ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
AIR DIVISION
ADMINISTRATIVE CODE

CHAPTER 335-3-4
CONTROL OF PARTICULATE EMISSIONS

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335-3-4-.01 Visible Emissions.

(1) Visible Emissions Restrictions for Stationary Sources.

(a) Except as provided in subparagraphs (b), (c), (d), or (e) of this paragraph, and paragraph (3) of this rule, no person shall discharge into the atmosphere from any source of emission, particulate of an opacity greater than that designated as twenty percent (20%) opacity, as determined by a six (6) minute average.

(b) For a person not covered by paragraphs (3), (4), (5), and (6) of this rule, during one six (6) minute period in any sixty (60) minute period, a person may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent (40%) opacity.

(c) The Director may approve exceptions to this rule or specific sources which hold permits under chapter 335-3-14; provided however, such exceptions may be made for startup, shutdown, load change, and rate change or other short,

intermittent periods of time upon terms approved by the Director and made a part of such permit.

(d) The Director may also approve exceptions to this rule in accordance with the following provisions:

1. The owner or operator of the affected source shall request in writing for the Director to provide an opportunity for the determination of the opacity of emissions during sampling and testing required pursuant to rule 335-3-1-.08.

2. Upon receipt from such owner or operator of the written report of the results of the sampling and testing conducted pursuant to rule 335-3-1-.08, the Director will make a finding concerning compliance with opacity and other applicable standards.

3. If the Director determines that an affected source is in compliance with all applicable standards for which the sampling and testing are being conducted in accordance with rule 335-3-1-.08 but during such sampling and testing the affected source fails to meet any applicable opacity standard, he shall notify the owner or operator and advise him that he may petition the Director within ten (10) days of receipt of notification to make appropriate adjustment to the opacity standard for the affected source.

4. The Director may grant such a petition upon a demonstration by the owner or operator that the affected source and associated air pollution control equipment were operated and maintained in a manner to minimize the opacity of emissions during the sampling and testing; that such sampling and testing were performed under the conditions established by the Director; and that the affected source and associated air pollution control equipment were incapable of being adjusted or operated to meet the applicable opacity standard.

5. Upon the conclusion of sampling and testing as required above, the Director may establish an opacity standard for the affected source at a level at which the source will be able, as indicated by the sampling and testing, to meet the opacity standard at all times during which the source is meeting the mass emissions standards. If sufficient data is not available to the Director to establish such opacity standards, the Director may require additional sampling and testing as necessary to make such a determination of opacity.

(e) The provisions of this paragraph shall not apply to combustion sources in single-family and duplex dwellings where such sources are used for heating or other domestic purposes.

(2) For a person subject to subparagraph (1)(b) of this rule, compliance with opacity standards in this rule shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A, 40 CFR Part 60, as the same may be amended requiring a six (6) minute average as determined by twenty-four (24) consecutive readings, at intervals of fifteen (15) seconds each.

(3) The conditions in paragraphs (4) and (5) of this rule apply to each emissions unit that meets all of the following requirements:

(a) A Continuous Opacity Monitoring System (COMS) is used for indication of opacity of emissions;

(b) With respect to opacity limitations, the units are subject only to the opacity provisions stated in paragraph (1) of this rule; and

(c) The COMS system utilized is required to comply with the requirements of 40 CFR 60.13 or 40 CFR 75.14 (if applicable) and is required to be certified in accordance with the requirements of 40 CFR 60, Appendix B, Performance Specification 1.

(4) Except as otherwise exempt under subparagraphs (1)(c) or (1)(d) of this rule, no permittee shall discharge into the atmosphere from any source of emission, particulate of an opacity greater than that designated as twenty percent (20%) opacity, as determined by a six (6) minute average, except that during each calendar quarter, the permittee may discharge into the atmosphere from any emissions unit qualifying under paragraph (3) of this rule, particulate with an opacity exceeding 20% for not more than twenty-four (24), six (6) minute periods in any calendar day, if such periods do not exceed 2.0 percent of the source calendar quarter operating hours for which the opacity standard is applicable and for which the COMS is indicating valid data.

(5) No permittee shall discharge into the atmosphere from any source of emission particulate of an opacity greater than 22% (excluding exempt periods allowed under subparagraphs (1)(c) and (1)(d) of this rule) averaged over each calendar day.

(6) For a person subject to paragraph (4) of this rule, compliance with the opacity standards in this rule shall be determined by COMS data.

(7) For emissions units described in paragraph (3) above, the permittee shall comply with paragraphs (4) and (5) within 6 months of EPA approval of paragraphs (3), (4), (5), and (6). Until 6

months after EPA approval of paragraphs (3), (4), (5), and (6), emissions units described by paragraph (3) above shall be subject to the emission limit in subparagraph (1)(a) of this rule, the exceptions in subparagraphs (1)(b), (1)(c) and (1)(d) of this rule, the compliance measurement techniques in paragraph (2) of this rule.
Author: James W. Cooper, John E. Daniel, Ronald W. Gore
Statutory Authority: Code of Ala. 1975, §§22-28-14; 22-22A-5, 22-22A-6, 22-22A-8.
History: Effective date January 18, 1972. **Amended:** June 5, 1979. **Amended:** Filed October 17, 1996; effective November 21, 1996. **Amended:** Filed August 28, 2003; effective October 2, 2003. **Amended:** Filed August 26, 2008; effective September 30, 2008.

335-3-4-.02 Fugitive Dust And Fugitive Emissions[1].

(1) No person shall cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, but not be limited to, the following:

(a) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;

(b) Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stock piles, and other surfaces which create airborne dust problems;

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[1]Section 4.2.1 and 4.2.2 of the Alabama Air Pollution Control Commission Rules and Regulations now cited as ADEM Administrative Code Rule 335-3-4-.02(1) and 335-3-4-.02(2) were declared unconstitutional by the Alabama Supreme Court in Ross Neely Express, Inc. v. Alabama Department of Environmental Management, 437 So. 2d 82 (Ala. 1983).

(c) Installation and use of hoods, fans, and fabric filters (or other suitable control devices) to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.

(2) Visible Emissions Restrictions Beyond Lot Line. No person shall cause or permit the discharge of visible fugitive dust

emissions beyond the lot line of the property on which the emissions originate.

(3) When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any rule or regulation, the Director may order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas-borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air.

Author: James W. Cooper, John E. Daniel
Statutory Authority: Code of Ala. 1975, §§22-28-14, 22-22A-5, 22-22A-6, 22-22A-8.
History: Effective Date: January 18, 1972. **Amended:** April 3, 1979; September 18, 1985. **Amended:** Filed October 17, 1996; effective November 21, 1996. **Amended:** Filed June 10, 1999; effective July 15, 1999.

335-3-4-.03 Fuel Burning Equipment.

(1) Class 1 Counties: No person shall cause or permit the emission of particulate matter from fuel-burning equipment in a Class 1 County in excess of the amount shown in Table 4-1 for the heat input allocated to such source. For sources in Class 1 Counties, interpolation of the data in Table 4-1 for heat input values between 10 million BTU/hr and 250 million BTU/hr shall be accomplished by the use of the equation:

$$E = 1.38H^{-0.44}$$

where:

E = Emissions in lb/million BTU

H = Heat Input in millions of BTU/hr

(2) Class 2 Counties: No person shall cause or permit the emission of particulate matter from fuel-burning equipment in a Class 2 County in excess of the amount shown in Table 4-1 for the heat input allocated to such source. For sources in Class 2 Counties, interpolation of the data in Table 4-1 for heat input values between 10 million BTU/hr and 250 million BTU/hr shall be accomplished by the use of the equation:

$$E = 3.109H^{-0.589}$$

where:

E = Emissions in lb/million BTU

H = Heat Input in millions of BTU/hr

(3) For purposes of this Rule, the total heat input from all similar fuel combustion units which discharge particulate matter through a common stack at a plant or premises shall be used for determining the maximum allowable emission of particulate matter.

(4) New fuel-burning sources emitting particulate matter shall be subject to the rules and regulations for Class 1 Counties, paragraph (1) of this Rule, regardless of their location.

Table 4-1 Allowable Particulate Matter Emission Based on Heat Input

Heat Input (Millions of BTU/hr)	**Allowable Emission (lb/million BTU)** Class 1 county	Class 2 County
1	.5	.8
10	.5	.8
20	.37	.53
40	.27	.35
60	.23	.28
80	.2	.24
100	.18	.21
150	.15	.16
200	.13	.14
250	.12	.12
1,000,000	.12	.12

(5) In lieu of the particulate emission limitations contained in paragraph (1) of this Rule for existing coal fired boilers at pulp mills in Talladega County having a rated capacity of up to 300 million BTU per hour, the allowable particulate emission limit shall be 0.1 lb/MMBTU.
Author: James W. Cooper, John E. Daniel
Statutory Authority: Code of Ala. 1975, §§22-28-14, 22-22A-5, 22-22A-6, 22-22A-8.
History: Effective Date: January 18, 1972. **Amended:** October 10, 1984. **Amended:** Filed October 17, 1996; effective November 21, 1996.

335-3-4-.04 Process Industries - General.

(1) Class 1 Counties: No person shall cause or permit the emission of particulate matter in any one hour from any source in a Class I County in excess of the amount shown in Table 4-2 for the process weight per hour allocated to such source. For sources in Class I Counties, interpolation of the data in Table 4-2 for the process

weight per hour values up to 60,000 lbs/hr shall be accomplished by use of the equation:

$$E = 3.59P^{0.62}$$

(P<30 tons/hr)

and interpolation and extrapolation of the data for process weight per hour values equal to or in excess of 60,000 lbs/hr shall be accomplished by use of the equation:

$$E = 17.31P^{0.16}$$

(P≥30 tons/hr)

≤where:

E = Emissions in pounds per hour

P = Process weight per hour in tons per hour.

(a) For the existing four (4) sinter machines in Jefferson County, the allowable filterable particulate limit from each windbox exhaust shall not exceed 0.030 grains per dry standard cubic foot with the additional requirement that total filterable particulate emissions from all windbox exhausts and discharge ends not exceed 140 pounds per hour.

Compliance with the total emission limit shall be achieved by operating no more than three (3) of the four (4) sinter machines simultaneously.

(2) Class 2 Counties: No person shall cause or permit the emission of particulate matter in any one hour from any source in a Class 2 County in excess of the amount shown in Table 4-2 for the process weight per hour allocated to such source. For sources in Class 2 Counties, interpolation of the data in Table 4-2 for the process weight per hour values up to 60,000 lbs/hr shall be accomplished by use of the equation:

$$E = 4.10P^{0.67}$$

(P< 30 tons/hr)

and interpolation and extrapolation of the data for process weight per hour values equal to or in excess of 60,000 lbs/hr shall be accomplished by use of the equation:

$$E = 55.0P^{0.11} - 40$$

(P≥ 30 tons/hr)

where:

E = Emissions in pounds per hour

P = Process weight per hour in tons per hour.

(3) Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of this Rule, the interpretation that results in the minimum value for allowable emission shall apply.

(4) For purposes of this Rule, the total process weight from all similar process units at a plant or premises shall be used for determining the maximum allowable emission of particulate matter that passes through a stack or stacks.

(5) New sources subject to this Rule emitting particulate matter shall be subject to the rules and regulations for Class I Counties, contained in paragraph (1) of this Rule, regardless of their location.

Table 4-2 Allowable Particulate Matter Emission Based on Process Weight Rate

Process Weight Rate (lb/hr)	**Allowable Emission Rate Class 1 County**	**(lb/hr) Class 2 County**
100	0.56	0.55
500	1.52	1.62
1,000	2.34	2.57
5,000	6.33	7.57
10,000	9.76	12.05
20,000	14.97	19.18
60,000	29.83	39.96
80,000	31.23	42.53
120,000	33.33	46.30
160,000	34.90	49.06
200,000	36.17	51.28
1,000,000	46.79	68.96

Author: James W. Cooper, John E. Daniel
Statutory Authority: Code of Ala. 1975, §§22-28-14, 22-22A-5, 22-22A-6, 22-22A-8.
History: Effective Date: January 18, 1972. **Amended:** April 6, 1983. **Amended:** Filed October 17, 1996; effective November 21, 1996.

335-3-4-.05 Small Foundry Cupola.

(1) No person shall cause or permit the emission of particulate matter in any one (1) hour from any small foundry cupola source in

excess of the amount shown in Table 4-3 for the process weight per hour allocated to such source.

(2) Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of this Rule, the interpretation that results in the minimum value for allowable emission shall apply.

(3) For purposes of this Rule, the total process weight from all similar process units at a plant or premises shall be used for determining the maximum allowable emission of particulate matter that passes through a stack or stacks.

(4) Foundry cupolas with a process weight rate greater than 50,000 pounds per hour shall be subject to the rules and regulations of Rule 335-3-4-.04.

Table 4-3 Allowable Particulate Matter Emission Based On Process Weight Rate For Small Foundry Cupolas

Process Weight (lb/hr)	Allowable Emission Rate (lb/hr)
1,000	3.05
2,000	4.70
3,000	6.35
4,000	8.00
5,000	9.58
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
30,000	31.30
40,000	37.00
50,000	42.40

Author: James W. Cooper, John E. Daniel
Statutory Authority: Code of Ala. 1975, §§22-28-14, 22-22A-5, 22-22A-6, and 22-22A-8.
History: Effective Date: January 18, 1972. **Amended:** Filed October 17, 1996; effective November 21, 1996.

335-3-4-.06 Cotton Gins.

(1) No person shall cause or permit the emission of particulate matter in any one (1) hour from any cotton gin operation in excess of the amount shown in Table 4-4 for the process weight per hour allocated to such operation. Particulate matter emissions subject

to this Rule include process emissions and incinerator emissions if any; provided, however, that this shall in no way relieve or affect the application of Chapter 335-3-3 to open burning and incineration at cotton gin operations.

(2) Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of this Rule, the interpretation that results in the minimum value for allowable emission shall apply.

(3) For purposes of this Rule, the total process weight from all similar process units at a plant or premises shall be used for determining the maximum allowable emission of particulate matter that passes through a stack or stacks.

Table 4-4 Allowable Particulate Matter Emission Based On Process Weight Rate For Cotton Gins

Process Weight Rate (lb/hr)	Allowable Emission Rate (lb/hr)	Process Weight Rate (lb/hr)	Allowable Emission Rate (lb/hr)
1,000	1.6	9,000	13.7
1,500	2.4	10,000	15.2
2,000	3.1	12,000	18.2
2,500	3.9	14,000	21.2
3,000	4.7	16,000	24.2
3,500	5.4	18,000	27.2
4,000	6.2	20,000	30.1
5,000	7.7	30,000	44.9
6,000	9.2	40,000	59.7
7,000	10.7	50,000	64.0
8,000	12.2	≥60,000	67.4

Author: James W. Cooper, John E. Daniel
Statutory Authority: Code of Ala. 1975, §§22-28-14, 22-22A-5, 22-22A-6, 22-22A-8.
History: Effective Date: January 18, 1972. **Amended:**

335-3-4-.07 Kraft Pulp Mills.

(1) Applicability. This Rule applies to manufacturing facilities for the pulping of wood and the preparation and recovery of associated chemicals by the kraft process, including combined recovery systems serving other processes such as neutral sulfite pulping.

(2) No person shall cause or permit the emission of particulate matter from any kraft pulp mill in excess of the amounts provided as follows:

(a) From all recovery furnaces, not more than 4.0 pounds per ton of pulp.

(b) From all smelt dissolver vents, not more than 0.5 pounds per ton.

(c) From all lime kilns, not more than 1.0 pounds per ton of pulp.

(3) The pulp production rates for kraft mills referred to in this Rule shall be tons of unbleached air-dried kraft pulp.

(4) Notwithstanding the specific limits set forth in this Rule, in order to maintain the lowest possible emission of air contaminants, the highest and best practicable treatment and control for particulate matter currently available shall be provided for new kraft pulp mills.

(5) For chemical recovery boilers constructed before 1972 at kraft pulp mills in Autauga County, the allowable particulate emissions shall be 1.11 pounds per air-dried ton of pulp.

(6) In lieu of the particulate emission limitations contained in subparagraph (2)(a) of this Rule, for chemical recovery boilers constructed before 1973 at pulp mills in Talladega County, the allowable particulate emission limits shall be 2.5 pounds per air-dried ton of unbleached kraft pulp.

(7) In lieu of the particulate emission limitations contained in subparagraph (2)(b) of this Rule, for smelt dissolver tanks constructed before 1973 at pulp mills in Talladega County, the allowable particulate emission limit shall be 0.3 pounds per air-dried ton of unbleached kraft pulp.
Author: James W. Cooper, John E. Daniel
Statutory Authority: Code of Ala. 1975, §§22-28-14, 22-22A-5, 22-22A-6, 22-22A-8.
History: Effective Date: July 26, 1972. **Amended:** March 7, 1984; October 10, 1984. **Amended:** Filed October 17, 1996; effective November 21, 1996.

335-3-4-.08 Wood Waste Boilers.

(1) Applicability. This Rule applies to boilers and other indirect heat exchangers using not less than thirty percent (30%) wood waste or wood by-products as fuel measured by heat input.

(2) Except as provided in paragraph (3) of this Rule, no person shall cause or permit the emission of particulate matter from any existing wood waste boilers in excess of 0.30 grains per standard dry cubic foot adjusted to fifty percent (50%) excess air. Provided that: for any existing wood waste boiler which must be

modified in order to meet the emission limitations of this Rule, no person shall cause or permit the emission of particulates in excess of:

(a) 0.17 grains per standard dry cubic foot, adjusted to fifty percent (50%) excess air for combination gas and wood waste boilers.

(b) 0.20 grains per standard dry cubic foot, adjusted to 50 percent excess air for combination oil and wood waste boilers.

(c) 0.23 grains per standard dry cubic foot, adjusted to fifty percent (50%) excess air for combination coal and wood waste boilers.

(d) 0.20 grains per standard dry cubic foot, adjusted to fifty percent (50%) excess air for boilers using wood waste only.

Author: James W Cooper, John E. Daniel
Statutory Authority: Code of Ala. 1975, §§22-28-14; 22-22A-5, 22-22A-6, 22-22A-8.
History: Effective Date: July 26, 1972. **Amended:** January 27, 1981; December 9, 1983; October 10, 1984. **Amended:** Filed October 17, 1996; effective November 21, 1996. **Amended:** Filed August 3, 2000; effective September 7, 2000. **Amended:** Filed April 25, 2017; effective June 9, 2017.

335-3-4-.09 Coke Ovens.

(1) Applicability. The provisions of this Rule shall apply to the production of coke in existing conventional slot-oven coke batteries with the exception of paragraph (10) of this Rule which applies to new batteries.

(2) Unloading and Transfer of Coal and Coke. Every person operating coke ovens shall apply all reasonable measures to prevent emissions from coal unloading, transfer, and coke transfer.

(3) Charging. There shall be no visible emissions during the charging cycle from the charging holes or the larry car of any battery with an opacity which is greater than twenty percent (20%) except for an average period or periods not to exceed three (3 minutes of any consecutive sixty (60) minutes on batteries with less than seventy (70) ovens nor more than four (4) minutes of any consecutive sixty (60) minutes on batteries with seventy (70) ovens or more.

(4) Pushing.

(a) There shall be no visible emissions during the pushing cycle, other than water mist or vapor, with an opacity which

is greater than forty percent (40%) for more than one (1) push per hour per battery.

(b) This paragraph specifically exempts existing conventional slot-oven coke batteries with forty (40) ovens located in Tuscaloosa County from subparagraph (a) above and imposes the following requirements:

1. There shall be no visible emissions during the pushing cycle, other than water mist or vapor, with an opacity which is greater than forty percent (40%) for more than two (2) pushes per hour per battery.

(c) Compliance with subparagraphs (a) and (b) of this paragraph shall be determined by dividing by four (4) the total number of pushes greater than forty percent (40%) opacity, observed during a four (4) hour observation period.

(d) Should the observation period include intervals of non-activity, (e.g., when the common coke car is servicing another battery) such intervals shall be included for purposes of determining compliance, provided that the average number of pushes per hour coincides with the average number of pushes per hour required by the normal production cycle of the battery. Intervals such as meal breaks, scheduled breaks when not on a twenty-four (24) hour pushing schedule, or intervals greater than fifteen (15) minutes due to malfunction of equipment cannot be included in the observation period.

(e) For purposes of this paragraph, "normal production cycle" shall mean the average number of pushes per hour determined by taking an arithmetic average of the pushing schedules of the previous ten (10) days. (The denominator to be based on the actual number of hours the pushing machine was scheduled to operate.)

(f) Observation Procedures.

1. The inspector shall evaluate the criteria listed below and select the most appropriate point at which to observe the visible emissions during the pushing cycle.

(i) The inspector should position himself as close to the source of pushing emissions as practical.

(ii) The inspector should observe pushing emissions against the sky.

(iii) The inspector should stand with the sun behind him, if possible, and with the emissions moving in any direction except directly toward or away from the inspector.

(5) Topside Emissions.

(a) Any leak discovered on the topside of a battery shall be wet sealed or the oven shall not be recharged until the necessary repairs are made.

(b) At no time shall there be leaks in more than ten percent (10%) of the offtake piping and no more than five percent (5%) of the charging hole lids on any one battery.

(6) Coke Oven Doors.

(a) There shall be no visible emissions, except non-smoking flame, from any opening on the coke oven doors from more than fifteen percent (15%) of the coke oven doors on any battery at any time.

(b) If a self-sealing door fails to seal during the coking cycle, it shall be adjusted, repaired, or replaced prior to a subsequent charge of oven.

(c) Luted doors which fail to seal after the oven is charged shall be reluted promptly.

(d) Every person operating coke ovens shall have a facility to maintain and repair coke oven doors and shall maintain an inventory of one (1) coke oven door per twelve (12) ovens operated.

(7) Oven Maintenance.

(a) All ovens shall be maintained in good condition to promote complete coking of coal.

(b) All coke oven cracks are to be sealed as soon as practicable after they are detected.

(c) As directed by the Director, reasonable records of the maintenance of oven doors, oven burners, and oven interiors are to be made and retained for a reasonable time.

(8) Combustion Stacks. There shall be no visible emissions, other than water mist or vapor, with an opacity greater than twenty percent (20%) from any stack except for a period or periods aggregating not more than three (3) minutes in any consecutive sixty (60) minutes.

(9) Quenching.

(a) No person shall operate a coke oven plant without baffles installed and properly operating in the quench towers.

(b) Water introduced to the quenching station must be of a quality approved by the Director.

(10) Notwithstanding the specific limits set forth in this Rule, in order to maintain the lowest possible emission of air contaminants, the highest and best practicable treatment and control for particulate matter currently available shall be provided for any new coke producing facilities.
Author: James W. Cooper, John E. Daniel
Statutory Authority: Code of Ala. 1975, §§22-28-14, 22-22A-5, 22-22A-6, 22-22A-8.
History: Effective Date: July 26, 1972. **Amended:** May 28, 1974; July 11, 1978; September 18, 1985, September 21, 1989. **Amended:** Filed October 17, 1996; effective November 21, 1996. **Amended:** Filed August 3, 2000; effective September 7, 2000.

335-3-4-.10 Primary Aluminum Plants.

(1) Applicability. This Rule applies to existing primary aluminum plants which will or do operate for the purpose of or related to producing aluminum metal from aluminum oxide (alumina).

(2) Emission Limits. The emission of particulate matter to the atmosphere from the baking of carbon anodes and from the reduction process (potlines) of any primary aluminum reduction plant shall not exceed twenty-two (22) pounds per ton of aluminum produced on a daily basis.

(3) Compliance. Each primary aluminum plant shall be in compliance with the provisions of this Rule at the earliest possible date, but not later than May 31, 1975. Nothing in this Rule shall negate the requirement for obtaining permits or submitting compliance schedules as required by these rules and regulations.
Author: Sue R. Robertson
Statutory Authority: Code of Ala. 1975, §§22-28-14, 22-22A-5, 22-22A-6, 22-22A-8.
History: Effective Date: January 30, 1973. **Amended:** November 27, 1973.

335-3-4-.11 Cement Plants.

(1) Applicability. This Rule applies to:

(a) Existing cement plants that have a process weight that is greater than 88.7 tons per hour.

(b) All existing cement plants in the primary nonattainment area for suspended particulates in Mobile County (Appendix D).

(c) New cement plants.

(2) This Rule specifically exempts new cement plants from Rule 335-3-4-.04(5).

(3) Emission Limits.

(a) No owner or operator shall cause, permit, or allow the emission of particulate matter from the kiln which is in excess of 0.30 pounds per ton of feed to the kiln, maximum two (2) hour average.

(b) No owner or operator shall cause, permit, or allow the emission of particulate matter from the clinker cooler which is in excess of 0.10 pounds per ton of feed to the kiln, maximum two (2) hour average.

(4) Compliance. Those cement plants located in the primary nonattainment area for suspended particulates in Mobile County (Appendix D) shall be in compliance with these provisions by January 1, 1982 and shall adhere to the increments of progress contained in the following schedule:

(a) Final plans for the emission control system must be submitted before December 31, 1979.

(b) Contracts for the emission control system must be awarded or orders must be issued for purchase of component parts to accomplish emission control before July 1, 1980.

(c) Initiation of on-site construction or installation of the emission control equipment must begin before December 31, 1980.

(d) On-site construction or installation of the emission control equipment must be complete before August 31, 1981.

(e) Final compliance shall be demonstrated before January 1, 1982.

(5) Exception. Cement plants located in the primary nonattainment area for suspended particulates in Mobile County (Appendix D) which shut down prior to December 31, 1982 will not be subject to the requirements contained in this Rule upon the posting of a surety bond in the amount of $100,000, such surety bond contingent on shutting down the facility and with no provision for extension.
Author: Jack Bryant
Statutory Authority: Code of Ala. 1975, §§22-28-14, 22-22A-5, 22-22A-6, 22-22A-8.
History: Effective Date: March 25, 1975. **Amended:** April 3, 1979. **Amended:** Filed October 17, 1996; effective November 21, 1996.

335-3-4-.12 Xylene Oxidation Process.

(1) Applicability. The provisions of this Rule shall apply to all xylene oxidation processes. Each process system shall be considered as a separate process unit.

(2) No person shall cause or permit the emissions of particulate matter in any one hour from any xylene oxidation process in excess of the amount calculated by use of the equations:

$$E = 2.75P^{0.62} \quad (P<30 \text{ tons/hr}) \qquad E = 13.15P^{0.16} \quad (P\geq 30 \text{ tons/hr})$$

Where:

E = Emissions in pounds per hour

P = Process weight per hour in tons per hour

(3) Where a thermal oxidizer is used for the reduction of process waste from a xylene oxidation process and no other waste streams are added, this thermal oxidizer shall be considered a part of the process system.
Author: Richard E. Grusnick
Statutory Authority: Code of Ala. 1975, §§22-28-14, 22-22A-5, 22-22A-6, 22-22A-8.
History: Effective Date: September 12, 1978. **Amended:**

335-3-4-.13 Reserved.
Author:
Statutory Authority:
History:

335-3-4-.14 Grain Elevators.

(1) Applicability. This Rule applies to existing grain elevators which have a permanent storage capacity of more than 88,000 m3 located in Mobile County, provided, however, that it does not apply to grain elevators located at animal food manufacturers, pet food manufacturers, cereal manufacturers, breweries, and livestock feedlots.

(2) Emission Limit. No owner or operator subject to this Rule shall cause, suffer, or allow the discharge into the atmosphere of any fugitive emission from:

(a) Any barge or ship loading station which exhibits greater than twenty percent (20%) opacity. Said emission limit shall be achieved by:

1. A telescoping loading spout which is kept extended to the grain surface and ventilation applied at the end of the spout to a fabric filter.

2. A system demonstrated to have control efficiency equivalent to or greater than provided under subparagraph (a)1. of this paragraph and approved by the Director.

(b) Any barge or ship unloading station unless operated as follows:

1. The unloading leg shall be enclosed from the top (including the receiving hopper) and ventilation to a control device shall be maintained on both sides of the leg and the grain receiving hopper.

2. The total rate of air ventilation shall be at least 32.1 actual cubic meters per cubic meter of grain handling capacity.

3. The owner or operator may use other methods of emission control demonstrated to have control efficiency equivalent to or greater than provided under subparagraphs (b)1. and 2. above and approved by the Director.

(3) Compliance. Affected facilities shall be in compliance with the provisions of this Rule at the earliest possible date, but no later than December 31, 1982 and shall adhere to the increments of progress contained in the following schedule:

(a) Final plans for the emission control system must be submitted before January 1, 1981.

(b) Contracts for the emission control systems must be awarded or orders must be issued for purchase of component parts to accomplish emission control before June 30, 1981.

(c) Initiation of on-site construction or installation of the emission control equipment must begin before August 31, 1981.

(d) On-site construction or installation of the emission control equipment must be completed before September 30, 1982.

(e) Final compliance shall be demonstrated before December 31, 1982.

Author: Marilyn G. Elliott
Statutory Authority: Code of Ala. 1975, §§22-28-14, 22-22A-5, 22-22A-6, 22-22A-8.
History: Effective Date: April 3, 1979. **Amended:** Filed October 17, 1996; effective November 21, 1996.

335-3-4-.15 Secondary Lead Smelters.

(1) All blast (cupola) or reverberatory furnaces at a secondary lead smelter must be equipped with a capture system for fugitive emissions from the tapping and charging operations with the exception of a reverberatory furnace lead tap. Such capture systems, including hoods, ducts, and fans, shall be designed, operated and maintained to achieve maximum reasonable capture and shall be vented to a control device with at least 99.5 percent collection efficiency.

(2) All alloying kettles or pots at a secondary lead smelter must be equipped with a vented cover that will be in place at all times the kettle contains molten lead except when access is necessary for casting or refining operations. The capture system, including covers, ducts, and fans, shall be designed, operated and maintained to achieve maximum reasonable capture and shall be vented to a control system with at least 90 percent collection efficiency.

(3) No owner or operator of a secondary lead smelter shall discharge or cause the discharge into the atmosphere from a blast (cupola) or reverberatory furnace primary exhaust stack any gases which contain particulate matter in excess of 50.0 mg/dscm (0.022 gr/dscf).

(4) Owners and operators of a secondary lead plant shall minimize fugitive dust at the plant by good housekeeping practices that will include: frequent sweeping of the plant and grounds; shielding the handling of flue dust from the wind; and enclosing, sheltering or otherwise treating all flue dust storage piles to prevent wind erosion.

(5) Compliance. Affected facilities shall be in compliance with the provisions of paragraphs (1) through (4) of this Rule at the earliest possible date, but no later than October 31, 1982.

(6) This paragraph applies to existing secondary lead smelters located in Pike County.

(a) Visible emissions escaping the capture system for the charging door shall not exceed 10% opacity when charging the blast furnace as determined by 40 CFR 60, Appendix A, Method 9

excluding Section 2.5. Visible emissions escaping the capture system for the closed charging door on the blast furnace shall not exceed 5% opacity during furnace operation as determined by 40 CFR 60, Appendix A, Method 9 excluding Section 2.5.

(b) Visible emissions escaping the capture system for the slag tap and lead tap on blast furnaces shall not exceed 1% opacity as determined by 40 CFR 60, Appendix A, Method 9.

(c) All lead bearing material (excluding the material from the battery breaking operation, material stored in closed containers, and other material which has been excluded in writing, by the Director) will be unloaded and stored in enclosed buildings. These buildings shall have no openings directly to the atmosphere except doors which may be opened only during egress or ingress or while material is being added or removed from the buildings. The buildings will be constructed such that stored material is transported to the smelter building without leaving an enclosed area.

(d) All paved areas external to buildings on which raw materials are handled will be clearly marked and kept wet by watering devices so that no visible emissions are observed emanating from the paved areas. All vehicles leaving the areas so designated by this Rule shall have their wheels and undercarriages washed immediately prior to leaving the area. Records must be kept of all vehicles leaving the area. Said records shall be maintained for a minimum of two years following date of recorded information.

(e) Paved areas not designated as necessitating wetting by subparagraph (d) of this paragraph above shall be vacuum swept twice daily except under specific conditions as approved by the Director. Records must be kept documenting when sweeping is done and any reason for not sweeping (such as equipment breakdown, inclement weather conditions). Said records shall be maintained for a minimum of two years following date of recorded information.

(f) Unpaved areas will be planted with grass or other ground cover or treated with lignosulfonate or equivalent surfactant on a schedule approved in writing by the Director. An evergreen vegetation boundary approved by the Director shall be planted and maintained on the northwest and north side of the plant.

(g) Compliance.

1. Except as provided under subparagraph (g)2. of this paragraph, affected facilities shall be in compliance with this paragraph within twelve (12) months of adoption.

2. Nothing in this Rule shall prevent the owner or operator of an affected facility from submitting to the Director a proposed alternative compliance schedule provided:

(i) the proposed alternative schedule is submitted within two (2) months of adoption; and

(ii) the proposed alternative schedule contains increments of progress; and

(iii) sufficient documentation and certification from appropriate suppliers, contractors, manufacturers, or fabricators are submitted by the owner or operator of the affected source to justify the dates proposed for the increments of progress; and

(iv) all alternative compliance schedules proposed or promulgated under this Rule shall provide for compliance of the source with this Rule as expeditiously as practicable, but no later than December 31, 1987.

Author: Ronald W. Gore
Statutory Authority: Code of Ala. 1975, §§22-28-14, 22-22A-5, 22-22A-6, 22-22A-8.
History: Effective Date: March 23, 1982. **Amended:** March 1, 1985. **Amended:** Filed October 17, 1996; effective November 21, 1996.

335-3-4-.16 Reserved.
Author:
Statutory Authority:
History:

335-3-4-.17 Steel Mills Located In Etowah County.

(1) Visible Emissions from the roof monitor or other openings in the BOF shop building, other than water mist or vapor, shall not exceed a shade or density greater than twenty percent (20%) opacity as determined on a three (3) minute rolling average. Compliance shall be determined by using the procedures specified at 40 C.F.R., Part 60, Appendix A, Method 9, excluding Section 2.5.

(2) All paved roads shall be vacuum swept or flushed of surface material every third consecutive day. The vacuum sweeper shall have a minimum blower capacity of 12,000 cfm and the flushing machine shall dispense water at the rate of 0.32 gal/yd^2.

(3) Paved parking areas shall be vacuum swept or flushed of surface material every calendar quarter. The vacuum sweeper shall have a minimum blower capacity of 12,000 cfm and the flushing machine shall dispense water at the rate of 0.32 gal/yd^2.

(4) Paved road or area flushing specified in paragraphs (2) and (3) of this Rule is not required when the temperature is below 32° F. Paved road or area cleaning is not required when precipitation during the previous 24-hour period has exceeded 0.01 inches.

(5) Unpaved roads, traffic areas in the slab storage area, and traffic areas in other material storage areas shall be treated with petroleum resin, asphalt emulsion, or equivalent dust suppressant on a quarterly or more frequent basis as determined by the Director.

(6) Unpaved parking lots shall be treated with petroleum resin, asphalt emulsion, or equivalent dust suppressant on a semi-annual basis.

(7) The petroleum resin or asphalt emulsion dust suppressant required in paragraphs (5) and (6) of this Rule shall be applied at a dilution ratio of 20% for the initial 3 applications and 12% for subsequent applications. The suppressant shall be applied at the rate of 0.75 gal/yd^2 of diluted solution for the initial 3 applications. Subsequent applications shall be applied at 0.25 gal/yd^2 of diluted solution. Other dust suppressants must be applied at an equivalent dilution ratio and application rate as determined by the Director.

(8) The source shall maintain at its plant premises, and make available for inspection, records documenting each occasion on which paved areas are cleaned in accordance with paragraphs (2) and (3) of this Rule, and any occasion on which such paved areas are not cleaned according to the required schedule, including any justification for failure to meet the required schedule, such as equipment breakdown or inclement weather conditions. The company shall also maintain and make available for inspection records documenting the frequency and amount of applications required by paragraphs (5) and (6) of this Rule. Said records shall be maintained for a minimum of two years following the date of recorded information.

(9) The source shall, within 30 days of approval of this Rule, notify the Department of a designated reclaim area on plant property and a designated paved road at its premises to be used to transport molten slag from the basic oxygen furnace shop to the reclaim area. These designations shall not be changed without the written approval of the Director.
Author: Sue R. Robertson

Statutory Authority: Code of Ala. 1975, §§22-28-14, 22-22A-5, 22-22A-6, 22-22A-8.
History: Effective Date: March 23, 1982. **Amended:** September 18, 1985. **Amended:** Filed October 17, 1996; effective November 21, 1996.