempted under Sec. 3Q-0702.

(c) The owner or operator of an activity exempt from permitting shall not be exempt from demonstrating compliance with any applicable State or federal requirement.

(d) Any facility whose actual emissions of particulate matter (PM10), sulfur dioxide, nitrogen oxides, volatile organic compounds, carbon monoxide, hazardous air pollutants, and toxic air pollutants are each less than five tons per year and whose actual total aggregate emissions are less than 10 tons per year shall not require a permit under Section 3Q-0300. This Paragraph shall not apply to synthetic minor facilities that are subject to Sec. 3Q-0315 of this Subchapter.

(e) Any facility that is not exempted from permitting under Paragraph (d) of this Rule and whose actual total aggregate emissions of particulate matter (PM10), sulfur dioxide, nitrogen oxides, volatile organic compounds, carbon monoxide, hazardous air pollutants, and toxic air pollutants are greater than or equal to five tons per year and less than 25 tons per year may register their facility under Sec. 3D-0202 instead of obtaining a permit under Section 3Q-0300. This Paragraph shall not apply to any facility as follows:

(1) synthetic minor facilities that are subject to Sec. 3Q-0315 of this Subchapter;
(2) facilities with a source subject to maximum achievable control technology under 40 CFR Part 63;
(3) facilities with sources of volatile organic compounds or nitrogen oxides that are located in a nonattainment area; or

(4) facilities with a source subject to NSPS, unless the source is exempted under Paragraph (g) or (h) of this Rule.

(f) The Director may require the owner or operator of a facility to register them under Section 3D-0200 or obtain a permit under Section 3Q-0300 if necessary to obtain compliance with any other applicable requirement under this Section or Section 3D.

(g) The following activities do not require a permit or permit modification under Section 3Q-0300. These activities shall not be included in determining applicability of any rule or standard that requires facility-wide aggregation of source emissions, including activities subject to Sec. 3D-0530, Sec. 3D-0531, Section 3Q-0500, and Section 3Q-0700 unless specifically noted below:

(1) maintenance, upkeep, and replacement:

(A) maintenance, structural changes, or repair activities which do not increase the capacity of such process and do not involve any change in quality or nature or increase in quantity of emission of any regulated air pollutant;

(B) housekeeping activities or building maintenance procedures, including painting buildings, paving parking lots, resurfacing floors, roof repair, washing, portable vacuum cleaners, sweeping, use and associated storage of janitorial products, or insulation removal;

(C) use of office supplies, supplies to maintain copying equipment, or blueprint machines;

(D) use of firefighting equipment (excluding engines subject to 40 CFR 63, Subpart ZZZZ); or

(E) replacement of existing equipment with equipment of the same size (or smaller), type and function that does not result in an increase to the actual or potential emission of regulated air pollutants, and that does not affect the compliance status, and with replacement equipment that fits the description of the existing equipment in the permit, including the application, such that the replacement equipment can be operated under that permit without any changes in the permit;

(2) air conditioning or ventilation: comfort air conditioning or comfort ventilating systems that do not transport, remove, or exhaust regulated air pollutants to the atmosphere;

(3) laboratory or classroom activities:

(A) bench-scale, on-site equipment used for experimentation, chemical or physical analysis for quality control purposes or for diagnosis of illness, training, or instructional purposes;

(B) research and development activities that produce no commercial product or feedstock material; or

(C) educational activities, including but not limited to wood working, welding, and automotive;

(4) storage tanks with no applicable requirements other than Stage I controls under Sec. 3D-0928, Gasoline Service Stations Stage I;

(5) combustion and heat transfer equipment:
  (A) heating units used for human comfort, excluding space heaters burning used oil, that have a heat input of less than 10 million Btu per hour and that do not provide heat for any manufacturing or other industrial process;
  (B) residential wood stoves, heaters, or fireplaces; or
  (C) water heaters that are used for domestic purposes only and are not used to heat process water;

(6) wastewater treatment processes: industrial wastewater treatment processes or municipal wastewater treatment processes for which there are no state or federal air requirements;

(7) dispensing equipment: equipment used solely to dispense gasoline, diesel fuel, kerosene, lubricants or cooling oils;

(8) electric motor burn-out ovens with secondary combustion chambers or afterburners;

(9) electric motor bake-on ovens;

(10) burn-off ovens with afterburners for paint-line hangers;

(11) hosiery knitting machines and associated lint screens, hosiery dryers and associated lint screens, and hosiery dyeing processes where bleach or solvent dyes are not used;

(12) woodworking operations processing only green wood;

(13) solid waste landfills: This does not apply to flares and other sources of combustion at solid waste landfills. These flares and other combustion sources are required to be permitted under Section 3Q-0300, unless they qualify for another exemption under this Paragraph; or

(14) miscellaneous:
  (A) equipment that does not emit any regulated air pollutants;
  (B) sources for which there are no applicable requirements;
  (C) motor vehicles, aircraft, marine vessels, locomotives, tractors, or other self-propelled vehicles with internal combustion engines;
  (D) engines subject to Title II of the Federal Clean Air Act (Emission Standards for Moving Sources);
  (E) equipment used for the preparation of food for direct on-site human consumption;
  (F) a source whose emissions are regulated only under Section 112(r) or Title VI of the Federal Clean Air Act;
  (G) exit gases from in-line process analyzers;
  (H) stacks or vents to prevent escape of sewer gases from domestic waste through plumbing traps;
  (I) refrigeration equipment that is consistent with Section 601 through 618 of Title VI (Stratospheric Ozone Protection) of the Federal Clean Air Act, 40 CFR Part 82, and any other regulations promulgated by EPA under Title VI for stratospheric ozone protection, except refrigeration equipment used as or in conjunction with air pollution control equipment. Refrigeration equipment used

as or in conjunction with air pollution control equipment is required to be permitted under Section 3Q-0300, unless it qualifies for another exemption under this Paragraph;

(J) equipment not vented to the outdoor atmosphere with the exception of equipment that emits volatile organic compounds. Equipment that emits volatile organic compounds is required to be permitted under Section 3Q-0300, unless it qualifies for another exemption under this Paragraph;

(K) animal operations not required to have control technology under Section 3D-1800. If an animal operation is required to have control technology, it shall be required to have a permit under this Subchapter;

(L) any incinerator covered under Sec. 3D-1201(c)(4); or

(M) dry cleaning operations, regardless of NSPS or NESHAP applicability.

(h) The following activities do not require a permit or permit modification under Section 3Q-0300. These activities are included in determining applicability of any rule or standard that requires facility-wide aggregation of source emissions, including activities subject to Sec. 3D-0530, Sec. 3D-0531, Section 3Q-0500, and Section 3Q-0700:

(1) combustion and heat transfer equipment (includes direct-fired units that only emit regulated pollutants from fuel combustion):

(A) fuel combustion equipment (excluding internal combustion engines) not subject to 40 CFR Part 60, NSPS, firing exclusively unadulterated liquid fossil fuel, wood, or approved equivalent unadulterated fuel as defined in Sec. 3Q-0103;

(B) fuel combustion equipment (excluding internal combustion engines) firing exclusively natural gas or liquefied petroleum gas or a mixture of these fuels; or

(C) space heaters burning waste oil if:

(i) the heater burns only oil that the owner or operator generates or used oil from do-it-yourself oil changers who generate used oil as household wastes; and

(ii) the heater is designed to have a maximum capacity of not more than 500,000 Btu per hour;

(2) gasoline distribution: bulk gasoline plants as defined in Sec. 3D-0926(a)(3), with an average daily throughput of less than 4,000 gallons;

(3) paint spray booths or graphic arts operations, coating operations, and solvent cleaning operations as defined in Sec. 3Q-0803 located at a facility whose facility-wide actual uncontrolled emissions of volatile organic compounds are less than five tons per year, except that such emission sources whose actual uncontrolled emissions of volatile organic compounds are less than 100 pounds per year shall qualify for this exemption regardless of the facility-wide emissions. For the purpose of this exemption water wash and filters that are an integral part of the paint spray booth are not considered air pollution control devices;

(4) electrostatic dry powder coating operations with filters or powder recovery systems;

(5) miscellaneous: any source whose potential uncontrolled emissions of particulate matter (PM10), sulfur dioxide, nitrogen oxides, volatile organic compounds, and carbon monoxide shall each be no more than five tons per year; or

(6) case-by-case exemption: activities that the applicant demonstrates to the Director not to violate any applicable emission control standard.

(i) The owner or operator of a facility or source claiming an activity is exempt under Paragraphs (d), (e), (g) or (h) of this Rule shall submit emissions data, documentation of equipment type, or other supporting documents to the Director upon request that the facility or source is qualified for that exemption.

(Ord. No. 4-94, 5-23-94; Ord. No. 9-94, 12-19-94, 7-28-97, 9-14-98, 5-24-99, 10-25-99, 7-24-00, 05-14-01, 7-22-02)

Sec. 3Q-0103. Definitions

For the purposes of this Subchapter, the definitions in G.S. 143-212 and 143-213 and the following definitions apply:

(1) “Administrator” means when it appears in any Code of Federal Regulation incorporated by reference in this Subchapter, the Director of the Office of Environmental Assistance and Protection:

(a) a specific rule in this Subchapter specifies otherwise, or

(b) the U.S. Environmental Protection Agency in its delegation or approval specifically states that a specific authority of the Administrator of the Environmental Protection Agency is not included in its delegation or approval.

(2) "Air Pollutant" means an air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive substance or matter that is emitted into or that otherwise enters the ambient air. Water vapor is not considered air pollutant.

(3) "Allowable emissions" mean the maximum emissions allowed by the applicable Rules contained in Forsyth County Code, Subchapter 3D, Air Quality Control or by permit conditions if the permit limits emissions to a lesser amount.

(4) "Alter or change" means to make a modification.

(5) "Applicable requirements" means:

(a) any requirement of Section 3Q-0500 of this Subchapter;

(b) any standard or other requirement provided for in the implementation plan approved or promulgated by EPA through Rule making under Title I of the federal Clean Air Act that implements the relevant requirements of the federal Clean Air Act including any revisions to 40 CFR Part 52;

(c) any term or condition of a construction permit for a facility covered under Subchapter Sec. 3D-0530, 0531 or 0532;

(d) any standard or other requirement under Section 111 or 112 of the federal Clean Air Act, but not including the contents of any risk management plan required under Section 112 of the federal Clean Air Act;

(e) any standard or other requirement under Title IV;
(f) any standard or other requirement governing solid waste incineration under Section 129 of the federal Clean Air Act;
(g) any standard or other requirement under Section 183(e), 183(f), or 328 of the federal Clean Air Act;
(h) any standard or requirement under Title VI of the federal Clean Air Act unless a permit for such requirement is not required under this Section;
(i) any requirement under Section 504(b) or 114(a)(3) of the federal Clean Air Act; or
(j) any national ambient air quality standard or increment or visibility requirement under Part C of Title I of the federal Clean Air Act, but only as it would apply to temporary sources permitted pursuant to 504(e) of the federal Clean Air Act.

(6) "Applicant" means the person who is applying for an air quality permit from the Office of Environmental Assistance and Protection.
(7) "Application package" means all elements or documents needed to make an application complete.
(8) "CFR" means Code of Federal Regulations.
(9) "Construction" means change in the method of operation or any physical change (including on-site fabrication, erection, installation, replacement, demolition, or modification of a source) that results in a change in emissions or affects the compliance status. The following activities are not construction:
(a) clearing and grading;
(b) building access roads, driveways, and parking lots, except parking lots required to have a construction permit under Section 3Q-0600;
(c) building and installing underground pipe work, including water, sewer, electric, and telecommunications utilities; or
(d) building ancillary structures, including fences and office buildings that are not a necessary component of an air contaminant source, equipment, or associated air cleaning device for which a permit is required under G.S. 143-215.108.
(10) "Director" means the Director of the Office of Environmental Assistance and Protection.
(11) Reserved.
(12) "EPA" means the United States Environmental Protection Agency or the Administrator of the Environmental Protection Agency.
(13) "EPA approves" or means full approval, interim approval, or partial approval by EPA.
(14) "Equivalent unadulterated fuels" means used oils that have been refined such that the content of toxic additives or contaminants in the oil are no greater than those in unadulterated fossil fuels.
(15) "Facility" means all of the pollutant emitting activities, except transportation facilities as defined under Sec. 3Q-0802, that are located on one or more adjacent properties under common control.

(16) "Federally enforceable" or "federal-enforceable" means enforceable by EPA.

(17) "Fuel combustion equipment" means any fuel burning source covered under Sec. 3D-0503, 0504, 0536, or 40 CFR Part 60 Subpart D, Da. Db, or Dc.

(18) "Green wood" means wood with a moisture content of 18 percent or more.

(19) "Hazardous air pollutant" means any pollutant that has been listed pursuant to Section 112(b) of the federal Clean Air Act. Pollutants that are listed only in Sec. 3D-1104 (Toxic Air Pollutant Guidelines), but not pursuant to Section 112(b), are not included in this definition.

(20) "Insignificant activities" means activities defined as insignificant activities because of category or as insignificant activities because of size or production rate under Sec. 3Q-0503.

(21) "Irrevocable contract" means a contract that cannot be revoked without substantial penalty.

(22) "Lesser quantity cutoff" means:

(a) for a source subject to the requirements of Section 112(d) or (j) of the federal Clean Air Act, the level of emissions of hazardous air pollutants below which the following are not required:

(i) maximum achievable control technology (MACT) or generally available control technology (GACT), including work practice standards, requirement under Section 112(d) of the federal Clean Air Act;

(ii) a MACT standard established under Section 112(j) of the federal Clean Air Act;

(iii) substitute MACT or GACT adopted under Section 112(l) of the federal Clean Air Act; or

(b) for modification of a source subject to, or may be subject to, the requirements of Section 112(g) of the federal Clean Air Act, the level of emissions of hazardous air pollutants below which MACT is not required to be applied under Section 112(g) of the federal Clean Air Act; or

(c) for all other sources, potential emissions of each hazardous air pollutant below 10 tons per year and the aggregate potential emissions of all hazardous air pollutants below 25 tons per year.

(23) "Major facility" means a major source as defined under 40 CFR 70.2.

(24) "Modification" means any physical change or change in method of operation that results in a change in emissions or affects compliance status of the source or facility.

(24a) "Office" means the Forsyth County Office of Environmental Assistance and Protection.

(25) "Owner or operator" means any person who owns, leases, operates, controls, or supervises a facility, source, or air pollution control equipment.

(26) "Peak shaving generator" means a generator that is located at a facility and is used only to serve that facility's on-site electrical load during peak demand periods for the

purpose of reducing the cost of electricity; it does not generate electricity for resale. A peak shaving generator may also be used for emergency backup.

(27) "Permit" means the legally binding written document, including any revisions thereto, issued pursuant to Chapter 3 of the Forsyth County Code to the owner or operator of a facility or source that emits one or more air pollutants and that allows that facility or source to operate in compliance with Chapter 3 of the Forsyth County Code. This document specifies the requirements applicable to the facility or source and to the permittee.

(28) "Permittee" means the person who has received an air quality permit from the Office.

(29) "Potential emissions" means the rate of emissions of any air pollutant that would occur at the facility's maximum capacity to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a facility to emit an air pollutant shall be treated as a part of its design if the limitation is federally enforceable. Such physical or operational limitations include air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed. Potential emissions include fugitive emissions as specified in the definition of major source in 40 CFR 70.2. Potential emissions do not include a facility's secondary emissions such as those from motor vehicles associated with the facility and do not include emissions from insignificant activities because of category as defined under Sec. 3Q-0503. If a rule in 40 CFR Part 63 uses a different methodology to calculate potential emissions, that methodology shall be used for sources and pollutants covered under that rule.

(30) "Portable generator" means a generator permanently mounted on a trailer or a frame with wheels.

(31) "Regulated air pollutant" means:

(a) nitrogen oxides or any volatile organic compound as defined under 40 CFR 51.100;

(b) any pollutant for which there is an ambient air quality standard under 40 CFR Part 50;

(c) any pollutant regulated under Sec. 3D-0524, 1110 or 1111 or 40 CFR Part 60, 61, or 63;

(d) any pollutant subject to a standard promulgated under Section 112 of the federal Clean Air Act or other requirements established under Section 112 of the federal Clean Air Act, including Section 112(g) (but only for the facility subject to Section 112(g)(2) of the federal Clean Air Act), (j), or (r) of the federal Clean Air Act; or

(e) any Class I or II substance listed under Section 602 of the federal Clean Air Act.

(32) “Sawmill” means a place or operation where logs are sawed into lumber consisting of one or more of these activities: debarking, sawing, and sawdust handling. Activities

that are not considered part of a sawmill include chipping, sanding, planing, routing, lathing, and drilling.

(33) "Source" means any stationary article, machine, process equipment, or other contrivance, or combination thereof, from which air pollutants emanate or are emitted, either directly or indirectly.

(34) "Toxic air pollutant" means any of the carcinogens, chronic toxicants, acute systemic toxicants, or acute irritants listed in Sec. 3D-1104.

(35) "Transportation facility" means a complex source as defined in G.S. 143-213(22).

(36) "Unadulterated fossil fuel" means fuel oils, coal, natural gas, or liquefied petroleum gas to which no toxic additives have been added that could result in the emissions of a toxic air pollutant listed under Sec. 3D-1104. (Ord. No. 4-94, 5-23-94; Ord. No. 9-94, 12-19-94, 11-11-96, 9-14-98, 5-24-99, 10-25-99, 5-8-06)

Sec. 3Q-0104. Where to obtain and file permit applications

(a) Application forms for a permit or permit modification may be obtained from and shall be filed with the Director, Office of Environmental Assistance and Protection, Forsyth County Government Center, 201 N. Chestnut Street, Winston-Salem, NC 27101-4120.

(b) The number of copies of applications to be filed are specified in Sec. 3Q-0305 (construction and operation permit procedures), 0507 (Title V permit procedures). (Ord. No. 4-94, 5-23-94, 11-11-96, 7-28-97)

Sec. 3Q-0105. Copies of referenced documents

(a) Copies of applicable Code of Federal Regulations (CFR) sections referred to in this Subchapter are available for public inspection at the Office of Environmental Assistance and Protection located at Forsyth County Government Center, 201 N. Chestnut Street, Winston-Salem, NC 27101-4120.

(b) Permit applications and permits may be reviewed at the Forsyth County Office of Environmental Assistance and Protection located at Forsyth County Government Center, 201 N. Chestnut Street, Winston-Salem, NC 27101-4120, excluding information entitled to confidential treatment under Sec. 3Q-0107.

(c) Copies of CFR, permit applications, and permits can be made for ten cents ($0.10) per page. (Ord. No. 4-94, 5-23-94, 11-11-96)

Sec. 3Q-0106. Incorporation by reference

(a) Referenced CFR contained in this Subchapter are incorporated by reference.

(b) Reserved.

(c) The CFR may be purchased from the Superintendent of Documents, P. O. Box 371954, Pittsburgh, PA 15250. The cost of the 40 CFR Parts 61 to 80 is fourteen dollars ($14.00). (Ord. No. 4-94, 5-23-94; Ord. No. 9-94, 12-19-94)

Sec. 3Q-0107. Confidential information

(a) All information required to be submitted to the Director under this Subchapter, Subchapter 3D or Forsyth County Code, Chapter 3, Air Quality Control shall be disclosed to the public unless the person submitting the information can demonstrate that the information is entitled to confidential treatment under G.S. 143-215.3C.

(b) A request that information be treated as confidential shall be made by the person submitting the information at the time that the information is submitted. The request shall state in writing reasons why the information should be held confidential. Any request not meeting these requirements shall be invalid.

(c) The Director shall decide which information is entitled to confidential treatment and shall notify the person requesting confidential treatment of his decision within 180 days of receipt of a request to treat information as confidential.

(d) Information for which a request has been made under Paragraph (b) of this Rule to treat as confidential shall be treated as confidential until the Director decides that it is not confidential. (Ord. No. 4-94, 5-23-94; 12-19-94, 7-28-97,5-24-99)

Sec. 3Q-0108. Delegation of authority

The Director may delegate the processing of permit applications and the issuance of permits to the Division Managers and senior Environmental Specialist of the Office of Environmental Assistance and Protection staff as he considers appropriate. This delegation shall not include the authority to deny a permit application or to revoke or suspend a permit. (Ord. No. 4-94, 5-23-94)

Sec. 3Q-0109. Compliance schedule for previously exempted activities

(a) If a source has heretofore been exempted from needing a permit, but because of change in permit exemptions, it is now required to have a permit as follows:

(1) If the source is located at a facility that currently has an air quality permit, the source shall be added to the air quality permit of the facility the next time that permit is revised or renewed, whichever occurs first.

(2) If the source is located at a facility that currently does not have an air quality permit, the owner or operator of that source shall apply for a permit within six months after the effective date of the change in the permit exemption.

(b) If a source becomes subject to requirements promulgated under 40 CFR Part 63; the owner or operator of the source shall apply for a permit unless exempted by Sec. 3Q-0102 at least 270 days before the final compliance date of the requirement. (Ord. No. 4-94, 5-23-94; 12-19-94, 11-11-96, 05-14-01)

Sec. 3Q-0110. Retention of permit at permitted facility

The permittee shall retain a copy of all active permits issued under this Subchapter at the facility identified in the permit. (Ord. No. 4-94, 5-23-94)

Sec. 3Q-0111. Applicability determinations

Any person may submit a request in writing to the Director requesting a determination as to whether a particular source or facility that the person owns or operates or proposes to own or operate is subject to any of the permitting requirements under this Subchapter. The request shall contain such information believed to be sufficient for the Director to make the requested determination. The Director may request any additional information that is needed to make the determination. (Ord. No. 4-94, 5-23-94)

Sec. 3Q-0112. Reserved.

(8-14-95)

Sec. 3Q-0113. Reserved.

SECTION 3Q-0200. PERMIT FEES

Sec. 3Q-0201. Applicability

(a) This Section is applicable:

(1) as of the permit anniversary date on or after July 1, 1994, to facilities that have or will have actual emissions of:

(A) 100 tons per year or more of particulate, sulfur dioxide, nitrogen oxides, volatile organic compounds, or carbon monoxide ;

(B) 10 tons per year or more of at least one hazardous air pollutant; or

(C) 25 tons per year or more of all hazardous air pollutants combined; and

(2) as of the permit anniversary date on or after October 1, 1994, to all facilities other than the facilities described in Subparagraph (a)(1) of this Rule.

(b) A general facility obtaining a permit under Sec. 3Q-0509 shall comply with provisions of this Section that are applicable to a Title V facility except that the fees are different as stated.

(c) Sec. 3Q-0207 is applicable to all facilities as of its effective date. (Ord. No. 4-94, 5-23-94; Ord. No. 9-94, 12-19-94, 10-8-96, 8-18-98)

Sec. 3Q-0202. Definitions

For the purposes of this Section, the following definitions apply:

(1) "Actual emissions" means the actual rate of emissions in tons per year of any air pollutant emitted from the facility over the preceding calendar year. Actual emissions shall be calculated using the sources' actual operating hours, production rates, in-place control equipment, and types of materials processed, stored, or combusted during the preceding calendar year. Actual emissions include fugitive emissions as specified in the definition of major source in 40 CFR 70.2. For fee applicability and calculation purposes under Sec. 3Q-0201 or 0203 and emissions reporting purposes under Sec. 3Q-0207, actual emissions do not include emissions beyond the normal emissions during violations, malfunctions, start-ups, and shut-downs, do not include a facility's secondary emissions such as those from motor vehicles associated with the facility, and do not include emissions from insignificant activities because of category as defined under Sec. 3Q-0503

(2) "Title V facility" means a facility that is required to have a permit under Section 3Q-0500 except perchloroethylene dry cleaners whose potential emissions are less than:

(A) 10 tons per year of each hazardous air pollutant,

(B) 25 tons per year of all hazardous air pollutants combined, and

(C) 100 tons per year of each regulated air pollutant.

(3) “Minor modifications” means a modification made pursuant to Sec. 3Q-0515, Minor Permit Modifications.

(4) "Synthetic minor facility" means a facility that would be a Title V facility except that the potential emissions are reduced below the thresholds in Paragraph (2) of this Rule by one or more physical or operational limitations on the capacity of the facility to emit an air pollutant. Such limitations must be enforceable by EPA and may include air pollution control equipment and restrictions on hours of operation, the type or amount of material combusted, stored, or processed.

(5) "Significant modifications" means a modification made pursuant to Sec. 3Q-0516, Significant Permit Modifications.

(6) "General facility" means a facility obtaining a permit under Sec. 3Q-0310 or 0509.

(7) "Small facility" means a facility that is not a Title V facility, a synthetic minor facility, a general facility, or an exclusionary small, nor solely a transportation facility.

(8) "Exclusionary Small Facility" means a facility that follows rules under Section 3Q-0800.

(9) "Minor Modification" means a modification made pursuant to Sec. 3Q-0515, Minor Permit Modifications.

(10) "Significant modification" means a modification made pursuant to Sec. 3Q-0516, Significant Permit Modification. (Ord. No. 4-94, 5-23-94; Ord. No. 9-94, 12-19-94, 10-8-96, 8-18-98, 9-21-99, 7-22-02, 11-22-04)

Sec. 3Q-0203. Permit and application fees

(a) The owner or operator of any facility holding a permit shall pay the following permit fees:

ANNUAL PERMIT FEES
(FEES FOR CALENDAR YEAR 2021)

Facility Category	Tonnage Factor	Basic Permit Fee	Nonattainment Area Added Fee	Complexity Fee (3-6 Programs)	Complexity Fee (7+ Programs)
Title V	$40.00	$8,775	$4,056	$2,500	$7,500
Synthetic Minor		$1,500			
Exclusionary Small		$250			
Small		$250			
General	50% of the otherwise applicable fee				

Annual permit fees for Title V facilities shall be adjusted as described in Sec. 3Q-0204. Annual permit fees for Title V facilities in this Paragraph are equal to the sum of the basic permit fee, tonnage factor fee, and nonattainment area added fee, as applicable.

(b) In addition to the annual permit fees required by Paragraph (a) of this Rule, the owner or operator of a Title V facility shall pay the following annual complexity fee, as applicable:

(1) For facilities subject to at least three and no greater than six of the federal programs identified in Paragraph (c) of this Rule, the added annual complexity fee shall be two thousand five hundred dollars ($2,500); or

(2) For facilities subject to seven or greater of the federal programs identified in Paragraph (c) of this Rule, the added annual complexity fee shall be seven thousand five hundred dollars ($7,500).

Annual complexity fees for Title V facilities shall be adjusted for inflation as described in Sec. 3Q-0204.

(c) Each of the programs and regulations identified in Subparagraphs (1) through (5) of this Paragraph are considered a federal program for the purposes of determining annual complexity fees under Paragraph (b) of this Rule:

(1) The PSD program is considered one federal program for any facility that is subject to Sec. 3D-0530;

(2) The Risk Management Program under Section 112r of the Clean Air Act is considered one federal program for any facility that is subject to Section 3D-2100;

(3) Each Subpart under 40 CFR Part 60, New Source Performance Standards (NSPS) is considered one federal program, with the exception of Subparts A, B, Ba, and C;

(4) Each Subpart under 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants (NESHAP) is considered one federal program, with the exception of Subpart A; and

(5) Each Subpart under 40 CFR Part 63, NESHAP for Source Categories, is considered one federal program, with the exception of Subparts A, B, C, D, and E.

The sum of all applicable federal programs identified in Subparagraphs (1) through (5) of this Paragraph shall be used to determine the annual complexity fee in accordance with Paragraph (b) of this Rule.

(d) In addition to the annual permit fee, a permit applicant shall pay a non-refundable permit application fee as follows:

PERMIT APPLICATION FEES
(FEES FOR CALENDAR YEAR 2021)

Facility Category	New or Modification	New	Significant Modification	Minor Modification	Ownership Change
Title V		$10,325	$7000	$3,000	$60
Title V (PSD or NSR/NAA)	$15,631				$60
Title V (PSD and NSR/NAA)	$30,402				$60
Synthetic Minor	$400				$50
Exclusionary Small	$50				$50
Small	$50				$50
General		50% of the otherwise applicable fee			$25

Permit application fees for Title V facilities shall be adjusted as described in Sec. 3Q-0204.

(e) The current annual permit fees, annual complexity fees, and permit application fees shall be found on the Office's website at https://www.forsyth.cc/eap/air_quality_regulation.aspx#fees.

(f) If a facility, other than a general facility, belongs to more than one facility category, the fees shall be those of the applicable category with the highest fees. If a permit application belongs to more than one type of application, the fee shall be that of the applicable permit application type with the highest fee.

(g) The tonnage factor fee shall be applicable only to Title V facilities. It shall be computed by multiplying the tonnage factor indicated in the table in Paragraph (a) of this Rule by the facility's combined total actual emissions of all regulated air pollutants, rounded to the nearest ton contained in the latest emissions inventory that has been completed by the Office. The calculation shall not include:

(1) Carbon monoxide;

(2) any pollutant that is regulated solely because it is a Class I or II substance listed under Section 602 of the federal Clean Air Act (ozone depletors);

(3) any pollutant that is regulated solely because it is subject to a regulation or standard under Section 112(r) of the federal Clean Air Act (accidental releases); and

Even though a pollutant may be classified in more than one pollutant category, the amount of pollutant emitted shall be counted only once for tonnage factor fee purposes and in a pollutant category chosen by the permittee. If a facility has more than one permit, the tonnage factor fee for the facility's combined total actual emissions as described in this Paragraph shall be paid only on the permit whose anniversary date first occurs on or after July 1.

(h) The nonattainment area added fee shall be applicable only to Title V facilities required to comply with Sec. 3D-0531, Section 3D-0900 (Volatile Organic Compounds) or Section 3D-1400 (Nitrogen Oxides) and either:

(1) are in an area designated in 40 CFR 81.334 as nonattainment, or

(2) are covered by a nonattainment or maintenance State Implementation Plan submitted for approval or approved as part of 40 CFR Part 52, Subpart II.

(i) A Title V (PSD or NSR/NAA) facility is a facility whose application is subject to review under Sec. 3D-0530 (Prevention of Significant Deterioration) or Sec. 3D-0531 (Sources in Nonattainment Areas).

(j) A Title V (PSD and NSR/NAA) facility is a facility whose application is subject to review under Sec. 3D-0530 (Prevention of Significant Deterioration) and Sec. 3D-0531 (Sources in Nonattainment Areas).

(k) Minor modification permit applications that are group processed require the payment of only one permit application fee per facility included in the group.

(l) No permit application fee is required for renewal of an existing permit, for changes to an unexpired permit when the only reason for the changes is initiated by the Director, for a name change with no ownership change, for a change under Sec. 3Q-0523 (Changes Not Requiring Permit Revisions) or for a construction date change, a test date change, a reporting procedure change, or a similar change.

(m) The permit application fee paid for modifications under Section 3Q-0400, Acid Rain Procedures, shall be the fee for the same modification if it were under Section 3Q-0500, Title V Procedures.

(n) An applicant who files permit applications pursuant to Sec. 3Q-0504 shall pay an application fee as would be determined by the application fee for the permit required under Section 3Q-0500; this fee will cover both applications provided that the second application covers only what is covered under the first application. If permit terms or conditions in an existing or future permit issued under Section 3Q-0500 will be established or modified by an application for a modification and if these terms or conditions are enforceable by the County only, then the applicant shall pay the fee under the column entitled " Minor Modification" in the table in Paragraph (d) of this Rule.

Sec. 3Q-0204. Fee adjustment

Beginning in 2012, the fees of Sec. 3Q-0203 for Title V facilities shall be adjusted as of October 15 of each year for inflation, based upon the annual (CPI) as reported by the U.S. Department of Labor ending in September. The fee adjustment shall become effective on the following January 1. The fee adjustment shall be done by the method described in 40 CFR 70.9(b)(2)(iv). The Title V tonnage factor shall be rounded to a whole cent and the other fees shall be rounded to a whole dollar, except that the ownership change application fee shall be rounded to the nearest ten-dollar ($10.00) increment. (Ord. No. 4-94, 5-23-94, 10-8-96, 8-18-98, 9-21-99)

Sec. 3Q-0205. Other adjustments

(a) Reserved.

(b) If a facility changes so that its facility category changes, the annual fee changes with the next annual fee.

(c) A facility that is moved to a new site may receive credit toward new permit fees for any unused portion of an annual fee if the permit for the old site is relinquished. (Ord. No. 4-94, 5-23-94)

Sec. 3Q-0206. Payment of fees

(a) Payment of fees required under this Section shall be by check or money order made payable to the Forsyth County General Fund. Annual permit fee payments shall refer to the permit number.

(b) If, within 30 days after being billed, the permit holder fails to pay an annual fee required under this Section, the Director may initiate action to terminate the permit under Sec. 3Q-0309 or 0519, as appropriate.

(c) A holder of multiple permits may arrange to consolidate the payment of annual fees into one annual payment.

(d) The permit application fee required by this Section shall accompany the application and is non-refundable.

(e) The Office shall annually prepare and make publicly available an accounting showing aggregate fee payments collected under this Section from facilities which have obtained or will obtain permits under Section 3Q-0500 except synthetic minor facilities and showing a summary of reasonable direct and indirect expenditures required to develop and administer the Title V permit program. (Ord. No. 4-94, 5-23-94; Ord. No. 9-94, 12-19-94, 05-14-01)

Sec. 3Q-0207. Annual emissions reporting

(a) The owner or operator of a Title V facility shall report by June 30th of each year the actual emissions during the previous calendar year of:

(1) volatile organic compounds,
(2) nitrogen oxides,
(3) total suspended particulates,
(4) sulfur dioxide,
(5) fluorine,
(6) hydrogen chloride,
(7) hydrogen fluoride,
(8) hydrogen sulfide,
(9) methyl chloroform,
(10) methylene chloride,
(11) ozone,
(12) chlorine,
(13) hydrazine,
(14) phosphine,
(15) particulate matter (PM10),
(16) carbon monoxide,
(17) lead and

(18) perchloroethylene.

(b) The accuracy of the report required by Paragraph (a) of this Rule shall be certified by a responsible official of the facility as defined under 40 CFR 70.2.

(c) The owner or operator of a facility not included in Paragraph (a) of this Rule, other than a transportation facility, that has actual emissions of 25 tons per year or more of nitrogen oxides or volatile organic compounds shall report by June 30th of each year the actual emissions of nitrogen oxides and volatile organic compounds during the previous calendar year.

(d) Reserved.

(e) The report shall be in or on such form as may be established by the Director. The Director may require reporting for sources within a facility, for other facilities, or for other pollutants, parameters, or information, by permit condition or pursuant to Sec. 3D-0202 (Registration of Air Pollution Sources). (Ord. No. 4-94, 5-23-94, 11-11-96, 8-18-98)

SECTION 3Q-0300. CONSTRUCTION AND OPERATION PERMIT

Sec. 3Q-0301. Applicability

(a) Except for the permit exemptions allowed under Sec. 3Q-0102 and 0302, the owner or operator of a new, modified, or existing facility or source shall not begin construction or operation without first obtaining a construction and operation permit in accordance with the procedures under Section 3Q-0300; however, Title V facilities are subject to the Title V procedures under Section 3Q-0500 including the acid rain procedures under Section 3Q-0400 for Title IV sources.

(b) The owner or operator of a source required to have a permit under this Section may also be subject to the air toxic permit procedures under Section 3Q-0700.

(c) The owner or operator of a source required to have a permit under this Section shall pay permit fees required under Section 3Q-0200. (Ord. No. 4-94, 5-23-94, 9-14-98)

Sec. 3Q-0302. Repealed

Sec. 3Q-0303. Definitions

For the purposes of this Section, the following definitions apply:

(1) "New facility" means a facility that is receiving a permit from the Office for construction and operation of a source of an emissions polluting operation that it is not currently permitted.

(2) "Modified facility" means a modification of an existing facility or source and:

(A) The permitted facility or source is being modified in such a manner as to require the Office to reissue the permit, or

(B) A new source is being added that requires the Office to reissue the permit.

A modified facility does not include a facility or source that requests to change name or ownership, construction or test dates, or reporting procedures.

(3) "Plans and Specifications" means the completed application and any other documents required to define the operating conditions of the air pollution source.

(4) "Title IV source" means a source that is required to be permitted following the procedures under Section 3Q-0400.

(5) "Title V source" means a source that is required to be permitted following the procedures under Section 3Q-0500. (Ord. No. 4-94, 5-23-94)

Sec. 3Q-0304. Applications

(a) Obtaining and filing application. Permit, permit modification, or permit renewal applications may be obtained and shall be filed in writing according to with Sec. 3Q-0104.

(b) Information to accompany application. Along with filing a complete application form, the applicant shall also file the following:

(1) Reserved.

(2) Reserved.

(3) for permit renewal, an emissions inventory that contains the information specified under Sec. 3D-0202, Registration of Air Pollution Sources (the applicant may use emission inventory forms provided by the Office to satisfy this requirement); and

(4) documentation showing the applicant complies with Parts (A) or (B) of this Subparagraph if the Director finds this information necessary to evaluate the source, its air pollution abatement equipment, or the facility.

(A) The applicant is financially qualified to carry out the permitted activities, or

(B) The applicant has substantially complied with the air quality and emissions standards applicable to any activity in which the applicant has previously been engaged, and has been in substantial compliance with federal and State environmental laws and Rules.

(c) When to file application. For sources subject to the requirements of Sec. 3D-0530 (prevention of significant deterioration) or Sec. 3D-0531 (new source review for sources in nonattainment areas), applicants shall file air permit applications at least 180 days before the projected construction date. For all other sources, applicants shall file air permit applications at least 90 days before the projected date of construction of a new source or modification of an existing source.

(d) Permit renewal, name, or ownership changes with no modifications. If no modification has been made to the originally permitted source, application for permit renewal or ownership change may be made by letter to the Director at the address specified in Sec. 3Q-0104. The renewal, name, or ownership change letter must state that there have been no changes in the permitted facility since the permit was last issued. However, the Director may require the applicant for ownership change to submit additional information, if the Director finds the following information necessary to evaluate the applicant for ownership change, showing that:

(1) The applicant is financially qualified to carry out the permitted activities, or

(2) The applicant has substantially complied with the air quality and emissions standards applicable to any activity in which the applicant has previously been engaged, and has been in substantial compliance with federal and State environmental laws and Rules.

To make a name or ownership change, the applicant shall send the Director the number of copies of letters specified in Sec. 3Q-0305 (a)(3) or (4) of this Section signed by a person specified in Paragraph (j) of this Rule.

(e) Applications for date and reporting changes. Application for changes in construction or test dates or reporting procedures may be made by letter to the Director at the address specified in Sec. 3Q-0104. To make changes in construction or test dates or reporting procedures, the applicant shall send the Director the number of copies of letters specified in Sec. 3Q-0305 (a)(5) signed by a person specified in Paragraph (j) of this Rule.

(f) When to file applications for permit renewal. Applicants shall file applications for renewals such that they are mailed to the Director at the address specified in Sec. 3Q-0104 and postmarked at least 90 days before expiration of the permit.

(g) Name or ownership change. The permittee shall file requests for permit name or ownership changes as soon as the permittee is aware of the imminent name or ownership change.

(h) Number of copies of additional information. The applicant shall submit the same number of copies of additional information as required for the application package.

(i) Requesting additional information. Whenever the information provided on the permit application forms does not adequately describe the source and its air cleaning device, the Director may request that the applicant provide any other information that the Director considers necessary to evaluate the source and its air cleaning device. Before acting on any permit application, the Director may request any information from an applicant and conduct any inquiry or investigation that he considers necessary to determine compliance with applicable standards.

(j) Signature on application. Permit applications submitted pursuant to this Rule shall be signed as follows:

(1) for corporations, by a principal executive officer of at least the level of vice-president, or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the emissions described in the permit application form originates;

(2) for partnership or limited partnership, by a general partner;

(3) for a sole proprietorship, by the proprietor;

(4) for municipal, State, federal, or other public entity, by a principal executive officer, ranking elected official, or other duly authorized employee.

(k) Application fee. With the exceptions specified in Sec. 3Q-0203 (i), a non-refundable permit application processing fee shall accompany each application. The permit application processing fees are defined in Section 3Q-0200. Each permit or renewal application is incomplete until the permit application processing fee is received.

(l) Correcting submittals of incorrect information. An applicant has a continuing obligation to submit relevant facts pertaining to his permit application and to correct incorrect information on his permit application.

(m) Retaining copy of permit application package. The applicant shall retain for the duration of the permit term one complete copy of the application package and any information submitted in support of the application package.

(Ord. No. 4-94, 5-23-94; Ord. No. 9-94, 12-19-94, 5-24-99, 5-8-06)

Sec. 3Q-0305. Application submittal content

(a) If an applicant does not submit, at a minimum, the following information with his application package, the application package shall be returned:

(1) for new facilities and modified facilities:

(A) an application fee as required under Section 3Q-0200,

(B) Reserved.
(C) the documentation required under Sec. 3Q-0304 (b)(2) if required.
(D) a financial qualification or substantial compliance statement if required, and
(E) applications as required under Sec. 3Q-0304 (a) and Paragraph (b) of this Rule and signed as required by Sec. 3Q-0304 (j);

(2) for renewals: two copies of applications as required under Sec. 3Q-0304 (a) and (d) and signed as required by Sec. 3Q-0304 (j); and an emissions inventory that contains the information specified under Sec. 3D-0202, Registration of Air Pollution Sources;

(3) for a name change: two copies of a letter signed by the appropriate individual listed in Sec. 3Q-0304 (j) indicating the current facility name, the date on which the name change shall occur, and the new facility name;

(4) for an ownership change: an application fee as required under Section 3Q-0200 and:
(A) two copies of a letter sent by each, the seller and the buyer, indicating the change, or
(B) two copies of a letter sent by either bearing the signature of both the seller and buyer, containing a written agreement with a specific date for the transfer of permit responsibility, coverage, and liability between the current and new permittee; and

(5) for corrections of typographical errors; changes in name, address, or telephone number of any individual identified in the permit; changes in test dates or construction dates; or similar minor changes: two copies of a letter signed by the appropriate individual listed in Sec. 3Q-0304 (j) describing the proposed change and explaining the need for the proposed change.

(b) The applicant shall submit copies of the application package as follows:
(1) six copies for sources subject to the requirements of Sec. 3D-0530, 0531 or 1200; or
(2) three copies for sources not subject to the requirements of Sec. 3D-0530, 0531 or 1200. (Ord. No. 4-94, 5-23-94, 11-22-04, 5-8-06)

Sec. 3Q-0306. Permits requiring public participation

(a) The Director shall provide for public notice for comments with an opportunity for the public to request a public hearing on draft permits for the following:

(1) any source that may be designated by the Director based on significant public interest relevant to air quality;
(2) a source to which Sec. 3D-0530 or 0531applies;
(3) a source whose emission limitation is based on a good engineering practice stack height that exceeds the height defined in Sec. 3D-0533 (a)(4)(A), (B) or (C);
(4) a source required to have controls more stringent than the applicable emission standards in Secion 3D-0500, according to Sec. 3D-0501 when necessary to comply with an ambient air quality standard under Section 3D-0400;

(5) alternative controls different than the applicable emission standards in Section 3D-0900 according to Sec. 3D-0952;

(6) a limitation on the quantity of solvent-borne ink that may be used by a printing unit or printing system according to Sec. 3D-0961 and 0965;

(7) an allowance of a particulate emission rate of 0.08 grains per dry standard cubic foot for an incinerator constructed before July 1, 1987, according to Sec. 3D-1204 (c)(2)(B) or 1208 (b)(2)(B);

(8) an alternative mix of controls under Sec. 3D-0501 (f);

(9) a source that is subject to the requirements of Sec. 3D-1109 or 1112; or

(10) a source seeking exemption from the 20-percent opacity standard in Sec. 3D-0521 under paragraph 0521 (f).

(11) a source using an alternative monitoring procedure or methodology under Sec. 3D-0606 (g) or 0608 (g);

(12) when the owner or operator who requests that the draft permit go to public notice with an opportunity to request a public hearing, or

(b) On the Office's website, the Director shall post a copy of the draft permit that changes classification for a facility by placing a physical or operational limitation in it to avoid the applicability of rules in Section 3Q-0500. Along with the draft permit, the Director shall also post a public notice for comments with an opportunity to request a public hearing on that draft permit. The public notice shall contain the information specified in Paragraph (c) of Sec. 3Q-0307 and shall allow at least 30 days for public comment.

(c) If EPA requires the County to submit a permit as part of the North Carolina State Implementation Plan for Air Quality (SIP) and if the Director approves a permit containing any of the conditions described in Paragraph (a) of this Rule as a part of the SIP, the Director shall submit the permit to the EPA for inclusion as part of the federally approved SIP.

Sec. 3Q-0307. Public participation procedures

(a) This Rule does not apply to sources subject to the requirements of Sec.3D-0530 or 0531 or Appendix S of 40 CFR Part 51. For sources subject to the requirements of Sec. 3D-0530 or 0531 or Appendix S of 40 CFR Part 51, the procedures in Sec. 3D-0530 or 0531 or Appendix S of 40 CFR Part 51 shall be followed, respectively.

(b) The public notice shall be given by publication in a newspaper of general circulation in the area where the facility is located and shall be mailed or emailed to persons who are on the Office's mailing or emailing list for air quality permit notices and to EPA.

(c) The public notice shall identify:

(1) the affected facility;

(2) the name and address of the permittee;

(3) the name and address of the person to whom to send comments and requests for public hearing;

(4) the name, address, and telephone number of an Office staff person from whom interested persons may obtain additional information, including copies of the draft permit, the application, compliance plan, monitoring and compliance reports, all other relevant supporting materials, and all other materials available to the Office that are relevant to the permit decision;

(5) the activity or activities involved in the permit action;

(6) any emissions change involved in any permit modification;

(7) a brief description of the public comment procedures;

(8) the procedures to follow to request a public hearing unless a public hearing has already been scheduled; and

(9) the time and place of any hearing that has already been scheduled.

(d) The notice shall allow at least 30 days for public and EPA comments.

(e) If the Director determines that significant public interest exists or that the public interest will be served, the Director shall require a public hearing to be held on a draft permit. Notice of a public hearing shall be given at least 30 days before the public hearing.

(f) The Director shall make available for public inspection in at least one location in the region affected, the information submitted by the permit applicant and the Office's analysis of that application.

(g) The Director shall send EPA a copy of each draft permit subject to public and EPA comment when he sends EPA the notice of request for public comment for that permit and shall send EPA a copy of each such permit when it is issued.

(h) Persons who desire to be placed on the Office's mailing or emailing notification list for air quality permit notices shall send their request to the Director, Office of Environmental Assistance and Protection, Forsyth County Government Center, 201 N. Chestnut Street, NC 27101-4120 or subscribe to the permits email list serve on the Forsyth County Environmental Affairs' website.

(Ord. No. 4-94, 5-23-94, 7-28-97)

Sec. 3Q-0308. Final action on permit applications

(a) The Director may:

(1) issue a permit, permit modification, or a renewal containing the conditions necessary to carry out the purposes of Chapter 3 of the Forsyth County Code;

(2) rescind a permit upon request by the permittee;

(3) deny a permit application when necessary to carry out the purposes of Chapter 3 of the Forsyth County Code;

(b) Any person whose application for a permit, permit modification, renewal or letter requesting change in name or ownership, construction or test date, or reporting procedure, is denied or is granted subject to conditions which are unacceptable to him shall have the right to appeal the Director's decision under Sec. 0109 of Chapter 3. The person shall have 30 days following receipt of the notice of the Director's decision on the application or permit in which to appeal the Director's decision. The permit becomes final if the applicant does not contest the permit within this 30-day period.

(c) The Director shall issue or renew a permit for a term of eight years. (Ord. No. 4-94, 5-23-94; Ord. No. 9-94, 12-19-94)

Sec. 3Q-0309. Termination, modification and revocation of permits

(a) The Director may terminate, modify, or revoke and reissue any permit issued under this Section if:

(1) The information contained in the application or presented in support thereof is determined to be incorrect;

(2) The conditions under which the permit or permit renewal was granted have changed;

(3) Violations of conditions contained in the permit have occurred;

(4) The permit holder fails to pay the fee required under Section 3Q-0200 within 30 days after being billed;

(5) The permittee refuses to allow the Director or his authorized representative upon presentation of credentials:

(A) to enter, at reasonable times and using reasonable safety practices, the permittee's premises in which a source of emissions is located or in which any records are required to be kept under terms and conditions of the permit;

(B) to have access, at reasonable times, to any copy or records required to be kept under terms and conditions of the permit;

(C) to inspect, at reasonable times and using reasonable safety practices, any source of emissions, control equipment, and any monitoring equipment or method required in the permit; or

(D) to sample, at reasonable times and using reasonable safety practices, any emission source at the facility;

(6) The Director finds that termination, modification, or revocation and reissuance of a permit is necessary to carry out the purpose of Chapter 3 of the Forsyth County Code.

(b) The permittee shall furnish the Office, in a timely manner, any reasonable information that the Director may request in writing to determine whether cause exists for terminating, modifying, or revoking and reissuing the permit or to determine compliance with the permit.

(c) The operation of a facility or source after its permit has been terminated is a violation of this Section.

(d) The permittee may request modifications to his permit.

(e) The filing of a request by a permittee for a permit termination, modification, revocation and reissuance, notification of planned changes, or anticipated noncompliance does not stay any permit term or condition.

(f) When a permit is modified, the proceedings shall affect only those parts of the permit that are being modified.

(g) The changes in this rule are effective July 1, 1999. (Ord. No. 4-94, 5-23-94; Ord. No. 9-94, 12-19-94, 5-24-99)

Sec. 3Q-0310. Permitting of numerous similar facilities

(a) The Director may issue a permit to cover numerous similar facilities or sources.

(b) The Director shall not issue a permit under this Rule unless the following conditions are met:

(1) There is no unique difference that would require special permit conditions for any individual facility; and

(2) No unique analysis is required for any facility covered under the permit.

(c) A permit issued under this Rule shall identify criteria by which facilities or sources may qualify for the permit. The Director shall grant the terms and conditions of the permit to facilities or sources that qualify.

(d) The facility or source shall be subject to enforcement action for operating without a permit if the facility or source is later determined not to qualify for the terms and conditions of the permit issued under this Rule.

(e) The owner or operator of a facility or source that qualifies for a permit issued under this Rule shall apply for coverage under the terms of the permit issued under this Rule or shall apply for a standard permit under this Section. (Ord. No. 4-94, 5-23-94)

Sec. 3Q-0311. Permitting of facilities at multiple temporary sites

(a) The Director may issue a single permit authorizing emissions from a facility or source at multiple temporary sites.

(b) Permits for facilities at multiple temporary sites shall include:

(1) the identification of each site;

(2) the conditions that will assure compliance with all applicable requirements at all approved sites;

(3) a requirement that the permittee notify the Office at least 10 days in advance of each change of site; and

(4) the conditions that assure compliance with all other provisions of this Section. (Ord. No. 4-94, 5-23-94, 11-11-96)

Sec. 3Q-0312. Application processing schedule

(a) The Office shall adhere to the following schedule for processing applications for permits, permit modifications, and permit renewals:

(1) for permit applications, except for prevention of significant deterioration under Sec. 3D-0530, case-by-case maximum achievable control technology under Sec. 3D-1109, or 1112, or a request for synthetic minor facility status before one year after EPA approves Section 3Q-0500:

(A) The Office shall send written acknowledgment of receipt of the permit application to the applicant within 10 days of receipt of the application.

(B) The Office shall review all permit applications within 45 days of receipt of the application to determine whether the application is complete or incomplete for processing purposes. The Office shall notify the applicant by letter:

(i) stating that the application as submitted is complete and specifying the completeness date,

(ii) stating that the application is incomplete, requesting additional information and specifying the deadline date by which the requested information is to be received by the Office, or

(iii) stating that the application is incomplete and requesting that the applicant rewrite and resubmit the application.

If the Office does not notify the applicant by letter dated within 45 days of receipt of the application that the application is incomplete, the application shall be deemed complete. A completeness determination shall not prevent the Director from requesting additional information at a later date when such information is considered necessary to properly evaluate the source, its air pollution abatement equipment, or the facility. If the applicant has not provided the requested additional information by the deadline specified in the letter requesting additional information, the Director may return the application to the applicant as incomplete. The applicant may request a time extension for submittal of the requested additional information.

(C) The Office shall determine within 45 days of receipt of a complete application if any additional information is needed to conduct the technical review of the application. A technical completeness determination shall not prevent the Director from requesting additional information at a later date when such information is considered necessary to properly evaluate the source, its air pollution abatement equipment or the facility. The Office shall complete the technical review within 90 days of receipt of a complete application or 10 days after receipt of requested additional information, whichever is later.

(D) If the draft permit is not required to go to public notice or to public hearing, the Director shall issue or deny the permit within 90 days of receipt of a complete application or 10 days after receipt of requested additional information, whichever is later. For renewals, the Director shall issue or deny the permit within 90 days of receipt of a complete application, or 10 days after receipt of requested additional information, or by the expiration date of the permit, whichever is later.

(E) If the draft permit is required to go to public notice with a request for opportunity for public hearing under Sec. 3Q-0306 (a), the Director shall:

(i) send the draft permit to public notice within 90 days after receipt of a complete application; and

(ii) complete the review of the record and take final action on the permit within 30 days after the close of the public comment period.

(F) If the draft permit is required to go to public hearing as a result of a request for public hearing under Sec. 3Q-0307 (e) of this Section, the Director shall:

(i) send the draft permit to public hearing within 45 days after approving the request for the public hearing; and

(ii) complete the review of the record and take final action on the permit within 30 days after the close of the public hearing.

(2) for permit applications for prevention of significant deterioration under Sec. 3D-0530, the processing schedules are set out in those Rules.

(3) for case-by-case maximum achievable control technology under Sec. 3D-1109 or 1112:

(A) The Office shall send written acknowledgment of receipt of the permit application to the applicant within 10 days of receipt of the application.

(B) The Office shall review all permit applications within 45 days of receipt of the application to determine whether the application is complete or incomplete for processing purposes. The Office shall notify the applicant by letter:

(i) stating that the application as submitted is complete and specifying the completeness date,

(ii) stating that the application is incomplete, requesting additional information and specifying the deadline date by which the requested information is to be received by the Office, or

(iii) stating that the application is incomplete and that the applicant rewrite and resubmit the application.

If the Office does not notify the applicant by letter dated within 45 days of receipt of the application that the application is incomplete, the application shall be deemed complete. A completeness determination shall not prevent the Director from requesting additional information at a later date when such information is considered necessary to properly evaluate the source, its air pollution abatement equipment, or the facility. If the applicant has not provided the requested additional information by the deadline specified in the letter requesting additional information, the Director may return the application to the applicant as incomplete. The applicant may request a time extension for submittal of the requested additional information.

(C) The Office shall determine within 60 days of receipt of a complete application if any additional information is needed to conduct the technical review of the application. A technical completeness determination shall not prevent the Director from requesting additional information at a later date when such information is considered necessary to properly evaluate the source, its air

pollution abatement equipment or the facility. The Office shall complete the technical review within 120 days of receipt of a complete application or 10 days after receipt of requested additional information, whichever is later.

(D) The Director shall:

(i) send the draft permit to public notice within 120 days after receipt of a complete application or 10 days after receipt of requested additional information, whichever is later; and

(ii) complete the review of the record and take final action on the permit within 30 days after the close of the public comment period.

(E) If the draft permit is required to go to public hearing as a result of a request for public hearing under Sec. 3Q-0307 (e), the Director shall:

(i) send the draft permit to public hearing within 45 days after approving the request for the public hearing; and

(ii) complete the review of the record and take final action on the permit within 30 days after the close of the public hearing.

(4) Requests for synthetic minor facility status before one year after EPA approves Section 3Q-0500 shall be acted on within one year after EPA approves Section 3Q-0500.

(b) The days that fall between sending out a letter requesting additional information and receiving that additional information shall not be counted in the schedules under Paragraph (a) of this Rule.1

(c) The Director may return at any time applications containing insufficient information to complete the review. (8-14-95, 7-28-97, 9-14-98)

Sec. 3Q-0313. Reserved.

(9-14-98)

Sec. 3Q-0314. General permit requirements

(a) All emissions limitations, controls, and other requirements imposed by a permit issued pursuant to this Section shall be at least as stringent as any other applicable requirement as defined under Sec. 3Q-0103. The permit shall not waive or make less stringent any limitation or requirement contained in any applicable requirement.

(b) Emissions limitations, controls and requirements contained in permits issued pursuant to this Section shall be permanent, quantifiable, and otherwise enforceable as a practical matter under G.S. 143-215.114A, 143-215.114B, and 143-215.114C.

(c) The owner or operator of a source permitted under this Section shall comply with the permit. Failure of the owner or operator of a permitted source to adhere to the terms and conditions of the permit shall be grounds for:

(1) enforcement action;

(2) permit termination, revocation and reissuance, or modification; or

(3) denial of permit renewal applications.

(d) A permit does not convey any property rights of any sort, or any exclusive privileges.

(5-24-99)

Sec. 3Q-0315. Synthetic minor facilities

(a) A synthetic minor facility is a facility whose permit contains terms and conditions to avoid the procedures of Section 3Q-0500, Title V Procedures.

(b) The owner or operator of a facility to which Section 3Q-0500, Title V Procedures, applies may choose to have terms and conditions placed in his permit to restrict operation to limit the potential to emit of the facility in order to remove the applicability of Section 3Q-0500 to the facility. An application for the addition of such terms and conditions shall be processed under this Section.

(c) A modification to a permit to remove terms and conditions in the permit that removed the applicability of Section 3Q-0500 shall be processed under either this Section or Section 3Q-0500. The applicant shall choose which procedures to follow. However, if the terms and conditions are removed following the procedures of this Section, the permittee shall submit a permit application under the procedures of Section 3Q-0500 within one year after the limiting terms and conditions are removed.

(d) After a facility is issued a permit that contains terms and conditions to remove the applicability of Section 3Q-0500, the facility shall comply with the permitting requirements of this Section.

(e) The Director may require monitoring, recordkeeping, and reporting necessary to assure compliance with the terms and conditions placed in the permit to remove the applicability of Section 3Q-0500.

(Ord. No. 4-94, 5-23-94, 5-24-99)

Sec. 3Q-0316. Administrative permit amendments

(a) An "administrative permit amendment" means a permit revision that:

(1) corrects typographical errors;

(2) identifies a change in the name, address or telephone number of any individual identified in the permit, or provides a similar minor administrative change at the facility;

(3) requires more frequent monitoring or reporting by the permittee;

(4) changes test dates or construction dates provided that no applicable requirements are violated by the change in test dates or construction dates; or

(5) changes the permit number without changing any portion of the permit that would not otherwise qualify as an administrative amendment.

(b) In making administrative permit amendments, the Director:

(1) shall take final action on a request for an administrative permit amendment within 60 days after receiving such a request, and

(2) may make administrative amendments without providing notice to the public.

(c) The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. (05-14-01)

Sec. 3Q-0317. Avoidance conditions

(a) The owner or operator of a facility may request that terms and conditions be placed in that facility's permit to avoid the applicability of:

(1) Sec. 3D-0530, Prevention of Significant Deterioration,
(2) Sec. 3D-0531, Sources in Nonattainment Areas,
(3) Section 3D-0900, Volatile Organic Compounds,
(4) Sec. 3D-1109, 112(j) Case-by-Case Maximum Achievable Control Technology,
(5) Sec. 3D-1111, Maximum Achievable Control Technology,
(6) Sec. 3D-1112(g) Case-by-Case Maximum Achievable Control Technology,
(7) Section 3D-1400, Nitrogen Oxides, or
(8) other rules of Subchapter 3D, Air Pollution Control Requirements or Title 40 of the Code of Federal Regulations that contain applicability thresholds.

(b) The Director may require the monitoring, recordkeeping, and reporting necessary to assure compliance with the terms and conditions placed in the permit to remove the applicability of a rule. (05-14-01)

Sec. 3Q-0318. Changes not requiring permit revisions

(a) This rule applies to sources that are not exempt under Sec. 0102 of this Subchapter. This rule applies to facilities that have an air quality permit.

(b) An owner or operator of a facility may make changes without first modifying their air permit if:

(1) the change does not violate any existing requirements or new applicable requirements;
(2) the change does not cause emissions allowed under the current permit to be exceeded;
(3) the change does not require a modification of a permit term or condition under Sec. 3Q-0315 or avoidance condition under Sec. 3Q-0317 of this Section;
(4) the change does not require a permit under Section 3Q-0700, Toxic Air Pollutant Procedures;
(5) Reserved; and
(6) the owner or operator shall notify the Director with written notification seven calendar days before the change is made. Within seven calendar days of receipt of the notice, the Director shall notify the owner or operator of its determination that the change meets the requirements of Subparagraphs (b)(1) through (b)(5).

(c) The written notification required under Subparagraph (b)(6) of this Rule shall include:

(1) a description of the change;
(2) a date on which the change will occur;
(3) any change in emissions; and

(4) any permit terms or conditions of the current permit that may be affected by this change.

(d) A copy of the notification required under Subparagraph (b)(6) of the Rule shall be attached to the current permit until the permit is revised at the next modification, name change, ownership change, or renewal.

SECTION 3Q-0400. ACID RAIN PROCEDURES

Sec. 3Q-0401. Purpose and applicability

(a) The purpose of this Rule is to implement Phase II of the federal acid rain program pursuant to the requirements of Title IV of the Clean Air Act as provided in 40 CFR Part 72 and 76.

(b) This Section applies to the sources described in 40 CFR 72.6 with such exceptions as allowed under 40 CFR 72.6.

(c) A certifying official of any unit may petition the Administrator for a determination of applicability under 40 CFR 72.6(c). The Administrator's determination of applicability shall be binding upon the Office, except as allowed under 40 CFR 72.6(c). (Ord. No. 4-94, 5-23-94, 11-11-96, 5-24-99, 05-14-01)

Sec. 3Q-0402. Acid rain permitting procedures

(a) For the purpose of this Rule the definitions contained in 40 CFR 72.2 and 76.2 and the measurements, abbreviations, and acronyms contained in 40 CFR 72.3 shall apply.

(b) Affected units as defined in 40 CFR 72.6, 76.1 or Paragraph (b)(1) of Sec. 3Q-0401 shall comply with the permit, monitoring, sulfur dioxide, nitrogen oxides, excess emissions, recordkeeping and reporting, liability, and any other provisions as required in 40 CFR Part 72 and 76. The term "permitting authority" shall mean Office of Environmental Assistance and Protection, and the term "Administrator" shall mean the Administrator of the United States Environmental Protection Agency.

(c) If the provisions or requirements of 40 CFR part 72 or 76 conflict with or are not included in Section 3Q-0500, then Part 72 or 76 provisions and requirements shall apply and take precedence. (Ord. No. 4-94, 5-23-94, 11-11-96, 5-24-99)

Sec. 3Q-0403. - Sec. 3Q-0418. Reserved.

(Ord. No. 4-94, 5-23-94, 11-11-96)

SECTION 3Q-0500. TITLE V PROCEDURES

Sec. 3Q-0501. Purpose of section and requirement for a permit

(a) The purpose of this Section is to establish an air quality permitting program as required under Title V and 40 CFR Part 70.

(b) The procedures and requirements under this Section do not apply until EPA approves this Section.

(c) With the exception in Paragraph (d) of this Rule, the owner or operator of an existing facility, new facility, or modification of an existing facility (except for minor modifications under Sec. 3Q-0515), including significant modifications that would not contravene or conflict with a condition in the existing permit, subject to the requirements of this Section shall not begin construction without first obtaining:

(1) a construction and operation permit following the procedures under this Section (except for Sec. 3Q-0504), or

(2) a construction and operation permit following the procedures under Sec. 3Q-0504 and filing a complete application within 12 months after commencing operation to modify the construction and operation permit to meet the requirements of this Section.

(d) If the permittee proposes to make a significant modification under Sec. 3Q-0516 that would contravene or conflict with a condition in the existing permit, he shall not begin construction or make the modification until he has obtained:

(1) a construction and operation permit following the procedures under this Section (except for Sec. 3Q-0504); or

(2) a construction and operation permit following the procedures under Sec. 3Q-0504 and, before beginning operation, files an application and obtains a permit modifying the construction and operation permit to meet the requirements of this Section (except for Sec. 3Q-0504).

(e) All facilities subject to this Section must have a permit to operate that assures compliance with 40 CFR Part 70 and all applicable requirements.

(f) Except as allowed under Sec. 3Q-0515 (minor modifications), no facility subject to the requirements of this Section may operate after the time that it is required to submit a timely and complete application under this Section except in compliance with a permit issued under this Section. This Paragraph does not apply to initial submittals under Sec. 3Q-0506 or to permit renewals under Sec. 3Q-0513.

(g) If the conditions of Sec. 3Q-0512 (b) (application shield) are met, the facility's failure to have a permit under this Section shall not be a violation.

(h) If the owner or operator of a facility subject to the requirements of this Section submits an application for a revision to his permit before receiving the initial permit under this Section, the application for the revision shall be processed under Section 3Q-0300.

(i) The owner or operator of a facility or source subject to the requirements of this Section may also be subject to the toxic air pollutant procedures under Section 3Q-0700.

(j) The owner or operator of an affected unit subject to the acid rain program requirements of Title IV is also subject to the procedures under Section 3Q-0400.

(k) The owner or operator of a facility subject to the requirements of this Section shall pay permit fees in accordance with the requirements of Section 3Q-0200. (Ord. No. 4-94, 5-23-94, 11-11-96, 9-14-98)

Sec. 3Q-0502. Applicability

(a) Except as provided in Paragraph (b) of this Rule, the following facilities are required to obtain a permit under this Section:

(1) major facilities;

(2) facilities with a source subject to Sec. 3D-0524 or 40 CFR Part 60, except new residential wood heaters;

(3) facilities with a source subject to Sec. 3D-1110 or 40 CFR Part 61, except asbestos demolition and renovation activities;

(4) facilities with a source subject to Sec. 3D-1111 or 40 CFR Part 63 or any other standard or other requirement under Section 112 of the federal Clean Air Act, except that a source is not required to obtain a permit solely because it is subject to Rules or requirements under Section 112(r) of the federal Clean Air Act;

(5) facilities to which Sec. 3D-0517(2), 0528, 0529 or 0534, applies;

(6) facilities with a source subject to Title IV or 40 CFR Part 72; or

(7) facilities in a source category designated by EPA as subject to the requirements of 40 CFR Part 70.

(b) This Section does not apply to minor facilities with sources subject to requirements of Sec. 3D-0524, 1110 or 1111 or 40 CFR Part 60, 61, or 63 until EPA requires these facilities to have a permit under 40 CFR Part 70.

(c) A facility shall not be required to obtain a permit under this Section on the sole basis of its greenhouse gas emissions.

(d) Once a facility is subject to this Section because of emissions of one pollutant, the owner or operator of that facility shall submit an application that includes all sources of all regulated air pollutants located at the facility except for insignificant activities because of category. (Ord. No. 4-94, 5-23-94, 11-11-96, 10-25-99)

Sec. 3Q-0503. Definitions

For the purposes of this Section, the definitions in G.S. 143-212 and 143-213 and the following definitions apply:

(1) "Affected States" means all States or local air pollution control agencies whose areas of jurisdiction are:

(A) contiguous to Forsyth County and located less than D=Q/12.5 from the facility, where:

(i) Q = emissions of the pollutant emitted at the highest permitted rate in tons per year, and

(ii) D = distance from the facility to the contiguous State or local air pollution control agency in miles unless the applicant can demonstrate to the satisfaction of the Director that the ambient impact in the contiguous States or local air pollution control agencies is less than the incremental ambient levels in Sec. 3D-0532 (c)(5); or

(B) within 50 miles of the permitted facility.

(2) "Complete application" means an application that provides all information described under 40 CFR 70.5(c) and such other information that is necessary to determine compliance with all applicable requirements.

(3) "Draft permit" means the version of a permit that the Office offers public participation under Sec. 3Q-0521 or Affected State review under Sec. 3Q-0522.

(4) "Emissions allowable under the permit" means a federally enforceable permit term or condition determined at issuance to be an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the facility has assumed to avoid an applicable requirement to which the facility would otherwise be subject.

(5) "Final permit" means the version of a permit that the Director issues that has completed all review procedures required under this Section if the permittee does not file a petition under Sec. 3-0109.

(6) "Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally-equivalent opening.

(7) "Insignificant activities because of category" means:

(A) mobile sources;

(B) air-conditioning units used for human comfort that are not subject to applicable requirements under Title VI of the federal Clean Air Act and do not exhaust air pollutants into the ambient air from any manufacturing or other industrial process;

(C) ventilating units used for human comfort that do not exhaust air pollutants into the ambient air from any manufacturing or other industrial process;

(D) heating units used for human comfort have a heat input of less than 10,000,000 Btu per hour and that do not provide heat for any manufacturing or other industrial process;

(E) noncommercial food preparation;

(F) consumer use of office equipment and products;

(G) janitorial services and consumer use of janitorial products;

(H) internal combustion engines used for landscaping purposes; and

(I) new residential wood heaters subject to 40 CFR Part 60, Subpart AAA.

(J) reserved.

(8) "Insignificant activities because of size or production rate" means any activity whose emissions would not violate any applicable emissions standard and whose potential emission of particulate, sulfur dioxide, nitrogen oxides, volatile organic compounds, and carbon monoxide before air pollution control devices, i.e., potential uncontrolled emissions, are each no more than five tons per year and whose potential emissions of hazardous air pollutants before air pollution control devices, are each below 1000 pounds per year.

(9) "Minor facility" means any facility that is not a major facility.

(10) "Operation" means the utilization of equipment that emits regulated pollutants.

(11) "Permit renewal" means the process by which a permit is reissued at the end of its term.

(12) "Permit revision" means any permit modification under Sec. 3Q-0515, 0516 or 0517 or any administrative permit amendment under Sec. 3Q-0514.

(13) "Proposed permit" means the version of a permit that the Director proposes to issue and forwards to EPA for review under Sec. 3Q-0522.

(14) "Relevant source" means only those sources that are subject to applicable requirements.

(15) "Responsible official" means a responsible official as defined under 40 CFR 70.2.

(16) "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

(17) "Synthetic minor facility" means a facility that would otherwise be required to follow the procedures of this Section except that the potential to emit is restricted by one or more federally enforceable physical or operational limitations, including air pollution control equipment and restrictions on hours or operation, the type or amount of material combusted, stored, or processed, or similar parameters.

(18) "Timely" means:

(A) for initial permit submittals under Sec. 3Q-0506, before the end of the time period specified for submittal of an application for the respective Standard Industrial Classification;

(B) for a new facility, one year after commencing operation;

(C) for renewal of a permit previously issued under this Section, nine months before the expiration of that permit;

(D) for a minor modification under Sec. 3Q-0515, before commencing the modification;

(E) for a significant modification under Sec. 3Q-0516 where the change would not contravene or conflict with a condition in the existing permit, 12 months after commencing operation;

(F) for reopening for cause under Sec. 3Q-0517, as specified by the Director in the request for additional information by the Director; or

(G) for requests for additional information, as specified by the Director in the request for additional information by the Director; or

(H) for modifications made under Section 112(j) of the federal Clean Air Act, 18 months after EPA fails to promulgate a standard for that category of source under Section 112 of the federal Clean Air Act by the date established pursuant to Section 112(e)(1) or (3) of the federal Clean Air Act. (Ord. No. 4-94, 5-23-94; Ord. No. 9-94, 12-19-94, 11-11-96, 9-14-98, 10-25-99)

Sec. 3Q-0504. Option for obtaining construction and operation permit

(a) Pursuant to Sec. 3Q-0501 (c) or (d)(2), the owner or operator of a new or modified facility subject to the requirements of this Section that chooses to obtain a construction and operation permit before the facility must obtain a permit under this Section may file an application under Section 3Q-0300.

(b) The applicant shall state in his permit application that he wishes to follow the procedures under this Rule.

(c) If the option allowed under Sec. 3Q-0501 (c)(1) is used, then the application processing procedures for prevention of significant deterioration under Sec. 3D-0530 and new source review for nonattainment areas under Sec. 3D-0531 do not apply. If the option allowed under Sec. 3Q-0501 (c)(2) is used, then the application processing procedures in this Section and:

(1) under Sec. 3D-0530 for prevention of significant deterioration, or

(2) under Sec. 3D-0531 for new source review for nonattainment areas, shall apply.

(d) If the procedures under Section 3Q-0300 are followed, the permittee shall have one year from the date of beginning operation of the facility or source to file an amended application following the procedures of this Section. The Director shall place a condition in the construction and operation permit stating this requirement. (Ord. No. 4-94, 5-23-94)

Sec. 3Q-0505. Application submittal content

If an applicant does not submit, at a minimum, the following information with his application package, the application package shall be returned:

(1) for new facilities and modified facilities:

(A) an application fee as required under Section 3Q-0200,

(B) Reserved,

(C) the documentation required under Sec. 3Q-0507 (d)(2),

(D) a financial qualification or substantial compliance statement if required, and

(E) applications as required under Sec. 3Q-0507 (a) and (e) and signed as required by Sec. 3Q-0520;

(2) for renewals: applications as required under Sec. 3Q-0507 (a) and (e) and signed as required by Sec. 3Q-0520;

(3) for a name change: three copies of a letter signed by the a responsible official in accordance with Sec. 3Q-0520 indicating the current facility name, the date on which the name change shall occur, and the new facility name;

(4) for an ownership change: an application fee as required under Section 3Q-0200, and:

(A) three copies of a letter sent by each the seller and the buyer indicating the change, or

(B) three copies of a letter sent by either bearing the signature of both the seller and buyer, and containing a written agreement with a specific date for the transfer of permit responsibility, coverage, and liability between the current and new permittee; and

(5) for corrections of typographical errors; changes name, address, or telephone number of any individual identified in the permit; changes in test dates or construction dates; or similar minor changes: three copies of a letter signed by a responsible official in accordance with Sec. 3Q-0520 describing the proposed change and explaining the need for the proposed change. (Ord. No. 4-94, 5-23-94)

Sec. 3Q-0506. Initial permit application submittal (repealed)

(Ord. No. 4-94, 5-23-94, 11-11-96, 9-14-98)

Sec. 3Q-0507. Application

(a) Except for:

(1) minor permit modifications covered under Sec. 3Q-0515,

(2) significant modifications covered under Sec. 3Q-0516 (c), or

(3) permit applications submitted under Sec. 3Q-0506, the owner or operator of a source shall have one year from the date of beginning of operation of the source to file a complete application for a permit or permit revision.

However, the owner or operator of the source shall not begin construction or operation until he has obtained a construction and operation permit pursuant to Sec. 3Q-0501 (c) or (d) and Sec. 3Q-0504.

(b) The application shall include all the information described in 40 CFR 70.3(d) and 70.5(c), including a list of insignificant activities because of size or production rate; but not including insignificant activities because of category. The application form shall be certified by a responsible official for truth, accuracy, and completeness. In the application submitted pursuant to this Rule, the applicant may attach copies of applications submitted pursuant to Section 3Q-0400 or Sec. 3D-0530 or 0531, provided the information in those applications contains information required in this Section and is current, valid, and complete.

(c) Application for a permit, permit revision, or permit renewal shall be made in accordance with Sec. 3Q-0104 on forms of the Office and shall include plans and specifications giving all necessary

data and information as required by this rule . Whenever the information provided on these forms does not describe the source or its air pollution abatement equipment to the extent necessary to evaluate the application, the Director may request that the applicant provide any other information that the Director considers necessary to evaluate the source and its air pollution abatement equipment.

(d) Along with filing a complete application form, the applicant shall also file the following:

(1) Reserved,

(2) Reserved,

(3) if required by the Director, information showing that:

(A) The applicant is financially qualified to carry out the permitted activities, or

(B) The applicant has substantially complied with the air quality and emissions standards applicable to any activity in which the applicant has previously been engaged, and has been in substantial compliance with federal and State environmental laws and Rules.

(e) The applicant shall submit copies of the application package as follows:

(1) for sources subject to the requirements of Sec. 3D-0530, 0531 or Section 3D-1200, six copies plus one additional copy for each Affected State that the Director has to notify;

(2) for sources not subject to the requirements of Sec. 3D-0530, 0531 or Section 3D-1200, four copies plus one additional copy for each Affected State that the Director has to notify.

The Director may at any time during the application process request additional copies of the complete application package from the applicant.

(f) Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, submit, as soon as possible, such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date he filed a complete application but prior to release of a draft permit.

(g) The applicant shall submit the same number of copies of additional information as required for the application package.

(h) The submittal of a complete permit application shall not affect the requirement that any facility have a preconstruction permit under Sec. 3D-0530, 0531 or 0532, or under Section 3Q-0400.

(i) The Director shall give priority to permit applications containing early reduction demonstrations under Section 112(i)(5) of the federal Clean Air Act. The Director shall take final action on such permit applications as soon as practicable after receipt of the complete permit application.

(j) With the exceptions specified in Sec. 3Q-0203 (i), a non-refundable permit application processing fee shall accompany each application. The permit application processing fees are defined in Section 3Q-0200. Each permit or renewal application is incomplete until the permit application processing fee is received.

(k) The applicant shall retain for the duration of the permit term one complete copy of the application package and any information submitted in support of the application package. (Ord. No. 4-94, 5-23-94; 12-19-94, 7-28-97, 10-25-99)

Sec. 3Q-0508. Permit content

(a) The permit shall specify and reference the origin and authority for each term or condition and shall identify any differences in form as compared to the applicable requirement on which the term or condition is based.

(b) The permit shall specify emission limitations and standards, including operational requirements and limitations, that assure compliance with all applicable requirements at the time of permit issuance.

(c) Where an applicable requirement of the federal Clean Air Act is more stringent than an applicable requirement of Rules promulgated pursuant to Title IV, both provisions shall be placed in the permit. The permit shall state that both provisions are enforceable by EPA.

(d) The permit for sources using an alternative emission limit established under Sec. 3D-0501 (d) or 0952 shall contain provisions to ensure that any resulting emissions limit has been demonstrated to be quantifiable, accountable, enforceable, and based on replicable procedures.

(e) The expiration date contained in the permit shall be for a fixed term of five years for sources covered under Title IV and for a term of no more than five years from the date of issuance for all other sources including solid waste incineration units combusting municipal waste subject to standards under Section 129(e) of the federal Clean Air Act.

(f) The permit shall contain monitoring and related recordkeeping and reporting requirements as specified in 40 CFR 70.6(a)(3) and 70.6(c)(1) including conditions requiring:

(1) the permittee to submit reports of any required monitoring at least every six months. The permittee shall submit reports:

(A) on forms obtained from the Office at the address in Sec. 3Q-0104,

(B) in a manner as specified by a permit condition, or

(C) on other forms that contain the information required by this Subchapter or as specified by a permit condition;; and

(2) the permittee to report:

(A) malfunctions, emergencies, and other upset conditions as prescribed in Sec. 3D-0524, 0535, 1110 or 1111;

(B) deviations quarterly from permit requirements not covered under Sec. 3D-0524, 0535, 1110 or 1111. The permittee shall include the probable cause of such deviation and any corrective actions or preventive measures taken.

(3) the responsible official to certify all deviations from permit requirements.

(g) At the request of the permittee, the Director shall allow records to be maintained in computerized form in lieu of maintaining paper records if computerized records contain the same information as the paper records would contain.

(h) The permit for facilities covered under Section 3D-2100, Risk Management Program, shall contain:

(1) a statement listing Section 3D-2100 as an applicable requirement;

(2) conditions that require the owner or operator of the facility to submit;

(A) a compliance schedule for meeting the requirements of Section 3D-2100 by the dates provided in Sec. 3D-2101 (a); or

(B) as part of the compliance certification under Paragraph (m) of this Rule, a certification statement that the source is in compliance with all requirements of Section 3D-2100, including the registration and submission of a risk management plan.

The content of the risk management plan need not itself be incorporated as a permit term or condition.

(i) The permit shall:

(1) contain a condition prohibiting emissions exceeding any allowances that a facility lawfully holds under Title IV; but shall not limit the number of allowances held by a permittee, but the permittee may not use allowances as a defense to noncompliance with any other applicable requirement;

(2) contain a severability clause so that various permit requirements will continue to be valid in the event of a challenge to any other portion of the permit;

(3) state that noncompliance with any condition of the permit is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application;

(4) state that the permittee may not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit;

(5) state that the Director may reopen, modify, revoke and reissue, or terminate the permit for reasons specified in Sec. 3Q-0517 or 0519;

(6) state that the filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, notification of planned changes, or anticipated noncompliance does not stay any permit condition;

(7) specify the conditions under which the permit shall be reopened before the expiration of the permit;

(8) state that the permit does not convey any property rights of any sort, or any exclusive privileges;

(9) state that the permittee shall furnish to the Office, in a timely manner:

(A) any reasonable information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit, and

(B) copies of records required to be kept by the permit when such copies are requested by the Director.

(For information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality.)

(10) contain a provision to ensure that the permittee pays fees required under Section 3Q-0200.

(11) contain a condition that authorizes the permittee to make Section 502(b)(10) changes, off-permit changes, or emission trades in accordance with Sec. 3Q-0523;

(12) include all applicable requirements for all sources covered under the permit;
(13) include fugitive emissions, if regulated, in the same manner as stack emissions;
(14) contain a condition requiring annual reporting of actual emissions as required under Sec. 3Q-0207;
(15) include all sources including insignificant activities; and
(16) contain other provisions the Director considers appropriate.

(j) The permit shall state the terms and conditions for reasonably anticipated operating scenarios identified by the applicant in the application. These terms and conditions shall:

(1) require the permittee, contemporaneously with making a change from one operating scenario to another, to record in a log at the permitted facility a record of the operating scenario under which it is operating;
(2) extend the permit shield described in Sec. 3Q-0512 to all terms and conditions under each such operating scenario; and
(3) ensure that each operating scenario meets all applicable requirements of Forsyth County Code, Chapter 3, Air Quality Control and of this Section.

(k) The permit shall identify which terms and conditions are enforceable by:

(1) both EPA and the Office;
(2) the Office only;
(3) EPA only; and
(4) citizens under the federal Clean Air Act.

(l) The permit shall state that the permittee shall allow personnel of the Office to:

(1) enter the permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
(2) have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
(3) inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
(4) sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

(m) When a compliance schedule is required under 40 CFR 70.5(c)(8) or under a Rule contained in Forsyth County Code, Chapter 3, Air Quality Control, the permit shall contain the compliance schedule and shall state that the permittee shall submit at least semiannually, or more frequently if specified in the applicable requirement, a progress report. The progress report shall contain:

(1) dates for achieving the activities, milestones, or compliance required in the compliance schedule, and dates when such activities, milestones, or compliance were achieved; and

(2) an explanation of why any dates in the compliance schedule were not or will not be met, and any preventive or corrective measures adopted.

(n) The permit shall contain requirements for compliance certification with the terms and conditions in the permit that are enforceable by EPA under Title V of the federal Clean Air Act, including emissions limitations, standards, or work practices. The permit shall specify:

(1) the frequency (not less than annually or more frequently as specified in the applicable requirements) of submissions of compliance certifications;

(2) a means for monitoring the compliance of the source with its emissions limitations, standards, and work practices;

(3) a requirement that the compliance certification include:

(A) the identification of each term or condition of the permit that is the basis of the certification;

(B) the status of compliance with the terms and conditions of the permit for the period covered by the certification, based on the methods or means designated in 40 CFR 70.6(c)(5)(iii)(B). The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR 64 occurred;

(C) whether compliance was continuous or intermittent;

(D) the identification of the method(s) or other means used by the owner and operator for determining the compliance status with each term and condition during the certification period; these methods shall include the methods and means required under 40 CFR Part 70.6(a)(3); and

(E) such other facts as the Director may require to determine the compliance status of the source;

(4) that all compliance certifications be submitted to EPA as well as to the Office.

(Ord. No. 4-94, 5-23-94; Ord. No. 9-94, 12-19-94, 11-11-96, 10-25-99, 7-24-00,05-14-01, 5-8-06)

Sec. 3Q-0509. Permitting of numerous similar facilities

(a) The Director may issue, after notice and opportunity for public participation provided in Sec. 3Q-0521, a permit to cover numerous similar facilities or sources.

(b) The Director shall not issue a permit under this Rule unless the following conditions are met:

(1) There is no unique difference that would require special permit conditions for any individual facility; and

(2) No unique analysis is required for any facility covered under the permit.

(c) A permit issued under this Rule shall comply with all the requirements of this Section.

(d) A permit issued under this Rule shall identify criteria by which facilities or sources may qualify for the permit. To facilities or sources that qualify, the Director shall grant the terms and conditions of the permit.

(e) The facility or source shall be subject to enforcement action for operating without a permit if the facility or source is later determined not to qualify for the terms and conditions of the permit issued under this Rule.

(f) Sources subject to Title IV shall not be eligible for a permit issued under this Rule.

(g) The owner or operator of a facility or source that qualifies for a permit issued under this Rule shall apply for coverage under the terms of the permit issued under this Rule or shall apply for a regular permit under this Section.

(h) The Office need not repeat the public participation procedures required under Sec. 3Q-0521 when it grants a request by a permit applicant to operate under a permit issued under this Rule. (Ord. No. 4-94, 5-23-94)

Sec. 3Q-0510. Permitting of facilities at multiple temporary sites

(a) The Director may issue a single permit authorizing emissions from similar operations by the same facility owner or operator at multiple temporary sites.

(b) In order for a facility to qualify for a permit for multiple temporary site under this Rule, the operation must involve at least one change of site during the term of the permit.

(c) Sources subject to Title IV shall not be eligible for a permit under this Section.

(d) Permits for facilities at multiple temporary sites shall include:

(1) identification of each site;

(2) conditions that will assure compliance with all applicable requirements at all authorized locations;

(3) requirements that the permittee notify the Office at least 10 days in advance of each change of location; and

(4) conditions that assure compliance with all other provisions of this Section. (Ord. No. 4-94, 5-23-94)

Sec. 3Q-0511. Repealed

(Ord. No. 4-94, 5-23-94, 5-24-99)

Sec. 3Q-0512. Permit shield and application shield

(a) Permit Shield:

(1) The Director shall place in a permit issued under this Section a permit term or condition (a permit shield) stating that compliance with the conditions of the permit shall be deemed compliance with applicable requirements specifically identified in the permit in effect as of the date of permit issuance, provided that:

(A) Such applicable requirements are included and are specifically identified in the permit; or

(B) The Director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

(2) A permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.

(3) A permit shield shall not alter or affect:

(A) the power of the Forsyth County Board of Commissioners, County Manager, Director or EPA under Section 303 of the federal Clean Air Act;

(B) the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;

(C) the applicable requirements under Title IV; or

(D) the ability of the Director (or EPA under Section 114 of the federal Clean Air Act) to obtain information to determine compliance of the facility with its permit, this Section, or Forsyth County Code, Chapter 3, Air Quality Control.

(4) A permit shield shall not apply to any change made at a facility that does not require a permit revision.

(5) A permit shield shall not extend to minor permit modifications made under Sec. 3Q-0515.

(b) Application Shield.

(1) Except as provided in Subparagraph (b)(2) of this Rule, if the applicant submits a timely and complete application for permit issuance (including for renewal), the facility's failure to have a permit under this Section shall not be a violation:

(A) unless the delay in final action is due to the failure of the applicant's timely submission of information as required or requested by the Director, or

(B) until the Director takes final action on the permit application.

(2) Subparagraph (b)(1) of this Rule shall cease to apply if, subsequent to the completeness determination made under Sec. 3Q-0507, the applicant fails to submit by the deadline specified in writing by the Director, any additional information identified as being needed to process the application. (Ord. No. 4-94, 5-23-94; Ord. No. 9-94, 12-19-94, 7-28-97)

Sec. 3Q-0513. Permit renewal and expiration

(a) Permits being renewed are subject to the procedural requirements of this Section, including those for public participation and affected State and EPA review.

(b) Permit expiration terminates the facility's right to operate unless a complete renewal application has been submitted at least nine months before the date of permit expiration.

(c) If the permittee or applicant has complied with Sec. 3Q-0512 (b)(1), the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied. (Ord. No. 4-94, 5-23-94)

Sec. 3Q-0514. Administrative permit amendments

(a) An "administrative permit amendment" means a permit revision and that:

(1) corrects typographical errors;

(2) identifies a change in the name, address or telephone number of any individual identified in the permit, or provides a similar minor administrative change at the facility;

(3) requires more frequent monitoring or reporting by the permittee;

(4) changes test dates or construction dates provided that no applicable requirements are violated by the change in test dates or construction dates;

(5) moves terms and conditions from the County-enforceable only portion of a permit to the County-and-federal-enforceable portion of the permit provided that terms and conditions being moved have become federally enforceable through Section 110, 111, or 112 or other parts of the federal Clean Air Act;

(6) moves terms and conditions from the federal-enforceable only portion of a permit to the County-and-federal-enforceable portion of the permit; or

(7) changes the permit number without changing any portion of the permit that is federally enforceable that would not otherwise qualify as an administrative amendment.

(b) In making administrative permit amendments, the Director:

(1) shall take final action on a request for an administrative permit amendment within 60 days after receiving such request,

(2) may make administrative amendments without providing notice to the public or any Affected State(s) provided he designates any such permit revision as having been made pursuant to this Rule, and

(3) shall submit a copy of the revised permit to EPA.

(c) The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request.

(d) Upon taking final action granting a request for an administrative permit amendment, the Director shall allow coverage by the permit shield under Sec. 3Q-0512 for the administrative permit amendments made.

(e) Administrative amendments for sources covered under Title IV shall be governed by Rules in Section 3Q-0400.

(f) this Rule shall not be used to make changes to the county-enforceable only part of the Title V permit. For the county-enforceable only part of a Title V permit, Rule 0318 of this Subchapter shall be used for administrative permit amendments. (Ord. No. 4-94, 5-23-94, 7-28-97)

Sec. 3Q-0515. Minor permit modifications

(a) The procedures set out in this Rule may be used for permit modifications when the modifications:

(1) do not violate any applicable requirement;

(2) do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;

(3) do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;

(4) do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the facility has assumed to avoid an applicable requirement to which the facility would otherwise be subject. Such terms and conditions include:

(A) a federally enforceable emissions cap assumed to avoid an applicable requirement under any provision of Title I of the federal Clean Air Act; or

(B) an alternative emissions limit approved as part of an early reduction plan submitted pursuant to Section 112(i)(5) of the federal Clean Air Act;

(5) are not modifications under any provision of Title I of the federal Clean Air Act; and

(6) are not required to be processed as a significant modification under Sec. 3Q-0516.

(b) In addition to the items required under Sec. 3Q-0505, an application requesting the use of the procedures set out in this Rule shall include:

(1) an application form including:

(A) a description of the change,

(B) the emissions resulting from the change, and

(C) identification of any new applicable requirements that will apply if the change occurs;

(2) a list of the facility's other pending applications awaiting group processing and a determination of whether the requested modification, aggregated with these other applications, equals or exceeds the thresholds set out under Subparagraphs (c)(1) through (3) of this Rule;

(3) the applicant's suggested draft permit;

(4) certification by a responsible official that the proposed modification meets the criteria for using the procedures set out in this Rule and a request that these procedures be used; and

(5) complete information for the Director to use to notify EPA and Affected States.

(c) The Director shall use group processing for minor permit modifications processed under this Rule. The Director shall notify EPA and Affected States of the requested permit revisions under this Rule and shall provide the information specified in Sec. 3Q-0522 on a quarterly basis. If the aggregated emissions from all pending minor permit modifications equal or exceed:

(1) 10 percent of the emissions allowed for the source for which the change is requested,

(2) 20 percent of the applicable definition of major facility, or

(3) five tons per year,

then the Director shall notify EPA and Affected States within five business days of the requested permit revision under this Rule and shall provide the information specified in Sec. 3Q-0522.

(d) Within 90 days after receiving a complete application that causes the thresholds in Paragraphs (c)(1), (2), or (3) of this Rule to be exceeded or 15 days after the end of EPA's 45-day review period, whichever is later, the Director shall:

(1) issue the permit modification as proposed;

(2) deny the permit modification application;

(3) determine that the requested modification does not qualify for the procedures set out in this Rule and should therefore, be processed under Sec. 3Q-0516;

(4) revise the draft permit modification and transmit the proposed permit to EPA.

(e) If the thresholds in Paragraphs (c)(1), (2), and (3) of this Rule are not exceeded, the Director shall, within 180 days after receiving a completed application for a permit modification or 15 days after the end of EPA's 45-day review period, whichever is later:

(1) issue the permit modification as proposed;

(2) deny the permit modification application;

(3) determine that the requested modification does not qualify for the procedures set out in this Rule and should therefore, be processed under Sec. 3Q-0516;

(4) revise the draft permit modification and transmit the proposed permit to EPA.

(f) The permit applicant may make the change proposed in his minor permit modification application immediately after filing the completed application with the Office. After the applicant makes the change, the facility shall comply with both the applicable requirements governing the change and the proposed permit terms and conditions until the Director takes one of the final actions specified in Paragraph (d)(1) through (d)(4) of this Rule. Between the filing of the permit modification application and the Director's final action, the facility need not comply with the existing permit terms and conditions it seeks to modify. However, if the facility fails to comply with its proposed permit terms and conditions during this time period, the Director may enforce the terms and conditions of the existing permit that the applicant seeks to modify.

(g) The permit shield allowed under Sec. 3Q-0512 shall not extend to minor permit modifications.

(h) If the State-enforceable only portion of the permit is revised, the procedures in Section 3Q-0300 shall be followed.

(i) The proceedings shall affect only those parts of the permit related to the modification. (Ord. No. 4-94, 5-23-94; Ord. No. 9-94, 12-19-94, 7-28-97)

Sec. 3Q-0516. Significant permit modification

(a) The procedures set out in this Rule shall be used for applications requesting permit modifications under this Rule or permit modifications that do not qualify for Sec. 3Q-0514, 0515, 0523 or 0524.

(b) Significant modifications include modifications that:

(1) involve a significant change in existing monitoring permit terms or conditions or relax any reporting or recordkeeping permit terms or conditions;

(2) require or change a case-by-case determination of an emissions limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;

(3) seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the facility has assumed to avoid an applicable requirement to which the facility would otherwise be subject; or

(4) are modifications under any provision of Forsyth County Code, Chapter 3, Air Quality Control or 3Q or Title I of the federal Clean Air Act not processed under Sec. 3Q-0514, 0515, 0523 or 0524.

(c) An application for a significant permit modification that would contravene or conflict with the existing permit shall be processed following the procedure set out in Sec. 3Q-0501 (d).

(d) An application for a significant permit modification that does not contravene or conflict with the existing permit shall be processed following the procedure set out in Sec. 3Q-0501 (c).

(e) This Rule shall not preclude the permittee from making changes consistent with this Section that would render existing permit compliance terms and conditions irrelevant.

(f) Except for the County-enforceable only portion of the permit, the procedures set out in Sec. 3Q-0507, 0521 or 0522 shall be followed to revise a permit under this Rule. If the County-enforceable only portion of the permit is revised, the procedures in Section 3Q-0300 shall be followed. The proceedings shall affect only those parts of the permit related to the significant modification.

(g) Reserved.

(h) Significant permit modifications shall be covered under the permit shield in accordance with Sec. 3Q-0512. (Ord. No. 4-94, 5-23-94; Ord. No. 9-94, 12-19-94)

Sec. 3Q-0517. Reopening for cause

(a) A permit shall be reopened and revised under the following circumstances:

(1) Additional applicable requirements become applicable to a facility with remaining permit term of three or more years;

(2) Additional requirements (including excess emissions requirements) become applicable to a source covered by Title IV (Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit.);

(3) The Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or

(4) The Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

(b) Any permit reopening under Subparagraph (a)(1) of this Rule shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required

if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to Sec. 3Q-0513 (c).

(c) Except for the County-enforceable only portion of the permit, the procedures set out in Sec. 3Q-0507, 0521 or 0522 shall be followed to reissue a permit that has been reopened under this Rule. If the County-enforceable only portion of the permit is reopened, the procedures in Section 3Q-0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.

(d) The Director shall notify the permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the Director may notify the permittee less than 60 days before reopening the permit. The notice shall explain why the permit is being reopened.

(e) Within 90 days, or 180 days if EPA extends the response period, after receiving notification from EPA that it finds that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate. (Ord. No. 4-94, 5-23-94, 7-28-97)

Sec. 3Q-0518. Final action

(a) The Director may:

(1) issue a permit, permit revision, or a renewal containing the conditions necessary to carry out the purposes of Chapter 3 of the Forsyth County Code and the federal Clean Air Act;

(2) rescind a permit upon request by the permittee; or

(3) deny a permit application when necessary to carry out the purposes of Chapter 3 of the Forsyth County Code and the federal Clean Air Act.

(b) The Director may not issue a final permit or permit revision, except administrative permit amendments covered under Sec. 3Q-0514, until EPA's 45-day review period has expired or until EPA has notified the Director that EPA will not object to issuance of the permit or permit revision, whichever occurs first. The Director shall issue the permit or permit revision within five days of receipt of notification from EPA that it will not object to issuance or of the expiration of EPA's 45-day review period, whichever occurs first.

(c) If EPA objects to a proposed permit, the Director shall respond to EPA's objection within 90 days after receipt of EPA's objection. The Director shall not issue a permit under this Section over EPA's objection.

(d) If EPA does not object in writing to the issuance of a permit, any person may petition EPA to make such objections by following the procedures and meeting the requirements under 40 CFR 70.8(d).

(e) No permit shall be issued, revised, or renewed under this Section unless all the procedures set out in this Section have been followed and all the requirements of this Section have been met. Default issuance of a permit, permit revision, or permit renewal by the Director is prohibited.

(f) Thirty days after issuing a permit, including a permit issued pursuant to Sec. 3Q-0509, that is not challenged by the applicant, the Director shall notice the issuance of the final permit. The notice shall

be issued on the Office of Environmental Assistance and Protection' website. The notice shall include the name and address of the facility and permit number. (Ord. No. 4-94, 5-23-94; 12-19-94, 8-14-95)

Sec. 3Q-0519. Termination, modification, revocation of permits

(a) The Director may terminate, modify, or revoke and reissue a permit issued under this Section if:

(1) The information contained in the application or presented in support thereof is determined to be incorrect;
(2) The conditions under which the permit or permit renewal was granted have changed;
(3) Violations of conditions contained in the permit have occurred;
(4) The permit holder fails to pay fees required under Section 3Q-0200 within 30 days after being billed;
(5) The permittee refuses to allow the Director or his authorized representative upon presentation of credentials:
  (A) to enter, at reasonable times and using reasonable safety practices, the permittee's premises in which a source of emissions is located or in which any records are required to be kept under terms and conditions of the permit;
  (B) to have access, at reasonable times, to any copy or records required to be kept under terms and conditions of the permit;
  (C) to inspect, at reasonable times and using reasonable safety practices, any source of emissions, control equipment, and any monitoring equipment or method required in the permit; or
  (D) to sample, at reasonable times and using reasonable safety practices, any emission source at the facility;
(6) EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
(7) The Director finds that termination, modification or revocation and reissuance of a permit is necessary to carry out the purpose of Chapter 3 of the Forsyth County Code.

(b) To operate a facility or source after its permit has been revoked is a violation of this Section. (Ord. No. 4-94, 5-23-94; Ord. No. 9-94, 12-19-94; 8-14-95)

Sec. 3Q-0520. Certification by responsible official

(a) A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required under this Section or by a term or condition in a permit issued under this Section.

(b) This certification shall state that, based on information and belief formed after reasonable inquiry, the statement and information in the document are true, accurate, and complete. (Ord. No. 4-94, 5-23-94)

Sec. 3Q-0521. Public participation

(a) The Director shall give public notice with an opportunity for comments and a hearing on all draft permits and permit revisions except permit revisions issued under Sec. 3Q-0514, 0515 and 0524. The Director shall give public notice with an opportunity for comments and a hearing on draft permit revisions issued under Sec. 3Q-0514, 0515 and 0524 if the Director finds it is in the best interest of the public.

(b) The notice of any draft permit for an existing facility for which a public hearing is scheduled, or new facility, shall be given by publication in a newspaper of general circulation in the area where the facility is located, posted on the Office of Environmental Assistance and Protection website, and shall be mailed or emailed to persons who are on the Office's mailing or emailing list for air quality permit notices.

(c) The notice for existing facilities for which a public hearing is not scheduled shall be given by posting the draft permit on the Office of Environmental Assistance and Protection web site, and shall be mailed or emailed to persons who are on the Office's mailing or emailing list for air quality permit notices.

(d) The notice shall identify:

(1) the affected facility;
(2) the name and address of the permittee;
(3) the name and address of the person to whom to send comments and requests for public hearing;
(4) the name, address, and telephone number of Office staff from whom interested persons may obtain additional information including copies of the permit draft, the application, compliance plan, monitoring and compliance reports, all other relevant supporting materials, and all other materials available to Office that are relevant to the permit decision;
(5) the activity or activities involved in the permit action;
(6) any emissions change involved in any permit modification;
(7) a brief description of the comment procedures;
(8) the procedures to follow to request a hearing unless a hearing has already been scheduled; and
(9) the time and place of any hearing that has already been scheduled.

(e) The Director shall send a copy of the notice to Affected States and EPA.

(f) The notice shall allow 30 days for public comments.

(g) If the Director finds that a public hearing is in the best interest of the public, the Director shall require a public hearing to be held on a draft permit. Notice of a public hearing shall be given at least 30 days before the hearing.

(h) If EPA requests a record of the comments and of the issues raised during the public participation process, the Director shall provide EPA this record.

(i) Persons who desire to be placed on the Office's mailing or email notification list for air quality permit notices shall send their request to the Director, Office of Environmental Assistance and Protection, Forsyth County Government Center, 201 N. Chestnut Street, Winston-Salem, NC 27101-

4120 or subscribe to the permits email list serve on the Office of Environmental Assistance and Protection's website. (Ord. No. 4-94, 5-23-94)

Sec. 3Q-0522. Review by EPA and affected states

(a) The Director shall provide EPA a copy of each permit application, including any application for permit revision, each proposed permit, and each final permit issued under this Section. If EPA has informed the Director that a permit application summary and relevant portion of the permit application and compliance plan are all it needs, the Director may provide this abridgement in place of the complete application.

(b) The Office shall retain for five years a copy of all permit applications, permits, and other related material submitted to or issued by the Office under this Section.

(c) The Director shall provide notice to each Affected State of each draft permit at or before the time notice is provided to the public under Sec. 3Q-0521.

(d) The Director, in writing, shall notify EPA and any Affected State of any refusal by the Office to accept all recommendations for the proposed permit that the Affected State submitted during the public or Affected State review period and shall state the reasons for not accepting any such recommendations. (Ord. No. 4-94, 5-23-94)

Sec. 3Q-0523. Changes not requiring permit revisions

(a) Section 502(b)(10) changes:

(1) The permittee may make Section 502(b)(10) changes without having his permit revised if:

(A) The changes are not a modification under Forsyth County Code, Chapter 3, Air Quality Control or Title I of the federal Clean Air Act;

(B) The changes do not cause the emissions allowed under the permit to be exceeded;

(C) The permittee notifies the Director and EPA with written notification at least seven days before the change is made; and

(D) The permittee attaches the notice to the relevant permit.

(2) The written notification required under Part (a)(1)(C) of this Rule shall include:

(A) a description of the change,

(B) the date on which the change will occur,

(C) any change in emissions, and

(D) any permit term or conditions that is no longer applicable as a result of the change.

(3) Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.

(b) Off-permit changes. A permittee may make changes in his operation or emissions without revising his permit if:

(1) The change affects only insignificant activities and the activities remain insignificant after the change, or

(2) The change is not covered under any applicable requirement.

(c) Emissions trading.

(1) To the extent that emissions trading is allowed under Forsyth County Code, Chapter 3, Air Quality Control, including subsequently adopted maximum achievable control technology standards, emissions trading is allowed without permit revisions provided that:

(A) All applicable requirements are met;

(B) The permittee complies with all terms and conditions of the permit in making the emissions trade; and

(C) The permittee notifies the Director and EPA with written notification at least seven days before the trade is made: this notification requirement does not apply to trades made under Sec. 3D-1419, Nitrogen Oxide Budget Trading Program or Sec. 3D-2408, Trading Program and Banking (CAIR).

(2) If an emissions cap has been established by a permit condition for the purposes of limiting emissions below that allowed by an otherwise applicable requirement, emissions trading is allowed to the extent allowed by the permit if:

(A) An emissions cap is established in the permit to limit emissions;

(B) The permit specifies the emissions limits with which each source shall comply under any applicable requirement;

(C) The permittee complies with all permit terms that ensure the emissions trades are enforceable, accountable, and quantifiable;

(D) The permittee complies with all applicable requirements;

(E) The permittee complies with the emissions trading procedures in the permit;

(F) The permittee notifies the Director and EPA with written notification at least seven days before the trade is made.

(3) The written notification required under Subparagraph (1) of this Paragraph shall include:

(A) a description of the change,

(B) the date on when the change will occur,

(C) any change in emissions,

(D) the permit requirement with which the facility or source will comply using the emissions trading provision of the applicable provision of Forsyth County Code, Chapter 3, Air Quality Control, and

(E) the pollutants emitted subject to the emissions trade.

This Subparagraph does not apply to trades made under Sec. 3D-1419, Nitrogen Oxide Budget Trading Program Sec. 3D-2408, Trading Program and Banking.

(4) The written notification required under Subparagraph (2) of this Paragraph shall include:

(A) a description of the change,
(B) the date on when the change will occur,
(C) changes in emissions that will result and how the increases and decrease in emissions will comply with the terms and conditions of the permit.

(d) The permit shield allowed under Sec. 3Q-0512 does not apply to changes made under Paragraphs (a), (b), or (c) of this Rule. (Ord. No. 4-94, 5-23-94; Ord. No. 9-94, 12-19-94, 5-8-06)

Sec. 3Q-0524. Ownership change

(a) Applications for ownership changes shall:
(1) contain the information required under Sec. 3Q-0505 (4), and
(2) follow the procedures under Section 3Q-0300.

(b) When the Director permits an ownership change, he shall submit a copy of the permit to EPA as an administrative amendment. (Ord. No. 4-94, 5-23-94)

Sec. 3Q-0525. Application processing schedule

(a) Except for permit applications submitted under Sec. 3Q-0506, the Office shall adhere to the following schedule in processing applications for permits, significant permit modifications, and permit renewal:

(1) The Office shall send written acknowledgment of receipt of the application to the applicant within 10 days of receipt of the application.
(2) The Office shall review all permit applications within 60 days of receipt of the application to determine whether the application is complete or incomplete. The Office shall notify the applicant by letter:
(A) stating that the application as submitted is complete and specifying the completeness date,
(B) stating that the application is incomplete, requesting additional information and specifying the deadline date by which the requested information is to be received by the Office, or
(C) stating that the application is incomplete and requesting that the applicant rewrite and resubmit the application.

If the Office does not notify the applicant by letter dated within 60 days of receipt of the application that the application is incomplete, the application shall be deemed complete. A completeness determination shall not prevent the Director from requesting additional information at a later date when such information is considered necessary to properly evaluate the source, its air pollution abatement equipment, or the facility. If the applicant has not provided the requested additional information by the deadline specified in the letter requesting additional information, the Director may return the application to the applicant as incomplete. The applicant may request a

time extension for submittal of the requested additional information. A completeness determination shall not be necessary for minor modifications under Sec. 3Q-0514.

(3) The Office shall determine within 60 days of receipt of a complete application if any additional information is needed to conduct the technical review of the application. A technical completeness determination shall not prevent the Director from requesting additional information at a later date when such information is considered necessary to properly evaluate the source, its air pollution abatement equipment or the facility. The Office shall complete the technical review within 270 days of receipt of a complete application or 10 days after receipt of requested additional information, whichever is later.

(4) The Director shall send the public notice for public comment on the draft permit to affected states, to EPA, and to persons on the email list for air quality permit notices within 270 days after receipt of a complete application or 10 days after receipt of requested additional information, whichever is later.

(5) If a public hearing is requested and approved by the Director for a draft permit, it shall be held within 45 days of the Director's decision to hold a public hearing.

(6) The Director shall complete the review of the record and send the proposed permit to EPA:

(A) within 30 days after the close of the public comment period if there is no public hearing on the draft permit; or

(B) within 45 days after the close of the public hearing if there is a public hearing on the draft permit.

(7) If EPA does not object to the proposed permit, the Director shall issue the permit within five days after:

(A) expiration of EPA 45-day review period; or

(B) receipt of notice from EPA that it will not object to issuance,

whichever comes first.

(8) If EPA objects to the proposed permit, the Director shall respond to EPA's objection within 90 days after receipt of EPA's objections.

(b) The Director may return at any time applications containing insufficient information to complete the review. (8-14-95, 9-14-98)

Sec. 3Q-0526. 112(j) case-by-case mact procedures

(a) The owner or operator of a source required to apply maximum achievable control technology (MACT) under Sec. 3D-1109 shall follow the permit procedures set out in this Rule.

(b) For the purposes of this Rule, the definitions in Sec. 3D-1109, 40 CFR 63.51, 40 CFR 63.2, and the following definitions apply:

(1) "Equivalent emission limitation" means an emission limitation, established under Section 112(j) of the federal Clean Air Act, that is equivalent to the MACT standard

that EPA would have promulgated under Section 112(d) or (h) of the federal Clean Air Act.

(2) "Source category schedule for standards" means the schedule for promulgating MACT standards issued pursuant to Section 112(e) of the federal Clean Air Act.

(3) “Title V Permit” means a permit issued under this Section.

(c) Except as provided for in Paragraph (d) or (e) of this Rule, the owner or operator of a source required to apply MACT under Sec. 3D-1109 shall submit an application for a permit or for a significant permit revision under this Section, whichever is applicable.

(d) Approval process for new and existing affected sources.

(1) Sources subject to section 112(j) as of the section 112(j) deadline. The requirements of Subparagraphs (d)(1)(A) and (B) of this Paragraph shall apply to major sources that include, as of the section 112(j) deadline, one or more sources in a category or subcategory for which the EPA has failed to promulgate an emission standard under 40 CFR Part 63 on or before an applicable section 112(j) deadline. Existing source MACT requirements (including relevant compliance deadlines), as specified in a title V permit issued to the facility pursuant to the requirements of 40 CFR Part 63, Subpart B, shall apply to such sources.

(A) The owner or operator shall submit an application for a permit or for a revision to an existing title V permit issued or a pending title V permit meeting the requirements of Subparagraph (m)(1) of this Rule by the section 112(j) deadline if the owner or operator can reasonably determine that one or more sources at the facility belong in a category or subcategory subject to Section 112(j) of the federal Clean Air Act.

(B) The owner or operator of a source that does not submit an application under Subparagraph (d)(1)(A) of this Rule and that is notified in writing by the Office that one or more sources at the facility belong to a category or subcategory subject to Section 112(j) of the federal Clean Air Act shall submit an application for a title V permit or for a revision to an existing title V permit meeting the requirements of Paragraph (m)(1) of this Rule within 30 days after being notified in writing by the Office. The Office is not required to make such notification.

(C) The requirements in Parts (i) and (ii) of this Subparagraph shall apply when the owner or operator has obtained a title V permit that incorporates a section 112(g) case-by-case MACT determination by the Office under Sec. 3D-1112, but has not submitted an application for a title V permit revision that addresses the emission limitation requirements of Section 112(j) of the federal Clean Air Act.

(i) When the owner or operator has a title V permit that incorporates a section 112(g) case-by-case MACT determination under Sec. 3D-1112, the owner or operator shall submit an application meeting the requirements of Paragraph (m)(1) of this Rule for a title V permit

revision within 30 days of the section 112(j) deadline or within 30 days of being notified that in writing by the Office that one or more sources at the major facility belong in such category or subcategory. The Office shall use the procedures in 40 CFR 63.52(e) to determine whether the emission limitations adopted pursuant to the prior 112(g) case-by-case MACT determination are substantially as effective as the emission limitations that the Office would otherwise adopt pursuant to Section 112(j) of the federal Clean Air Act for the source in question. If the Office determines the previously adopted 112(g) emission limitations are substantially as effective, then the Office shall retain the existing limitations in the permit to effectuate Section 112(j) of the federal Clean Air Act. If the Office does not retain the previously adopted 112(g) emission limitations, the MACT requirements of this Rule are satisfied upon issuance of a revised title V permit incorporating any additional section 112 (j) requirements.

(ii) When the owner or operator that has submitted a title V permit application that incorporates a section 112(g) case-by-case MACT determination by the Office under Sec. 3D-1112, but has not received the permit incorporating the section 112(g) requirements, the owner or operator shall continue to pursue a title V permit that addresses the requirements of Section 112(g) of the federal Clean Air Act. The owner or operator shall submit a permit application meeting the requirements of Paragraph (m)(1) of this Rule within 30 days of issuance of that title V permit. The Office shall use the procedures in 40 CFR 63.52(e) to determine whether the emissions limitations adopted pursuant to the prior 112(g) case-by-case MACT determination are substantially as effective as the emission limitations that the Office would otherwise adopt pursuant to Section 112(j) of the federal Clean Air Act for the source in question. If the Office determines the previously adopted 112(g) emission limitations are substantially as effective, then the Director shall retain the existing emission limitations to effectuate Section 112(j) of the federal Clean Air Act and revise the permit accordingly. If the Office does not retain the previously adopted 112(g) emission limitations, the MACT requirements of this Rule are satisfied upon issuance of a revised title V permit incorporating any additional section 112 (j) requirements.

(e) Sources that become subject to Section 112(j) of the federal Clean Air Act after the section 112(j) deadline and that do not have a title V permit addressing section 112(j) requirements. The requirements of this Paragraph apply to sources that do not meet the criteria in Paragraph (d) of this Rule on the section 112(j) deadline and are therefore not subject to Section 112(j) of the federal Clean Air Act on that date, but where events occur subsequent to the section 112 (j) deadline that would bring the source

under the requirements of this Rule, and the source does not have a title V permit that addresses the requirements of Section 112(j) of the federal Clean Air Act.

(1) When one or more sources in a category or subcategory subject to the requirements of this rule are installed at a major source, or result in the source becoming a major source due to the installation, and the installation does not invoke section 112(g) requirements in Sec. 3D-1112, the owner or operator shall submit an application meeting the requirements of Paragraph (m)(1) of this Rule within 30 days of startup of the source. Existing source MACT requirements (including relevant compliance deadlines), as specified in a title V permit issued pursuant to the requirements of this Rule, shall apply to such sources. The Office shall use the procedures in 40 CFR 63.52(e) to determine whether the emissions limitations adopted pursuant to the prior 112(g) case-by-case MACT determination are substantially as effective as the emission limitations that the Office would otherwise adopt pursuant to Section 112(j) of the federal Clean Air Act for the source in question. If the Office determines the previously adopted 112(g) emission limitations are substantially as effective, then the Office shall retain the existing emission limitations to effectuate Section 112(j) of the federal Clean Air Act and revise the permit accordingly. If the Office does not retain the previously adopted 112(g) emission limitations, the MACT requirements of this Rule are satisfied upon issuance of a revised title V permit incorporating any additional section 112 (j) requirements.

(2) When one or more sources in a category or subcategory subject to 112(j) requirements are installed at a major source or result in the source becoming a major source due to the installation, and the installation requires 112(g) emission limitations to be established and permitted under Sec. 3Q-0528, and the owner or operator has not submitted an application for a title V permit revision that addresses the emission limitation requirements of Section 112(j) of the federal Clean Air Act, the owner or operator shall apply for and obtain a title V permit that addresses the emission limitation requirements of Section 112(g) of the federal Clean Air Act. Within 30 days of issuance of that title V permit, the owner or operator shall submit an application meeting the requirements of Paragraph (m)(1) of this Rule for a revision to the existing title V permit. The Office shall determine whether the emissions limitations adopted pursuant to the prior 112(g) case-by-case MACT determination are substantially as effective as the emission limitations that the Office would otherwise adopt pursuant to Section 112(j) of the federal Clean Air Act for the source in question. If the Office determines the previously adopted 112(g) emission limitations are substantially as effective, then the Office shall retain the existing emission limitations to effectuate Section 112(j) of the federal Clean Air Act and revise the permit accordingly. If the Office does not retain the previously adopted 112(g) emission limitations, the permit shall be revised to incorporate any additional Section 112(j) requirements.

(3) The owner or operator of an area source that, due to a relaxation in any federally enforceable emission limitation (such as a restriction on hours of operation), increases its potential to emit hazardous air pollutants such that the source becomes a major source that is subject to this Rule, shall submit an application meeting the requirements of Paragraph (m)(1) of this Rule within 30 days after the date that such source becomes a major source. The Director shall use the procedures in Paragraph (n) of this Rule in reviewing the application. The existing source MACT requirements (including relevant compliance deadlines), shall apply to such sources.

(4) If EPA establishes a lesser quantity emission rate under section 112(a)(1) of the federal Clean Air Act that results in an area source becoming a major source that is subject to this Rule, then the owner or operator of such a major source shall submit an application meeting the requirements of Paragraph (m)(1) of this Rule on or before the date six months after the date that such source becomes a major source. Existing source MACT requirements (including relevant compliance deadlines), as specified in a title V permit issued pursuant to the requirements of this Rule, shall apply to such sources.

(f) Sources that have a title V permit addressing section 112(j) requirements. The requirements of this Paragraph apply to major sources that include one or more sources in a category or subcategory for which EPA fails to promulgate an emission standard on or before the section 112(j) deadline, and the owner or operator has a permit meeting the section 112(j) requirements, and where changes occur at the major source to equipment, activities, or both, subsequent to the section 112(j) deadline.

(1) If the title V permit already provides the requirements that address the events that occur under this Paragraph subsequent to the section 112(j) deadline, then the source shall comply with the applicable new source MACT or existing source MACT requirements as specified in the permit, and the section 112(j) requirements are thus satisfied.

(2) If the title V permit does not contain the requirements that address the events that occur under this Paragraph subsequent to the section 112(j) deadline, then the owner operator shall submit an application for a revision to the existing title V permit that meets the requirements of Paragraph (m)(1) of this Rule within 30 days of beginning construction. Existing source MACT requirements (including relevant compliance deadlines), as specified in a title V permit issued pursuant to the requirements of this Rule shall apply to such sources.

(g) Requests for applicability determination. An owner or operator who is unsure of whether one or more sources at a major source belong in a category or subcategory for which EPA has failed to promulgate an emission standard under this 40 CFR Part 63 may, on or before an applicable section 112(j) deadline, request an applicability determination from the Office by submitting an application meeting the requirements of Paragraph (m)(1) of this Rule by the applicable deadlines specified in paragraphs (d), (e), or (f) of this Rule.

(h) An owner or operator who submits a Part 1 MACT application meeting the requirements of Paragraph (m)(1) of this Rule shall submit a Part 2 MACT application meeting the requirements of

Paragraph (m)(2) of this Rule no later than the applicable date specified in 40 CFR 63 Subpart B Table 1. The submission date specified in 40 CFR 63 Subpart B Table 1 for Miscellaneous Organic Chemical Manufacturing shall apply to sources in each of the source categories listed in 40 CFR 63 Subpart B Table 2. When an owner or operator is required by Sec. 3D-1109 and this Rule to submit an application meeting the requirements of Paragraph (m)(1) of this Rule by a date that is after the date for a Part 2 MACT application for sources in the category or subcategory in question established by 40 CFR 63 Subpart B Table 1, the owner or operator shall submit a Part 2 MACT application meeting the requirements of Paragraph (m)(2) of this Rule within 60 additional days after the applicable deadline for submission of the Part 1 MACT application. The Part 2 applications shall be reviewed by the Office according to the procedures established in 40 CFR 63.55.

(1) Any owner or operator who submitted a request for an applicability determination on or before May 15, 2002, that remained pending as of May 30, 2003, and who still wishes to obtain such a determination must resubmit that request by the date that is 60 days after the Administrator publishes in the Federal Register a proposed standard under section 112(d) or 112(h) of the Clean Air Act for the category or subcategory in question. Such a resubmitted request must be supplemented to discuss the relation between the source(s) in question and the applicability provision in the proposed standard for the category or subcategory in question, and to explain why there may still be uncertainties that require a determination of applicability. The Director shall take action on each supplemented and resubmitted request within an additional 60 days after the applicable deadline for the resubmitted request. If more than three years remain on the current title V permit, the owner or operator shall submit an application for a title V permit revision to make any conforming changes in the permit required to adopt the existing emission limitations as the section 112(j) MACT emission limitations. If less than three years remain on the current title V permit, any required conforming changes shall be made when the permit is renewed. If the applicability determination is positive, the owner or operator shall submit a Part 2 MACT application meeting the requirements of Paragraph (m)(2) of this Rule by the date specified for the category or subcategory in question in 40 CFR 63 Subpart B Table 1. If the applicability determination is negative, no further action by the owner or operator is necessary.

(2) An owner or operator who has submitted an application meeting the requirements of Paragraph (m)(1) of this Rule may request a determination of whether emission limitations adopted pursuant to a prior case-by-case MACT determination under section 112(g) that apply to one or more sources in a relevant category or subcategory are substantially as effective as the emission limitations that the Office would otherwise adopt pursuant to this Rule for the source in question. Such a request must be submitted by the date for the category or subcategory in question specified in 40 CFR 63 Subpart B Table 1. Each request for a determination under this Paragraph shall be construed as a complete application for an equivalent emission limitation under this Rule. If the Director determines that the emission limitations in the prior

case-by-case MACT determination are substantially as effective as the emission limitations the Director would otherwise adopt under this Rule , then the Director must adopt the existing emission limitations in the permit as the emission limitations to effectuate section 112(j) for the source in question. If the Director determines that the emission limitations in the prior case-by-case MACT determination under section 112(g) are not substantially as effective as the emission limitations that the Director would otherwise adopt for the source in question under this Rule, the Director must make a new MACT determination and adopt a title V permit incorporating an appropriate equivalent emission limitation under this Rule. The Office shall use the procedures in 40 CFR 63.52(e) to determine whether the emission limitations adopted pursuant to the prior 112(g) case-by-case MACT determination are substantially as effective as the emission limitations which Office would otherwise adopt pursuant to Section 112(j) of the federal Clean Air Act for the source in question.

(i) If the Director disapproves a permit application submitted under this Rule or determines that the application is incomplete, the owner or operator shall revise and resubmit the application to meet the Director's objections not later than six months after first receiving notification that the application has been disapproved or is incomplete.

(j) If the owner or operator of a source subject to this Rule has submitted a timely and complete application for a permit, significant permit revision, or administrative amendment required by this Rule, any failure to have this permit shall not be a violation of the requirements of this Rule unless the delay in final action is due to the failure of the applicant to submit, in a timely manner, information required or requested to process the application.

(k) The permit shall contain the items specified in 40 CFR 63.52 including:

(1) specification of the affected source and the new affected source

(2) an emission limitation (or limitations) or emission standard equivalent to existing source MACT and an emission limitation (or limitations) equivalent to new source MACT for control of emissions of hazardous air pollutants for that category or subcategory determined by the Director according to 40 CFR 63.55(a) on a case-by-case basis;

(3) any emission limits, production limits, operational limits or other terms and conditions necessary to ensure practicable enforceability of the MACT emission limitation;

(4) any notification, operation and maintenance, performance testing, monitoring, reporting, and recordkeeping requirements; and

(5) a compliance date(s) by which the owner or operator of an existing source shall be in compliance with the MACT emission limitation and all other applicable terms and conditions of the permit not to exceed three years from the date of issuance of the permit (The owner or operator of a new affected source shall comply with a new source MACT level of control immediately upon startup.)

(l) Early reductions made pursuant to Section 112(i)(5)(A) of the federal Clean Air Act shall be achieved not later than the date on which the relevant standard should have been promulgated according to the source category schedule for standards.

(m) A permit application for a MACT determination shall consist of two parts.

(1) The Part 1 application shall contain the information required under 40 CFR 63.53(a) and shall be submitted by the applicable deadline specified in Paragraph (d), (e), or (f) of this Rule.

(2) The Part 2 application shall contain the information required under 40 CFR 63.53(b) and shall be submitted no later than the deadline in 40 CFR 63 Subpart B Table 1.

(n) Permit application review. The Director shall follow 40 CFR 63.55(a) in reviewing permit applications for MACT. The resulting MACT determination shall be incorporated into the facility's title V permit according to the procedures established under this Section. Following submittal of a Part 1 or Part 2 MACT application, the Director may request, pursuant to Sec. 3Q-0507 (c) and 0525 (a), additional information from the owner or operator; and the owner or operator shall submit the requested information within 30 days. A Part 2 MACT application is complete if it is sufficient to begin processing the application for a title V permit addressing section 112(j) requirements. If the Office disapproves a permit application or determines that the application is incomplete, the owner or operator shall revise and resubmit the application to meet the objections of the Office within the time period specified by the Office. Such time period shall not exceed six months from the date that the owner or operator is first notified that the application has been disapproved or is incomplete. The Director shall issue a title V permit meeting section 112(j) requirements after receipt of a complete Part 2 MACT application following the schedule in Sec. 3Q-0525.

(o) The following requirements apply to case-by-case determinations of equivalent emission limitations when a MACT standard is subsequently promulgated:

(1) If EPA promulgates an emission standard that is applicable to one or more sources within a major facility before the date a proposed permit under this Rule is approved, the permit shall contain the promulgated standard rather than the emission limitation determined under Sec. 3D-1109, and the owner or operator of the source shall comply with the promulgated standard by the compliance date in the promulgated standard.

(2) If EPA promulgates an emission standard that is applicable to a source after the date that a permit is issued under this Rule, the Director shall revise the permit on its next renewal to reflect the promulgated standard. (Subparagraph (a)(1) of Sec. 3Q-0517 does not apply to requirements established under this Rule.) The Director shall establish a compliance date in the revised permit that assures that the owner or operator shall comply with the promulgated standard within a reasonable time, but no longer than eight years after such standard is promulgated or eight years after the date by which the owner or operator was first required to comply with the emission limitation established by permit, whichever is earlier. However, in no event shall the period for compliance for existing sources be shorter than that provided for existing sources in the promulgated standard.

(3) Notwithstanding the requirements of Subparagraphs (1) or (2) of this Paragraph, if EPA promulgates an emission standard that is applicable to a source after the date a proposed permit is approved, the Director need not change the emission limitation in the permit to reflect the promulgated standard if the level of control required by the

emission limitation in the permit is as effective as that required by the promulgated standard. If EPA promulgates an emission standard that is applicable to an affected source after the date a permit application is approved, and the level of control required by the promulgated standard is less stringent than the level of control required by any emission limitation in the prior MACT determination, the Office is not required to incorporate any less stringent emission limitation of the promulgated standard and may consider any more stringent provisions of the MACT determination to be applicable legal requirements when issuing or revising such a title V permit. (11-11-96, 11-22-04)

Sec. 3Q-0527. Reserved.

(9-14-98)

Sec. 3Q-0528. 112(g) case-by-case mact procedures

(a) Applicability. The owner or operator of a source required to apply maximum achievable control technology (MACT) under Sec. 3D-1112 shall follow the permit procedures set out in this Rule.

(b) Construction prohibition. After July 1, 1998 a person shall not begin actual construction or reconstruction of a major source of hazardous air pollutants unless:

(1) The major source has been specifically regulated or exempted from regulation under:

(A) Sec. 3D-1109 or 1111, or

(B) a standard issued pursuant to Section 112(d), 112(h), or 112(j) of the federal Clean Air Act under 40 CFR Part 63,

and the owner and operator has fully complied with all procedures and requirements for preconstruction review established by that standard, including any applicable requirements set forth in 40 CFR Part 63, Subpart A; or

(2) The Office has made a final and effective case-by-case determination under Sec. 3D-1112 such that emissions from the constructed or reconstructed major source will be controlled to a level no less stringent than the maximum achievable control technology emission limitation for new sources.

(c) Requirements for constructed and reconstructed major sources. When a case-by-case determination of MACT is required by Sec. 3D-1112, the owner and operator shall submit a permit application to the Office and the Office shall process the application following the procedures of Sec. 3Q-0501 (c).

(d) Alternative operating scenarios. When applying for a permit, the owner or operator may request approval of case-by-case MACT determinations for alternative operating scenarios. Approval of such determinations satisfies the requirements of Section 112(g) of the federal Clean Air Act for each such scenario.

(e) Application requirements for a case-by-case MACT determination. The owner or operator of a source required to apply MACT under Sec. 3D-1112 shall submit a permit application that contains all the information required under 40 CFR 63.43(e).

(f) Reporting to the EPA. Within 60 days of the issuance of a permit under this Section or Section 3Q-0300 incorporating a MACT determination, the Director shall provide a copy of such permit to EPA, and shall provide a summary in a compatible electronic format for inclusion in the MACT data base. (9-14-98)

FORSYTH COUNTY, NC - AIR QUALITY CONTROL

SECTION 3Q-0600. REPEALED

Sec. 3Q-0601. – 3Q-0607 Repealed

SECTION 3Q-0700. TOXIC AIR POLLUTANT PROCEDURES

Sec. 3Q-0701. Applicability

With the exceptions in Sec. 3Q-0702, no person shall cause or allow any toxic air pollutant named in Sec. 3D-1104 to be emitted from any facility into the atmosphere at a rate that exceeds the applicable rate(s) in Sec. 3Q-0711 without having received a permit to emit toxic air pollutants as follows:

(1) new facilities according to Sec. 3Q-0704;
(2) modifications according to Sec. 3Q-0706.

Sec. 3Q-0702. Exemptions

(a) A permit to emit toxic air pollutants shall not be required under this Section for:
  (1) residential wood stoves, heaters, or fireplaces;
  (2) hot water heaters that are used for domestic purposes only and are not used to heat process water;
  (3) maintenance, structural changes, or repairs that do not change capacity of that process, fuel-burning, refuse-burning, or control equipment, and do not involve any change in quality or nature or increase in quantity of emission of any regulated air pollutant or toxic air pollutant;
  (4) housekeeping activities or building maintenance procedures, including painting buildings, resurfacing floors, roof repair, washing, portable vacuum cleaners, sweeping, use and associated storage of janitorial products, or non-asbestos bearing insulation removal;
  (5) use of office supplies, supplies to maintain copying equipment, or blueprint machines;
  (6) paving parking lots;
  (7) replacement of existing equipment with equipment of the same size, type, and function if the new equipment:
    (A) does not result in an increase to the actual or potential emissions of any regulated air pollutant or toxic air pollutant;
    (B) does not affect compliance status; and
    (C) fits the description of the existing equipment in the permit, including the application, such that the replacement equipment can be operated under that permit without any changes to the permit;
  (8) comfort air conditioning or comfort ventilation systems that do not transport, remove, or exhaust regulated air pollutants to the atmosphere;
  (9) equipment used for the preparation of food for direct on-site human consumption;
  (10) non-self-propelled non-road engines, except generators, regulated by rules adopted by the Environmental Protection Agency under Title II of the federal Clean Air Act;
  (11) stacks or vents to prevent escape of sewer gases from domestic waste through plumbing traps;

(12) use of fire fighting equipment;

(13) the use for agricultural operations by a farmer of fertilizers, pesticides, or other agricultural chemicals containing one or more of the compounds listed in Sec. 3D-1104 if such compounds are applied according to agronomic practices acceptable to the North Carolina Department of Agriculture and the Forsyth County Board of Commissioners;

(14) asbestos demolition and renovation projects that comply with Sec. 3D-1110 and that are being done by persons accredited by the NC Department of Health and Human Services under the Asbestos Hazard Emergency Response Act;

(15) incinerators used only to dispose of dead animals or poultry as identified in Sec. 3D-1201 (c)(4) or incinerators used only to dispose of dead pets as identified in Sec. 3D-1208 (a)(2)(A);

(16) refrigeration equipment that is consistent with Section 601 through 618 of Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, 40 CFR Part 82, and any other regulations promulgated by EPA under Title VI for stratospheric ozone protection, except those units used as or with air pollution control equipment;

(17) laboratory activities:

(A) bench-scale, on-site equipment used exclusively for chemical or physical analysis for quality control purposes, staff instruction, water or wastewater analyses, or non-production environmental compliance assessments;

(B) bench scale experimentation, chemical or physical analyses, training or instruction from nonprofit, non-production educational laboratories;

(C) bench scale experimentation, chemical or physical analyses, training or instruction from hospital or health laboratories pursuant to the determination or diagnoses of illnesses; and

(D) research and development laboratory activities that are not required to be permitted under Section 3Q-0500 provided the activity produces no commercial product or feedstock material;

(18) combustion sources as defined in Sec. 3Q-0703 except new or modified combustion sources permitted on or after July 10, 2010.

(19) storage tanks used only to store:

(A) inorganic liquids with a true vapor pressure less than 1.5 pounds per square inch absolute;

(B) fuel oils, kerosene, diesel, crude oil, used motor oil, lubricants, cooling oils, natural gas, liquefied petroleum gas, or petroleum products with a true vapor pressure less than 1.5 pounds per square inch absolute;

(20) dispensing equipment used solely to dispense diesel fuel, kerosene, lubricants or cooling oils;

(21) portable solvent distillation systems that are exempted under Sec. 3Q-0102 (c)(1)(I);

(22) processes:

(A) electric motor burn-out ovens with secondary combustion chambers or afterburners;
(B) electric motor bake-on ovens;
(C) burn-off ovens for paint-line hangers with afterburners;
(D) hosiery knitting machines and associated lint screens, hosiery dryers and associated lint screens, and hosiery dyeing processes where bleach or solvent dyes are not used;
(E) blade wood planers planing only green wood;
(F) saw mills that saw no more than 2,000,000 board feet per year provided only green wood is sawed;
(G) perchloroethylene dry cleaning processes with 12-month rolling average consumption of:
(i) less than 1366 gallons of perchloroethylene per year for facilities with dry-to-dry machines only;
(ii) less than 1171 gallons of perchloroethylene per year for facilities with transfer machines only; or
(iii) less than 1171 gallons of perchloroethylene per year for facilities with both transfer and dry-to-dry machines;

(23) wood furniture manufacturing operations as defined in 40 CFR 63.801(a) that comply with the emission limitations and other requirements of 40 CFR Part 63 Subpart JJ, provided that the terms of this exclusion shall not affect the authority of the Director under Sec. 3Q-0712;
(24) wastewater treatment systems at pulp and paper mills for hydrogen sulfide and methyl mercaptan only;
(25) natural gas and propane fired combustion sources with an aggregate allowable heat input value less than 450 million Btu per hour that are the only source of benzene at the facility;
(26) emergency engines with an aggregate total horsepower less than 4843 horsepower that are the only source of formaldehyde at the facility;
(27) an air emission source that is any of the following:
(A) subject to an applicable requirement under 40 CFR Part 61, as amended;
(B) an affected source under 40 CFR Part 63, as amended; or
(C) subject to a case-by-case MACT permit requirement issued by the Office pursuant to 23 Paragraph (j) of 42 U.S.C. Section 7412, as amended;
(28) gasoline dispensing facilities or gasoline service station operations that comply with Sec. 3D-0928 and 0932 and that receive gasoline from bulk gasoline plants or bulk gasoline terminals that comply with Sec. 3D-0524, 0925, 0926, 0927, 0932 and 0933 via tank trucks that comply with Sec. 3D-0932;
(29) the use of ethylene oxide as a sterilant in the production and subsequent storage of medical devices or the packaging and subsequent storage of medical devices for sale if

the emissions from all new and existing sources at the facility described in Sec. 3D-0538 (d) are controlled at least to the degree described in Sec. 3D-0538 (d) and the facility complies with Sec. 3D-0538 (e) and (f);

(30) bulk gasoline plants, including the storage and handling of fuel oils, kerosene, and jet fuels but excluding the storage and handling of other organic liquids, that comply with Sec. 3D-0524, 0925, 0926, 0932 and 0933; unless the Director finds that a permit to emit toxic air pollutants is required under Paragraph (b) of this Rule or Sec. 3Q-0712 of this Section for a particular bulk gasoline plant; or

(31) bulk gasoline terminals, including the storage and handling of fuel oils, kerosene, and jet fuels but excluding the storage and handling of other organic liquids, that comply with Sec. 3D-0524, 0925, 0927, 0932 and 0933 if the bulk gasoline terminal existed before November 1, 1992; unless:

(A) the Director finds that a permit to emit toxic air pollutants is required under Paragraph (b) of this Rule or Sec. 3Q-0712 for a particular bulk gasoline terminal, or

(B) the owner or operator of the bulk gasoline terminal meets the requirements of Sec. 3D-0927 (i);

(b) Emissions from the activities identified Subparagraphs (a)(28) through (a)(31) of this Rule shall be included in determining compliance with the toxic air pollutant requirements in this Section and shall be included in the permit if necessary to assure compliance. Emissions from the activities identified in Subparagraphs (a)(1) through (a)(27) of this Rule shall not be included in determining compliance with the toxic air pollutant requirements in this Section provided that the terms of this exclusion shall not affect the authority of the Director under Sec. 3Q-0712 of this Section.

(c) The addition or modification of an activity identified in Paragraph (a) of this Rule shall not cause the source or facility to be evaluated for emissions of toxic air pollutants.

(d) An activity that is exempt from being permitted under this Section is not exempt from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. (9-14-98, 7-24-00, 7-22-02, 11-22-14)

Sec. 3Q-0703. Definitions

For the purposes of this Section, the following definitions apply:

(1) "Actual rate of emissions" means:

(A) for existing sources:

(i) for toxic air pollutants with an annual averaging period, the average rate or rates at which the source actually emitted the pollutant during the two-year period preceding the date of the particular modification and that represents normal operation of the source. If this period does not represent normal operation, the Director may allow the use of a different, more representative, period.

(ii) for toxic air pollutants with a 24-hour or one-hour averaging period, the maximum actual emission rate at which the source actually emitted for the applicable averaging period during the two-year period preceding the date of the particular modification and that represents normal operation of the source. If this period does not represent normal operation, the Director may require or allow the use of a different, more representative, period.

(B) for new or modified sources, the average rate or rates, determined for the applicable averaging period(s), that the proposed source will actually emit the pollutant as determined by engineering evaluation.

(2) "Applicable averaging period" means the averaging period for which an acceptable ambient limit has been established by the Commission in Sec. 3D-1104.

(3) “Bioavailable chromate pigments” means the group of chromium (VI) compounds consisting of calcium chromate (CAS No.13765-19-0), calcium dichromate (CAS No. 14307-33-6), strontium chromate (CAS No. 7789-06-2), strontium dichromate (CAS No. 7789-06-2), zinc chromate (CAS No. 13530-65-9), and zinc dichromate (CAS No. 7789-12-0).

(4) “CAS Number” means the Chemical Abstract Service registry number identifying a particular substance.

(5) “Chromium (VI) equivalent” means the molecular weight ratio of the chromium (VI) portion of a compound to the total molecular weight of the compound multiplied by the associated compound emission rate or concentration at the facility.

(6) “Combustion sources” means boilers, space heaters, process heaters, internal combustion engines, and combustion turbines, which burn only wood or unadulterated fossil fuel. It does not include incinerators, waste combustors, kilns, dryers, or direct heat exchange industrial processes.

(7) "Creditable emissions" means actual decreased emissions that have not been previously relied on to comply with Subchapter 3D. All creditable emissions shall be enforceable by permit condition.

(8) "Cresol" means o-cresol, p-cresol, m-cresol, or any combination of these compounds.

(9) "Evaluation" means:

(A) a determination that the emissions from the facility, including emissions from sources exempted by Sec. 3Q-0702 (a)(28) through (31) of this Section, are less than the rate listed in Sec. 3Q-0711; or

(B) a determination of ambient air concentrations as described under Sec. 3D-1106, including emissions from sources exempted by Sec. 3Q-0702 (28) through (31).

(10) "GACT" means any generally available control technology emission standard applied to an area source or facility pursuant to Section 112 of the federal Clean Air Act.

(11) "Hexane isomers except n-hexane" means 2-methyl pentane, 3-methyl pentane, 2,2-dimethyl butane, 2,3-dimethyl butane, or any combination of these compounds.

(12) "MACT" means any maximum achievable control technology emission standard applied to a source or facility pursuant to Section 112 federal Clean Air Act.

(13) "Maximum feasible control" means the maximum degree of reduction for each pollutant subject to regulation under this Section using the best technology that is available taking into account, on a case-by-case basis, human health, energy, environmental, and economic impacts and other costs.

(14) "Modification" means any physical changes or changes in the methods of operation that result in a net increase in emissions or ambient concentration of any pollutant listed in Sec. 3Q-0711 or that result in the emission of any pollutant listed in Sec. 3Q-0711 not previously emitted.

(15) "Net increase in emissions" means for a modification the sum of any increases in permitted allowable and decreases in the actual rates of emissions from the proposed modification from the sources at the facility for which the air permit application is being filed. If the net increase in emissions from the proposed modification is greater than zero, all other increases in permitted allowable and decreases in the actual rates of emissions at the facility within five years immediately preceding the filing of the air permit application for the proposed modification that are otherwise creditable emissions may be included.

(16) “Nickel, soluble compounds” means the soluble nickel salts of chloride ($NiCl_2$, CAS No. 7718-54-9), sulfate ($NiSO_4$, CAS No. 7786-81-4), and nitrate ($Ni(NO_3)_2$, CAS No. 13138-45-9).

(17) “Non-specific chromium (VI) compounds” means the group of compounds consisting of any chromium (VI) compounds not specified in this Section as a bioavailable chromate pigment or a soluble chromate compound.

(18) "Polychlorinated biphenyls" means any chlorinated biphenyl compound or mixture of chlorinated biphenyl compounds.

(19) “Pollution prevention plan” means a written description of current and projected plans to reduce, prevent, or minimize the generation of pollutants by source reduction and recycling and includes a site-wide assessment of pollution prevention opportunities at a facility that addresses sources of air pollution, water pollution, and solid and hazardous waste generation.

(20) “SIC” means standard industrial classification code.

(21) “Soluble chromate compounds” means the group of chromium (VI) compounds consisting of ammonium chromate (CAS No. 7788-98-9), ammonium dichromate (CAS No. 7789-09-5), chromic acid (CAS No. 7738-94-5), potassium chromate (CAS No. 7789-00-6), potassium dichromate (CAS No. 7778-50-9), sodium chromate (CAS No. 7775-11-3), and sodium dichromate (CAS No. 10588-01-9).

(22) "Toxic air pollutant" means any of those carcinogens, chronic toxicants, acute systemic toxicants, or acute irritants listed in Sec. 3D-1104.

Sec. 3Q-0704. New facilities

(a) This Rule applies only to new facilities.

(b) The owner or operator of a facility required to have a permit because of applicability of a Section in Subchapter 3D, other than Section 3D-1100, are required to receive a permit to emit toxic air pollutants before beginning construction, and shall comply with the permit when beginning operation. This Paragraph does not apply to facilities whose emissions of toxic air pollutants result only from sources exempted under Sec. 3Q-0102 of this Subchapter.

(c) The owner or operator of the facility shall submit a permit application to comply with Section 3D-1100 if emissions of any toxic air pollutant exceed the levels contained in Sec. 3Q-0711 of this Section.

(d) The permit application filed pursuant to this Rule shall include an evaluation for all toxic air pollutants listed in Sec. 3D-1104. All sources at the facility, excluding sources exempt from evaluation in Sec. 3Q-0702 of this Section, emitting these toxic air pollutants shall be included in the evaluation.

(9-14-98)

Sec. 3Q-0705. Existing facilities and sic calls (Repealed)

Sec. 3Q-0706. Modifications

(a) The owner or operator shall comply with Paragraphs (b) and (c) of this Rule for modification of any facility required to have a permit because of applicability of a Section in Subchapter 3D, other than Section 3D-1100. This Paragraph does not apply to facilities whose emissions of toxic air pollutants result only from insignificant activities, as defined in Sec. 3Q-0103 (20) of this Subchapter, or sources exempted under Sec. 3Q-0102 of this Subchapter.

(b) The owner or operator of the facility shall submit a permit application to comply with Sec. 3D-1100 if the modification results in:

(1) a net increase in emissions or ambient concentration of any toxic air pollutant that the facility was emitting before the modification; or

(2) emissions of any toxic air pollutant that the facility was not emitting before the modification if such emissions exceed the levels contained in Sec. 3Q-0711.

(c) The permit application filed pursuant to this Rule shall include an evaluation for all toxic air pollutants covered under Sec. 3D-1104 for which there is:

(1) a net increase in emissions of any toxic air pollutant that the facility was emitting before the modification; and

(2) emission of any toxic air pollutant that the facility was not emitting before the modification if such emissions exceed the levels contained in Sec. 3Q-0711.

All sources at the facility, excluding sources exempt from evaluation in Sec. 3Q-0702, emitting these toxic air pollutants shall be included in the evaluation.

(d) If a source is included in an air toxic evaluation, but is not the source that is being added or modified at the facility, and if the emissions from this source must be reduced in order for the facility to

comply with the rules in this Section and Sec. 3D-1100, then the emissions from this source shall be reduced by the time that the new or modified source begins operating such that the facility shall be in compliance with the rules in this Section and Sec. 3D-1100. (9-14-98, 5-8-06)

Sec. 3Q-0707. Previously permitted facilities

Any facility with a permit that contains a restriction based on the evaluation of a source exempted under Sec. 3Q-0702 may request a permit modification to adjust the restriction by removing from consideration the portion of emissions resulting from the exempt source unless the Director determines that the removal of the exempt source will result in an acceptable ambient level in Sec. 3D-1104 being exceeded. The Director shall modify the permit to remove the applicability of the air toxic rules to the exempt source. No fee shall be charged solely for such permit modification. (9-14-98)

Sec. 3Q-0708. Compliance schedule for previously unknown toxic air pollutant emissions

(a) The owner or operator of a facility permitted to emit toxic air pollutants shall submit a permit application within six months after the owner or operator learns of an emission of a previously unknown toxic air pollutant from a permitted source that would have been included in the permit when it was issued. The application shall include the information required by Paragraph (b) of this Rule.

(b) When an application to revise a permit is submitted under this Rule, the owner or operator shall in addition to the application, submit to the Director:

(1) an evaluation for the pollutant according to this Section and Section 3D-1100 that demonstrates compliance with the acceptable ambient level in Sec. 3D-1104; or

(2) a compliance schedule containing the information required under Paragraph (c) of this Rule for the proposed modifications to the facility required to comply with the acceptable ambient level according to this Section and Section 3Q-1100.

(c) The compliance schedule required under Subparagraph (b)(2) of this Rule shall contain the following increments of progress as applicable:

(1) a date by which contracts for emission control and process equipment shall be awarded or orders shall be issued for the purchase of component parts;

(2) a date by which on-site construction or installation of the emission control and process equipment shall begin;

(3) a date by which on-site construction or installation of the emission control and process equipment shall be completed; and

(4) the date by which final compliance shall be achieved.

(d) Final compliance shall be achieved no later than:

(1) six months after the permit modification or renewal is issued if construction or installation of emission control or process equipment is not required;

(2) one year after the permit modification or renewal is issued if construction or installation of emission control or process equipment is required; or

(3) the time that is normally required to construct a stack or install other dispersion enhancement modifications but not more than one year after the permit modification or renewal is issued.

(e) The owner or operator shall certify to the Director within ten days after each applicable deadline for each increment of progress required under Paragraph (c) of this Rule whether the required increment of progress has been met.

Sec. 3Q-0709. Demonstrations

(a) Demonstrations. The owner or operator of a source who is applying for a permit or permit modification to emit toxic air pollutants shall:

(1) demonstrate to the satisfaction of the Director through dispersion modeling that the emissions of toxic air pollutants from the facility shall not cause any acceptable ambient level listed in Sec. 3D-1104 to be exceeded beyond the premises (adjacent property boundary); or

(2) demonstrate to the satisfaction of the Forsyth County Board of Commissioners or its delegate that the ambient concentration beyond the premises (adjacent property boundary) for the subject toxic air pollutant shall not adversely affect human health (e.g., a risk assessment specific to the facility) though the concentration is higher than the acceptable ambient level in Sec. 3D-1104 by providing one of the following demonstrations:

(A) the area where the ambient concentrations are expected to exceed the acceptable ambient levels in Sec. 3D-1104 is not inhabitable or occupied for the duration of the averaging time of the pollutant of concern; or

(B) new toxicological data that show that the acceptable ambient level in Sec. 3D-1104 for the pollutant of concern is too low and the facility's ambient impact is below the level indicated by the new toxicological data.

(b) Technical Infeasibility and Economic Hardship. This Paragraph shall not apply to any incinerator covered under Sec. 3D-1200. The owner or operator of any source constructed before May 1, 1990, or a perchloroethylene dry cleaning facility subject to a GACT standard under 40 CFR 63.320 through 63.325, or a combustion source as defined in Sec. 3Q-0703 permitted before July 1, 2009, who cannot supply a demonstration described in Paragraph (a) of this Rule shall:

(1) demonstrate to the satisfaction of the Forsyth County Board of Commissioners or its delegate that complying with the guidelines in Sec. 3D-1104 is technically infeasible as the technology necessary to reduce emissions to a level to prevent the acceptable ambient levels in Sec. 3D-1104 from being exceeded does not exist; or

(2) demonstrate to the satisfaction of the Forsyth County Board of Commissioners or its delegate that complying with the guidelines in Sec. 3D-1104 would result in serious economic hardship. In deciding if a serious economic hardship exists, the Forsyth County Board of Commissioners or its delegate shall consider market impact; impacts

on local, regional and state economy; risk of closure; capital cost of compliance; annual incremental compliance cost; and environmental and health impacts.

If the owner or operator makes a demonstration to the satisfaction of the Forsyth County Board of Commissioners or its delegate pursuant to Subparagraphs (1) or (2) of this Paragraph, the Director shall require the owner or operator of the source to apply maximum feasible control. Maximum feasible control shall be in place and operating within three years from the date that the permit is issued for the maximum feasible control.

(c) Pollution Prevention Plan. The owner or operator of any facility using the provisions of Paragraph (a) (2) (A) or Paragraph (b) of this Rule shall develop and implement a pollution prevention plan consisting of the following elements:

(1) statement of corporate and facility commitment to pollution prevention;
(2) identification of current and past pollution prevention activities;
(3) timberline and strategy for implementation;
(4) description of ongoing and planned employee education efforts; and
(5) identification of internal pollution prevention goal selected by the facility and expressed in either qualitative or quantitative terms.

The facility shall submit the pollution prevention plan along with the application. The pollution prevention plan shall be maintained on site. A progress report on implementation of the plan shall be prepared by the facility annually and be made available to Office personnel for review upon request.

(d) Modeling Demonstration. If the owner or operator of a facility demonstrates by modeling that no toxic air pollutant emitted from the facility exceeds the acceptable ambient level values set out in Sec. 3D-1104 beyond the facility's premises, further modeling demonstration is not required with the permit application. However, the Office may still require more stringent emission levels according to its analysis under Sec. 3D-1107.

(e) Change in Acceptable Ambient Level. When an acceptable ambient level for a toxic air pollutant in Rule Sec. 3D-1104 is changed, any condition that has previously been put in a permit to protect the previous acceptable ambient level for that toxic air pollutant shall not be changed until:

(1) The permit is renewed, at which time the owner or operator of the facility shall submit an air toxic evaluation , excluding sources exempt from evaluation in Sec. 3Q-0702 of this Section, showing that the new acceptable ambient level will not be exceeded. If additional time is needed to bring the facility into compliance with the new acceptable ambient level, the owner or operator shall negotiate a compliance schedule with the Director. The compliance schedule shall be written into the facility's permit and final compliance shall not exceed two years from the effective date of the change in the acceptable ambient level; or
(2) The owner or operator of the facility requests that the condition be changed and submits along with that request an air toxic evaluation, excluding sources exempt from evaluation in Sec. 3Q-0702 of this Section, showing that the new acceptable ambient level shall not be exceeded. (9-14-98)

Sec. 3Q-0710. Public notice and opportunity for public hearing

(a) If the owner or operator of a facility chooses to make a demonstration pursuant to Sec. 3Q-0709 (a)(2) or (b) of this Section, the Forsyth County Board of Commissioners or its delegate shall approve or disapprove the permit after a public notice with an opportunity for a public hearing.

(b) The public notice shall be given by publication in a newspaper of general circulation in the area where the facility is located and shall be emailed to persons who are on the Office's emailing list for air quality permit notices.

(c) The public notice shall identify:

(1) the affected facility;

(2) the name and address of the permittee;

(3) the name and address of the person to whom to send comments and requests for public hearing;

(4) the name, address, and telephone number of an Office staff person from whom interested persons may obtain additional information, including copies of the draft permit, the application, compliance plan, pollution prevention plan, monitoring and compliance reports, all other relevant supporting materials, and all other materials available to the Office that are relevant to the permit decision;

(5) the activity or activities involved in the permit action;

(6) any emissions change involved in any permit modification;

(7) a brief description of the public comment procedures;

(8) the procedures to follow to request a public hearing unless a public hearing has already been scheduled; and

(9) the time and place of any hearing that has already been scheduled.

(d) The notice shall allow at least 30 days for public comments.

(e) If the Director determines that significant public interest exists or that the public interest will be served, the Director shall require a pubic hearing to be held on a draft permit. Notice of a public hearing shall be given at least 30 days before the public hearing.

(f) The Director shall make available for public inspection in at least one location in the region affected, the information submitted by the permit applicant and the Office's analysis of that application.

(g) Any persons requesting copies of material identified in Subparagraph (c)(4) of this Rule shall pay ten cents ($0.10) a page for each page copied. Confidential material shall be handled in accordance with Rule .0107 of this Subchapter. (9-14-98)

Sec. 3Q-0711. Emission rates requiring a permit

(a) A permit to emit toxic air pollutants is required for any facility where one or more emission release points are obstructed or non-vertically oriented whose actual rate of emissions from all sources are greater than any one of the following toxic air pollutant permitting emissions rates:

Pollutant (CAS Number)	Carcinogens lb/yr	Chronic Toxicants lb/day	Acute Systemic Toxicants lb/hr	Acute Irritants lb/hr
acetaldehyde (75-07-0)				6.8
acetic acid (64-19-7)				0.96
acrolein (107-02-8)				0.02
acrylonitrile (107-13-1)		0.4	0.22	
ammonia (7664-41-7)				0.68
aniline (62-53-3)			0.25	
arsenic and inorganic arsenic compounds	0.053			
asbestos (1332-21-4)	5.7×10^{-3}			
aziridine (151-56-4)		0.13		
benzene (71-43-2)	8.1			
benzidine and salts (92-87-5)	0.0010			
benzo(a)pyrene (50-32-8)	2.2			
benzyl chloride (100-44-7)			0.13	
beryllium (7440-41-7)	0.28			
beryllium chloride (7787-47-5)	0.28			
beryllium fluoride (7787-49-7)	0.28			
beryllium nitrate (13597-99-4)	0.28			
bioavailable chromate pigments, as chromium (VI) equivalent	0.0056			
bis-chloromethyl ether (542-88-1)	0.025			
bromine (7726-95-6)				0.052
1,3-butadiene (106-99-0)	11			
cadmium (7440-43-9)	0.37			
cadmium acetate (543-90-8)	0.37			
cadmium bromide (7789-42-6)	0.37			
carbon disulfide (75-15-0)		3.9		
carbon tetrachloride (56-23-5)	460			
chlorine (7782-50-5)		0.79		0.23
chlorobenzene (108-90-7)		46		

Pollutant (CAS Number)	Carcinogens lb/yr	Chronic Toxicants lb/day	Acute Systemic Toxicants lb/hr	Acute Irritants lb/hr
chloroform (67-66-3)	290			
chloroprene (126-99-8)		9.2	0.89	
cresol (1319-77-3)			0.56	
p-dichlorobenzene (106-46-7)				16.8
dichlorodifluoromethane (75-71-8)		5200		
dichlorofluoromethane (75-43-4)		10		
di(2-ethylhexyl)phthalate (117-81-7)		0.63		
dimethyl sulfate (77-78-1)		0.063		
1,4-dioxane (123-91-1)		12		
epichlorohydrin (106-89-8)	5600			
ethyl acetate (141-78-6)			36	
ethylenediamine (107-15-3)		6.3	0.64	
ethylene dibromide (106-93-4)	27			
ethylene dichloride (107-06-2)	260			
ethylene glycol monoethyl ether (110-80-5)		2.5	0.48	
ethylene oxide (75-21-8)	1.8			
ethyl mercaptan (75-08-1)			0.025	
fluorides		0.34	0.064	
formaldehyde (50-00-0)				0.04
Hexachlorocyclopentadiene (77-47-4)		0.013	0.0025	
hexachlorodibenzo-p-dioxin (57653-85-7)	0.0051			
n-hexane (110-54-3)		23		
hexane isomers except nBhexane				92
hydrazine (302-01-2)		0.013		
hydrogen chloride (7647-01-0)				0.18
hydrogen cyanide (74-90-8)		2.9	0.28	
hydrogen fluoride (7664-39-3)		0.63		0.064
hydrogen sulfide (7783-06-4)		1.7		
maleic anhydride (108-31-6)		0.25	0.025	

Pollutant (CAS Number)	Carcinogens lb/yr	Chronic Toxicants lb/day	Acute Systemic Toxicants lb/hr	Acute Irritants lb/hr
manganese and compounds		0.63		
manganese cyclopentadienyl tricarbonyl (12079-65-1)		0.013		
manganese tetroxide (1317-35-7)		0.13		
mercury, alkyl		0.0013		
mercury, aryl and inorganic compounds		0.013		
mercury, vapor (7439-97-6)		0.013		
methyl chloroform (71-55-6)		250		64
methylene chloride (75-09-2)	1600		0.39	
methyl ethyl ketone (78-93-3)		78		22.4
methyl isobutyl ketone (108-10-1)		52		7.6
methyl mercaptan (74-93-1)			0.013	
nickel carbonyl (13463-39-3)		0.013		
nickel metal (7440-02-0)		0.13		
nickel, soluble compounds, as nickel		0.013		
nickel subsulfide (12035-72-2)	0.14			
nitric acid (7697-37-2)				0.256
nitrobenzene (98-95-3)		1.3	0.13	
n-nitrosodimethylamine (62-75-9)	3.4			
non-specific chromium (VI) compounds, as chromium (VI) equivalent	0.0056			
pentachlorophenol (87-86-5)		0.063	0.0064	
perchloroethylene (127-18-4)	13000			
phenol (108-95-2)			0.24	
phosgene (75-44-5)		0.052		
phosphine (7803-51-2)				0.032
polychlorinated biphenyls (1336-36-3)	5.6			
soluble chromate compounds, as chromium (VI) equivalent		0.013		
styrene (100-42-5)			2.7	

Pollutant (CAS Number)	Carcinogens lb/yr	Chronic Toxicants lb/day	Acute Systemic Toxicants lb/hr	Acute Irritants lb/hr
sulfuric acid (7664-93-9)		0.25	0.025	
tetrachlorodibenzo-p-dioxin (1746-01-6)	0.00020			
1,1,1,2-tetrachloro-2,2-difluoroethane (76-11-9)		1100		
1,1,2,2-tetrachloro-1,2-difluoroethane (76-12-0)		1100		
1,1,2,2-tetrachloroethane (79-34-5)	430			
toluene (108-88-3)		98		14.4
toluene diisocyanate,2,4-(584-84-9) and 2,6-(91-08-7) isomers		0.003		
trichloroethylene (79-01-6)	4000			
trichlorofluoromethane (75-69-4)			140	
1,1,2-trichloro-1,2,2-trifluoroethane (76-13-1)				240
vinyl chloride (75-01-4)	26			
vinylidene chloride (75-35-4)		2.5		
xylene (1330-20-7)		57		16.4

(b) A permit to emit toxic air pollutants is required for any facility where all emission release points are unobstructed and vertically oriented whose actual rate of emissions from all sources are greater than any one of the following toxic air pollutant permitting emissions rates:

Pollutant (CAS Number)	Carcinogens lb/yr	Chronic Toxicants lb/day	Acute Systemic Toxicants lb/hr	Acute Irritants lb/hr
acetaldehyde (75-07-0)				28.43
acetic acid (64-19-7)				3.90
acrolein (107-02-8)				0.08
acrylonitrile (107-13-1)		1.3	1.05	
ammonia (7664-41-7)				2.84
aniline (62-53-3)			1.05	

Pollutant (CAS Number)	Carcinogens lb/yr	Chronic Toxicants lb/day	Acute Systemic Toxicants lb/hr	Acute Irritants lb/hr
arsenic and inorganic arsenic compounds	0.194			
asbestos (1332-21-4)	7.748×10^{-3}			
aziridine (151-56-4)		0.3		
benzene (71-43-2)	11.069			
benzidine and salts (92-87-5)	1.384×10^{-3}			
benzo(a)pyrene (50-32-8)	3.044			
benzyl chloride (100-44-7)			0.53	
beryllium (7440-41-7)	0.378			
beryllium chloride (7787-47-5)	0.378			
beryllium fluoride (7787-49-7)	0.378			
beryllium nitrate (13597-99-4)	0.378			
bioavailable chromate pigments, as chromium (VI) equivalent	0.008			
bis-chloromethyl ether (542-88-1)	0.034			
bromine (7726-95-6)				0.21
1,3-butadiene (106-99-0)	40.585			
cadmium (7440-43-9)	0.507			
cadmium acetate (543-90-8)	0.507			
cadmium bromide (7789-42-6)	0.507			
carbon disulfide (75-15-0)		7.8		
carbon tetrachloride (56-23-5)	618.006			
chlorine (7782-50-5)		1.6		0.95
chlorobenzene (108-90-7)		92.7		
chloroform (67-66-3)	396.631			
chloroprene (126-99-8)		18.5	3.69	
cresol (1319-77-3)			2.32	
p-dichlorobenzene (106-46-7)				69.5
dichlorodifluoromethane (75-71-8)		10445.4		
dichlorofluoromethane (75-43-4)		21.1		

Pollutant (CAS Number)	Carcinogens lb/yr	Chronic Toxicants lb/day	Acute Systemic Toxicants lb/hr	Acute Irritants lb/hr
di(2-ethylhexyl)phthalate (117-81-7)		1.3		
dimethyl sulfate (77-78-1)		0.1		
1,4-dioxane (123-91-1)		23.6		
epichlorohydrin (106-89-8)	7655.891			
ethyl acetate (141-78-6)			147.41	
ethylenediamine (107-15-3)		12.6	2.63	
ethylene dibromide (106-93-4)	36.896			
ethylene dichloride (107-06-2)	350.511			
ethylene glycol monoethyl ether (110-80-5)		5.1	2.00	
ethylene oxide (75-21-8)	2.490			
ethyl mercaptan (75-08-1)			0.11	
fluorides		0.7	0.26	
formaldehyde (50-00-0)				0.16
hexachlorocyclopentadiene (77-47-4)		2.5×10^{-2}	0.01	
hexachlorodibenzo-p-dioxin (57653-85-7)	0.007			
n-hexane (110-54-3)		46.3		
hexane isomers except n-hexane				379.07
hydrazine (302-01-2)		2.5×10^{-2}		
hydrogen chloride (7647-01-0)				0.74
hydrogen cyanide (74-90-8)		5.9	1.16	
hydrogen fluoride (7664-39-3)		1.3		0.26
hydrogen sulfide (7783-06-4)		5.1		
maleic anhydride (108-31-6)		0.5	0.11	
manganese and compounds		1.3		
manganese cyclopentadienyl tricarbonyl (12079-65-1)		2.5×10^{-2}		
manganese tetroxide (1317-35-7)		0.3		
mercury, alkyl		2.5×10^{-3}		
mercury, aryl and inorganic compounds		2.5×10^{-2}		

Pollutant (CAS Number)	Carcinogens lb/yr	Chronic Toxicants lb/day	Acute Systemic Toxicants lb/hr	Acute Irritants lb/hr
mercury, vapor (7439-97-6)		2.5×10^{-2}		
methyl chloroform (71-55-6)		505.4		257.98
methylene chloride (75-09-2)	2213.752		1.79	
methyl ethyl ketone (78-93-3)		155.8		93.19
methyl isobutyl ketone (108-10-1)		107.8		31.59
methyl mercaptan (74-93-1)			0.05	
nickel carbonyl (13463-39-3)		2.5×10^{-2}		
nickel metal (7440-02-0)		0.3		
nickel, soluble compounds, as nickel		2.5×10^{-2}		
nickel subsulfide (12035-72-2)	0.194			
nitric acid (7697-37-2)				1.05
nitrobenzene (98-95-3)		2.5	0.53	
n-nitrosodimethylamine (62-75-9)	4.612			
non-specific chromium (VI) compounds, as chromium (VI) equivalent	0.008			
pentachlorophenol (87-86-5)		0.1	0.03	
perchloroethylene (127-18-4)	17525.534			
phenol (108-95-2)			1.00	
phosgene (75-44-5)		0.1		
phosphine (7803-51-2)				0.14
polychlorinated biphenyls (1336-36-3)	7.656			
soluble chromate compounds, as chromium (VI) equivalent		2.6×10^{-2}		
styrene (100-42-5)			11.16	
sulfuric acid (7664-93-9)		0.5	0.11	
tetrachlorodibenzo-p-dioxin (1746-01-6)	2.767×10^{-4}			
1,1,1,2-tetrachloro-2,2-difluoroethane (76-11-9)		2190.2		
1,1,2,2-tetrachloro-1,2-difluoroethane (76-12-0)		2190.2		

Pollutant (CAS Number)	Carcinogens lb/yr	Chronic Toxicants lb/day	Acute Systemic Toxicants lb/hr	Acute Irritants lb/hr
1,1,2,2-tetrachloroethane (79-34-5)	581.110			
toluene (108-88-3)		197.96		58.97
toluene diisocyanate,2,4-(584-84-9) and 2,6-(91-08-7) isomers		8.4×10^{-3}		
trichloroethylene (79-01-6)	5442.140			
trichlorofluoromethane (75-69-4)			589.66	
1,1,2-trichloro-1,2,2-trifluoroethane (76-13-1)				1000.32
vinyl chloride (75-01-4)	35.051			
vinylidene chloride (75-35-4)		5.1		
xylene (1330-20-7)		113.7		68.44

(c) For the following pollutants, the highest emissions occurring for any 15-minute period shall be multiplied by four and the product shall be compared to the value in Paragraph (a). These pollutants are:

(1) acetaldehyde (75-07-0);
(2) acetic acid (64-19-7);
(3) acrogen (107-02-8);
(4) ammonia (7664-41-7);
(5) bromine (7726-95-6);
(6) chlorine (7782-50-5);
(7) formaldehyde (50-00-0);
(8) hydrogen chloride (7647-01-0);
(9) hydrogen fluoride (7664-39-3); and
(10) nitric acid (7697-37-2). (9-14-98, 5-24-99, 05-14-01)

Sec. 3Q-0712. Calls by the director

Notwithstanding any other provision of this Section or Sec. 3D-1104, upon a written finding that a source or facility emitting toxic air pollutants presents an unacceptable risk to human health based on the acceptable ambient levels in Sec. 3D-1104 or epidemiology studies, the Director may require the owner or operator of the source or facility to submit a permit application to comply with Section 3D-1100 for any or all of the toxic air pollutants emitted from the facility. (9-14-98)

Sec. 3Q-0713. Pollutants with otherwise applicable federal standards or requirements

(a) This Rule applies to the establishment of emission limitations or any other requirements pursuant to the requirements of this Section or Section 3D-1100 for which a standard or requirement has been promulgated under Section 112 of the federal Clean Air Act including those contained in Section 3D-1110 and 1111.

(b) For each facility subject to emission standards or requirements under Section 112 of the federal Clean Air Act, permits issued or revised according to Section 3Q-0500 shall contain specific conditions that:

(1) reflect applicability criteria no less stringent than those in the otherwise applicable federal standards or requirements;

(2) require levels of control for each affected facility and source no less stringent than those contained in the otherwise applicable federal standards or requirements;

(3) require compliance and enforcement measures for each facility and source no less stringent than those in the otherwise applicable federal standards or requirements;

(4) express levels of control, compliance, and enforcement measures in the same form and units of measure as the otherwise applicable federal standards or requirements; and

(5) assure compliance by each affected facility no later than would be required by the otherwise applicable federal standard or requirement. (9-14-98)

Sec. 3Q-0714. Wastewater treatment systems at pulp and paper mills

(a) This Rule applies to wastewater collection and treatment systems at pulp and paper mills that are exempted under Sec. 3Q-0702.

(b) Except for facilities that employ activated sludge type wastewater treatment systems, the owner or operator of a wastewater collection and treatment system covered under this Rule shall:

(1) submit to the Director estimates of hydrogen sulfide, total reduced sulfur, and methyl mercaptan emissions from wastewater collection and treatment systems and components using estimation methods or factors developed through industry testing and analytical studies and approved by the Director by November 1, 2005. In deciding approval of the estimation methods and factors, the Director shall consider field validation procedures including the number of valid samples taken, when measurements are made, laboratory and field measurement quality assurance procedures, and other information necessary in producing accurate and precise measurements.

(2) using the emission estimates developed under Subparagraph (b)(1), perform air dispersion modeling of all hydrogen sulfide emission sources, including all emissions associated with the wastewater collection and treatment system, as described in Sec. 3D-1106 (a) through (i). If the modeling analysis demonstrates that predicted

concentrations of hydrogen sulfide are below the acceptable ambient levels outlined in Sec. 3D-1104, no further plan development, measurement or monitoring action is required to maintain the exemption provided by this Rule. The results of the favorable modeling demonstration must be submitted to the Director by July 1, 2006.

(3) if the dispersion modeling performed under Subparagraph (b)(2) of this rule shows that the acceptable ambient level for hydrogen sulfide is exceeded, submit to the Director, on or before September 30, 2006, for approval by the Director, an ambient air quality monitoring plan designed to assess actual ambient levels of hydrogen sulfide typical of pulp and paper mill operations. The monitoring plan may be undertaken at each of the individual mill sites or, at the option of the affected mill sites, it may be undertaken at a single North Carolina mill site that the Director determines to be representative of the industry. The Director shall complete review and make the decision regarding approval of the monitoring plan by December 31, 2006;

(4) by June 30, 2007, implement the ambient monitoring study plan required in Subparagraph (b)(3) to determine the actual ambient levels of hydrogen sulfide near pulp and paper mills;

(5) complete the ambient hydrogen sulfide monitoring plan and report the results to the Director by December 31, 2008.

(c) To perform ambient monitoring for hydrogen sulfide under Subparagraph (b)(3) of this Rule, the owner or operator shall use monitoring methods and procedures approved by the Director. The Director shall approve the monitoring methods and procedures if he determines that they are an appropriate measure of ambient air concentrations of hydrogen sulfide.

SECTION 3Q-0800. EXCLUSIONARY RULES

Sec. 3Q-0801. Purpose and scope

(a) The purpose of this Section is to define categories of facilities that are exempted from needing a permit under Section 3Q-0500, Title V Procedures, of this Subchapter or the applicability of Sec. 3D-1111 or 40 CFR Part 63 by defining their potential emissions to be less than:

(1) 100 tons per year of each regulated air pollutant;

(2) 10 tons per year of each hazardous air pollutant; and

(3) 25 tons per year of all hazardous air pollutants combined;

as determined by criteria set out in each individual source category rule. [A particular maximum achievable control technology (MACT) standard promulgated under 40 CFR Part 63 may have a lower applicability threshold than those contained in this Paragraph. The threshold contained in that MACT standard shall be used to determine the applicability of that MACT standard]. Potential emissions of hazardous air pollutants limited through the procedures of this Section may be used to determine the applicability of specific requirements of 40 CFR Part 63 to a facility.

(b) Coverage under the rules of this Section is voluntary. The owner or operator of a facility or source qualified to be covered under a rule in this Section that does not want to be covered under that rule shall notify the Director in writing that he does not want his facility covered under this Section, and the Section shall no longer apply to that facility or source.

(c) A source cannot rely on emission limits or caps contained in this Section to justify violation of any rate-based emission limits or other applicable requirements.

(d) Although a facility is exempted, by complying with this Section, from the permitting procedures contained in Section 3Q-0500, Title V Procedures, of this Subchapter, or the applicability of Sec. 3D-1111 or 40 CFR Part 63, it may still need a permit under Section 3Q-0300, Construction and Operation Permit, of this Subchapter unless it is exempted from needing a permit by Sec. 3Q-0102.

(e) Except for gasoline service stations and dispensing facilities and dry cleaning facilities, any facility or source not required to have a permit under this Subchapter shall not be required to maintain records and report emissions as required under this Section. (11-13-95, 5-24-99)

Sec. 3Q-0802. Gasoline service stations and dispensing facilities

(a) For the purpose of this Rule the following definitions apply:

(1) "Gasoline dispensing facility" means any site where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage tanks.

(2) "Gasoline service station" means any gasoline dispensing facility where gasoline is sold to the motoring public from stationary storage tanks.

(b) This Rule only applies to gasoline service stations and gasoline dispensing facilities that are in compliance with Sec. 3D-0928.

(c) Potential emissions from gasoline service stations and gasoline dispensing facilities shall be determined using actual gasoline throughput.

(d) Any gasoline service station or gasoline dispensing facility that has an annual throughput, on a calendar month rolling average basis, of less than 52,000,000 gallons shall be exempted from the requirements of Section 3Q-0500.

(e) The owner or operator of any gasoline service station or gasoline dispensing facility exempted by this Rule from Section 3Q-0500 shall submit a report containing the information described in Paragraph (f) of this Rule if:

(1) annual throughput exceeds 45,000,000 gallons, by the end of the month following the month that throughput exceeds 45,000,000 gallons and every 12 months thereafter;

(2) annual throughput exceeds 50,000,000 gallons, by the end of the month following the month that throughput exceeds 50,000,000 gallons and every six months thereafter; or

(3) annual throughput equals or exceeds 52,000,000 gallons, by the end of the month following the month that throughput equals or exceeds 52,000,000 gallons and shall submit a permit application pursuant to the procedures in Section 3Q-0500.

(f) The report required under Paragraph (e) of this Rule shall include:

(1) the name and location of the gasoline service station or gasoline dispensing facility;

(2) the annual throughput of gasoline for each of the 12-month periods ending on each month since the previous report was submitted, including monthly gasoline throughput for each month required to calculate the annual gasoline throughput for each 12-month period; and

(3) the signature of the appropriate official as identified in Sec. 3Q-0304 (j) certifying as to the truth and accuracy of the report.

(g) The owner or operator of any gasoline service station or gasoline dispensing facility exempted by this Rule from Section 3Q-0500 shall provide documentation of annual throughput to the Director upon request. The owner or operator of any gasoline service station or gasoline dispensing facility exempted by this Rule from Section 3Q-0500 shall retain records to document annual throughput for all 12-month periods during the previous three years.

(h) For facilities covered by this Rule, the owner or operator shall report to the Director any exceedance of a requirement of this Rule within one week of its occurrence. (11-13-95)

Sec. 3Q-0803. Coating, solvent cleaning, graphic arts operations

(a) For the purposes of this Rule, the following definitions apply:

(1) "Coating operation" means a process in which paints, enamels, lacquers, varnishes, inks, dyes, glues, and other similar materials are applied to wood, paper, metal, plastic, textiles, or other types of substrates.

(2) "Solvent cleaning operation" means the use of solvents containing volatile organic compounds to clean soils from metal, plastic, or other types of surfaces.

(3) "Graphic arts operation" means the application of inks to form words, designs, or pictures to a substrate, usually by a series of application rolls each with only partial

coverage and usually using letterpress, offset lithography, rotogravure, or flexographic process.

(b) Potential emissions for a coating operation, solvent cleaning operation, or graphic arts operation shall be determined using actual emissions without accounting for any air pollution control devices to reduce emissions of volatile organic compounds or hazardous air pollutants including perchloroethylene, methyl chloroform, and methyl chloride from the coating operation, solvent cleaning operation or graphic arts operation. All volatile organic compounds and hazardous air pollutants that are also volatile organic compounds and perchloroethylene, methyl chloroform, and methyl chloride are assumed to evaporate and be emitted into the atmosphere at the source.

(c) Paragraphs (d) through (l) of this Rule do not apply to any facility whose potential emissions are greater than or equal to:

(1) 100 tons per year of each regulated air pollutant;
(2) 10 tons per year of each hazardous air pollutant; or
(3) 25 tons per year of all hazardous air pollutants combined;

as determined by criteria set out in each individual source category rule. [A particular maximum achievable control technology (MACT) standard promulgated under 40 CFR Part 63 may have a lower applicability threshold than those contained in this Paragraph. The threshold contained in that MACT standard shall be used to determine the applicability of that MACT standard.]

(d) With the exception of Paragraph (c) of this Rule, the owner or operator of a coating, solvent cleaning, or graphics arts operation shall be exempted from the requirements of Section 3Q-0500, provided the owner or operator of the facility complies with Paragraphs (f)through (j) of this Rule, as appropriate.

(e) Only Paragraph (b) of this Rule applies to coating operations, solvent cleaning operations, or graphic arts operations that are exempted from needing a permit under Sec. 3Q-0102.

(f) The owner or operator of a facility whose potential emissions:

(1) of volatile organic compounds are less than 100 tons per year but more than or equal to 75 tons per year;
(2) of each hazardous air pollutant is less than 10 tons per year but more than or equal to 7.5 tons per year; or
(3) of all hazardous air pollutants combined are less than 25 tons per year but more than or equal to 18 tons per year;

shall maintain records and submit reports as described in Paragraphs (g) and (j) of this Rule.

(g) For facilities covered under Paragraph (f) of this Rule, the owner or operator shall:

(1) maintain monthly consumption records of each material used containing volatile organic compounds as follows:
(A) quantity of volatile organic compound in pounds per gallon of each material used,
(B) pounds of volatile organic compounds of each material used per month and total pounds of volatile organic compounds of each material used during the 12-month period ending on that month,

(C) quantity of each hazardous air pollutant in pounds per gallon of each material used,

(D) pounds of each hazardous air pollutant of each material used per month and total pounds of each hazardous air pollutant of each material used during the 12-month period ending on that month,

(E) quantity of all hazardous air pollutants in pounds per gallon of each material used, and

(F) pounds of all hazardous air pollutants of each material used per month and total pounds of all hazardous air pollutants of each material used during the 12-month period ending on that month; and

(2) submit to the Director each quarter, or more frequently if required by a permit condition, a report summarizing emissions of volatile organic compounds and hazardous air pollutants containing the following:

(A) pounds volatile organic compounds used:

(i) for each month during the quarter, and

(ii) for each 12-month period ending on each month during the quarter using the 12-month rolling total;

(B) greatest quantity in pounds of an individual hazardous air pollutant used:

(i) for each month during the quarter, and

(ii) for each 12-month period ending on each month during the quarter using the 12-month rolling total; and

(C) pounds of all hazardous air pollutants used:

(i) for each month during the quarter, and

(ii) for each 12-month period ending on each month during the quarter using the 12-month rolling total.

(h) The owner or operator of a facility whose potential emissions:

(1) of volatile organic compounds are less than 75 tons per year,

(2) of each hazardous air pollutants is less than 7.5 tons per year, and

(3) of all hazardous air pollutants combined are less than 18 tons per year,

shall maintain records and submit reports as described in Paragraphs (i) and (j) of this Rule.

(i) For facilities covered under Paragraph (h)of this Rule, the owner or operator shall submit to the Director by March 1 of each year, unless an alternate date is specified in a permit issued under Section 3Q-0300, or more frequently if required by a permit condition, a report summarizing emissions of volatile organic compounds and hazardous air pollutants containing the following:

(1) pounds volatile organic compounds used during the previous calendar year,

(2) pounds of the highest individual hazardous air pollutant used during the previous year, and

(3) pounds of all hazardous air pollutants used during the previous year.

(j) In addition to the specific reporting requirements for sources covered under Paragraphs (f) and (h) of this Rule, the owner or operator of the source shall:

(1) maintain purchase orders and invoices of materials containing volatile organic compounds, which shall be made available to the Director upon request to confirm the general accuracy of the reports filed under Paragraphs (g) or (i) of this Rule regarding materials usage;
(2) retain purchase orders and invoices for a period of at least three years;
(3) report to the Director any exceedance of a requirement of this Rule within one week of occurrence; and
(4) certify all submittals as to the truth, completeness, and accuracy of all information recorded and reported over the signature of the appropriate official as identified in Sec. 3Q-0304 (j).

(k) Copies of all records required to be maintained under Paragraphs (g), (i) or (j) of this Rule shall be maintained at the facility and shall be available for inspection by personnel of the Office on demand.

(l) The Director shall maintain a list of facilities covered under this Rule. (11-13-95, 7-28-97, 5-24-99, 05-14-01)

Sec. 3Q-0804. Dry cleaning facilities

(a) For the purpose of this Rule, the following definitions apply:
(1) "Dry cleaning facility" means an establishment with one or more dry cleaning systems as defined under 40 CFR 63.321.
(2) "Perchloroethylene consumption" means the total volume of perchloroethylene purchased based upon purchase receipts or other reliable measures.

(b) Potential emissions for dry cleaning facilities shall be determined using perchloroethylene consumption.

(c) Any dry cleaning facility that has a yearly perchloroethylene consumption as determined under 40 CFR 63.323(d) of less than 10 tons shall be exempted from the requirements of Section 3Q-0500.

(d) The owner or operator of a dry cleaning facility shall report perchloroethylene consumption in accordance with 40 CFR 63.324.

(e) For facilities covered by this Rule, the owner or operator shall report to the Director any exceedance of a requirement of this Rule within one week of its occurrence. (11-13-95)

Sec. 3Q-0805. Grain elevators

(a) This Rule applies to grain elevators that only receive grain directly from the farm and that only clean, dry, grind, or store grain before it is transported elsewhere.

(b) This Rule shall not apply to facilities that process grain beyond cleaning, drying, or grinding.

(c) Potential emissions for grain elevators shall be determined using actual tons of grain received or shipped, whichever is greater.

(d) Any grain elevator that receives or ships less than 21,000 tons of grain per year shall be exempted from the requirements of Section 3Q-0500.

(e) The owner or operator of a grain elevator exempted by this Rule from Section 3Q-0500 shall submit to the Director, by March 1 of each year, unless an alternate date is specified in a permit issued under Section 3Q-0300, a report containing the following information:

(1) the name and location of the grain elevator;
(2) the tons of grain received and shipped during the previous calendar year; and
(3) the signature of the appropriate official as identified in Sec. 3Q-0304 (j) certifying as to the truth and accuracy of the report.

(f) The owner or operator of any grain elevator exempted by this Rule from Section 3Q-0500 shall provide documentation of annual tons of grain received or shipped to the Director upon request. The owner or operator of a grain elevator exempted by this Rule from Section 3Q-0500 shall retain records to document annual tons of grain received or shipped for each of the previous three years.

(g) For facilities covered by this Rule, the owner or operator shall report to the Director any exceedance of a requirement of this Rule within one week of its occurrence. (11-13-95, 05-14-01)

Sec. 3Q-0806. Cotton gins

(a) Potential emissions for cotton gins shall be determined using actual number of bales of cotton, not exceeding 500 pounds each, produced.

(b) Any cotton gin that gins less than 167,000 bales of cotton per year shall be exempted from the requirements of Section 3Q-0500.

(c) The owner or operator of any cotton gin exempted by this Rule from Section 3Q-0500 shall submit to the Director, by March 1 of each year a report containing the following information:

(1) the name and location of the cotton gin;
(2) the number of bales of cotton produced during the previous year; and
(3) the signature of the appropriate official as identified in Sec. 3Q-0304 (j) certifying as to the truth and accuracy of the report.

(d) The owner or operator of any cotton gin exempted by this Rule from Section 3Q-0500 shall provide documentation of number of bales produced to the Director upon request. The owner or operator of a cotton gin exempted by this Rule from Section 3Q-0500 shall retain records to document number of bales of cotton produced for each of the previous three years.

(e) If the number of bales specified in Paragraph (b) of this Rule are exceeded, the owner or operator shall report to the Director this event within one week of its occurrence. (11-13-95, 05-14-01, 11-22-04)

Sec. 3Q-0807. Emergency generators

(a) This Rule applies to facilities whose only sources requiring a permit is one or more emergency generators or emergency use internal combustion engines and associated fuel storage tanks.

(b) For the purposes of this Rule:

(1) "Emergency generator " means a stationary internal combustion engine used to generate electricity only during the loss of primary power at the facility that is beyond the control of the owner or operator of the facility or during maintenance when necessary to protect the environment. An emergency generator may be operated periodically to ensure that it will operate;

(2) "Emergency use internal combustion engines" means stationary internal combustion engines used to drive pumps, aerators, and other equipment only during the loss of primary power at the facility that is beyond the control of the owner or operator of the facility or during maintenance when necessary to protect the environment. An emergency use internal combustion engine may be operated periodically to ensure that it will operate.

(c) For the purposes of this Rule, potential emissions for emergency generators and emergency use internal combustion engines shall be determined using actual fuel consumption.

(d) Any facility whose emergency generators and emergency use internal combustion engines consume less than:

(1) 322,000 gallons per year of diesel fuel for diesel-powered generators,

(2) 62,500,000 cubic feet per year of natural gas for natural gas-powered generators,

(3) 1,440,000 gallons per year of liquefied petroleum gas for liquefied petroleum gas-powered generators, and

(4) 50,800 gallons per year of gasoline for gasoline-powered generators,

shall be exempted from the requirements of Section 3Q-0500.

(e) The owner or operator of any emergency generator or emergency use internal combustion engine exempted by this Rule from Section 3Q-0500 shall submit, to the Director by March 1 of each year unless an alternate date is specified in a permit issued under Section 3Q-0300, a report containing the following information:

(1) the name and location of the facility,

(2) the types and quantity of fuel consumed by emergency generators and emergency use internal combustion engines; and

(3) the signature of the appropriate official as identified in Rule .0304(j) of this Subchapter certifying as to the truth and accuracy of the report.

(f) The owner or operator of any facility exempted by this Rule from Section 3Q-0500 shall provide documentation of types and quantities of fuel consumed to the Director upon request. The owner or operator of a facility exempted by this Rule from Section 3Q-0500 shall retain records to document types and quantities of fuels consumed for each of the previous three years.

(g) For facilities covered by this Rule, the owner or operator shall report to the Director any exceedance of a requirement of this Rule within one week of its occurrence. (11-13-95, 9-14-98, 05-14-01)

Sec. 3Q-0808. Peak shaving generators

(a) This Rule applies to facilities whose only sources requiring a permit is one or more peak shaving generators and their associated fuel storage tanks.

(b) For the purpose of this Rule, potential emissions shall be determined using actual total fuel consumption.

(c) Any facility whose total fuel consumption by one or more peak shaving generators shall be exempted from the requirements of Section 3Q-0500. if the facility uses:

(1) natural gas burning turbine driven generators that combust less than or equal to 5,625,000 therms per year;

(2) distillate oil burning turbine driven generators that combust less than or equal to 1,496,000 gallons per year;

(3) combined fuel (natural gas and six percent or more distillate oil) burning engine generators that combust less than or equal to 633,320 therms natural gas and 24,330 gallons distillate oil per year; or

(4) distillate oil burning engine driven generators that combust less than or equal to 410,580 gallons per year.

(d) The owner or operator of any peak shaving generator exempted by this Rule from Section 3Q-0500 shall submit to the Director by March 1 of each year, unless an alternate date is specified in a permit issued under Section 3Q-0300, a report containing the following information:

(1) the name and location of the facility;

(2) the number and size of all peak shaving generators located at the facility;

(3) the total number of hours of operation of all peak shaving generators located at the facility;

(4) the actual total amount of energy production per year from all peak shaving generators located at the facility; and

(5) the signature of the appropriate official as identified in Sec. 3Q-0304 (j) certifying as to the truth and accuracy of the report.

(e) The owner or operator of any facility exempted by this Rule from Section 3Q-0500 shall provide documentation of number, size, number of hours of operation, and amount and type of fuel burned per calendar year from all peak shaving generators located at the facility to the Director upon request. The owner or operator of a facility exempted by this Rule from Section 3Q-0500 shall retain records to document the amount of total energy production per year for the previous three years.

(f) For facilities covered by this Rule, the owner or operator shall report to the Director if the total fuel combusted by all peak shaving generators located at the facility exceeds the applicable fuel limit in Paragraph (c) of this Rule within one week of its occurrence that the facility has exceeded the fuel consumption in Paragraph (c) of this Rule.

(5-24-99, 05-14-01, 5-8-06)

Sec. 3Q-0809. Concrete batch plants

(a) This Rule applies to concrete batch plants that use fabric filters or equivalently effective control devices to control particulate emissions from the storage silos and the weigh hopper that receives materials from the cement and cement supplemental (mineral admixture) silos.

(b) For the purpose of this Rule, potential emissions shall be determined using actual cubic yards of wet concrete produced.

(c) Any concrete batch plant that produces less than 1,210,000 cubic yards of wet concrete per year shall be exempted from the requirements of Section 3Q-0500.

(d) The owner or operator of any concrete batch plant exempted by this Rule from Section 3Q-0500 shall submit to the Director by March 1 of each year a report containing the following information:

(1) name and location of the concrete batch plant;

(2) current air permit number;

(3) number of cubic yards of wet concrete produced during the previous calendar year; and

(4) signature of the appropriate official as identified in Sec. 3Q-0304 (j) certifying as to the truth and accuracy of the report.

(e) The owner or operator of any concrete batch plant exempted by this Rule from Section 3Q-0500 shall provide documentation of the cubic yards of wet concrete produced to the Director upon request. The owner or operator of a concrete batch plant exempted by this Rule from Section 3Q-0500 shall retain records to document the cubic yards of wet concrete produced per year for the previous three years.

(f) For concrete batch plants covered by this Rule, the owner or operator shall report to the Director any exceedance of a requirement of this Rule within one week of its occurrence.

Sec. 3Q-0810. Reserved

(5-8-06)

SECTION 3Q-0900. PERMIT EXEMPTIONS

Sec. 3Q-0901. Purpose and scope

(a) The purpose of this Section is to define categories of facilities or sources that are exempted from needing a permit under Section 3Q-0300.

(b) Sources at a facility required to have a permit under Section 3Q-0500 shall not be eligible for exemption under this Section.

(c) This Section does not apply to activities exempted from permitting under Sec. 3Q-0102.

(d) Coverage under this Section is voluntary. If the owner or operator of a facility or source qualified to be covered under a rule in this Section does not want to be covered under that rule, he shall notify the Director in writing that he does not want his facility or source covered under this Section. Along with the notification, he shall submit a permit application according the procedures in Section 3Q-0300, and the Director shall act on that application following the procedures in Section 3Q-0300.

(e) To quality for exemption under this Section, the facility or source shall comply with all the requirements in the applicable rule in this Section.

(f) If the Director finds that a facility or source covered under this Section is in violation of the requirements of this Section, he shall require that facility or source to be permitted under Section 3Q-0300 if necessary to obtain or maintain compliance.

Sec. 3Q-0902. Temporary crushers

(a) For the purposes of this Rule, "temporary crusher" means a crusher that will not be operated at any one facility or site for more than 12 months.

(b) This rule applies to any temporary crusher that:

(1) crushes no more than 300,000 tons at any one facility or site;

(2) burn no more than 17,000 gallons of diesel fuel during any 12 months if it uses:

(A) a diesel-fired generator, or

(B) a diesel engine to drive the crusher;

(3) does not operate at a quarry that has an air permit issued under this Subchapter; and

(4) continuously uses water spray to control emissions from the crusher; and

(5) does not operate at a facility that is required to have a mining permit issued by the North Carolina Department of Environment and Natural Resources, Division of Land Resources.

(c) The owner or operator of a temporary crusher and any associated generators shall comply with Sec. 3D-0510 Particulates From Sand, Gravel, or Crushed Stone Operations, 0516 Sulfur Dioxide Emissions From Combustion Sources, 0521 Control of Visible Emissions, 0524 New Source Performance Standards, 40 CFR Part 60, Subparts OOO and IIII, 0535 Excess Emissions Reporting and Malfunctions, 0540 Particulates From Fugitive Non-Process Dust Emission Sources and 1806 Control and Prohibition of Odorous Emissions.

(d) The owner or operator of a temporary crusher shall not cause or allow any material to be produced, handled, transported, or stockpiled without so that the ambient air quality standards for particulate matter (PM2.5, PM10, and total suspended particulate are not exceeded beyond the property line).

(e) The owner or operator of a temporary crusher shall maintain records of the amount of material crushed and the quantity of fuel burned in the diesel-fired generator or engine so that the Director can determine upon review of these records that the crusher qualifies to be covered under this Rule.

(f) The owner or operator of a temporary crusher shall label each crusher, hopper, feeder, screen, conveyor, elevator, and generator with a permanent and unique identification number.

(g) If a source is covered under Sec. 3D-0524 (40 CFR Part 60, Subpart OOO), the owner or operator of a temporary crusher shall submit to the Director notifications required under Sec. 3D-0524 (40 CFR Part 60, Subpart OOO).

(h) If the Director or his authorized representative requests copies of notifications or testing records required under Sec. 3D-0524 (40 CFR Part 60, Subpart OOO), the owner or operator of a temporary crusher shall submit the requested notifications or testing records within two business days of such a request.

(i) If a source is covered under Sec. 3Q-0524 (40 CFR Part 60, Subpart IIII), the owner or operator of a compression ignition internal combustion engine (CI ICE) for a temporary crusher shall submit to the Director notifications required under Sec. 3Q-0524 (40 CFR Part 60, Subpart IIII).

(j) If the Director or his authorized representative requests copies of notifications or testing records required under Sec. 3Q-0524 (40 CFR Part 60, Subpart IIII), the owner or operator of a compression ignition internal combustion engine (CI ICE) for temporary crusher shall submit the requested notifications or testing records within two business days of such a request.

(k) If the owner or operator of a crusher plans or has the design potential to operate a crusher at a facility or site for more than twelve months, he shall apply for and shall have received an air quality permit issued under this Subchapter before beginning operations.

Sec. 3Q-0903. Emergency generators and stationary reciprocating internal combustion engines

(a) For the purposes of this Rule, the following definitions apply:

(1) "Emergency generator" means an emergency stationary reciprocating internal combustion engine as defined in 40 CFR 63.6675.

(2) "Stationary reciprocating internal combustion engine" shall be defined as set forth in 40 CFR 63.6675.

(b) This rule applies to emergency generators and stationary reciprocating internal combustion engines at a facility whose only sources that would require a permit are emergency generators and stationary reciprocating internal combustion engines whose facility-wide actual emissions are less than 100 tons per calendar year of any regulated pollutant, 10 tons per calendar year of any hazardous air pollutant or 25 tons per calendar year of any combination of hazardous air pollutants.

(c) The owner or operator of emergency generators and stationary reciprocating internal combustion engines covered under this Rule shall comply with Sec. 3D-0516, Sec. 3D-0521, and Sec.

3D-0524 of Subchapter 3D.

(d) The owner or operator of emergency generators and stationary reciprocating internal combustion engines covered under this Rule shall provide the Director documentation upon request that the emergency generators and stationary reciprocating internal combustion engines meet the applicability requirements in Paragraph (b) of this Rule.