

23.4(455B) Specific processes.

23.4(1) *General.* The provisions of this section shall not apply to those facilities for which performance standards are specified in 23.1(2). The emission standards specified in this section shall apply and those specified in paragraphs 23.3(2) "a" and 23.3(2) "b" shall not apply to each process of the types listed in the following subsections, except as provided in paragraph "a".

EXCEPTION: Whenever the executive director determines that a process complying with the emission standard prescribed in this section is causing or will cause air pollution in a specific area of the state, the specific emission standard may be suspended and compliance with the provisions of section 23.3 may be required in such instance.

23.4(2) *Asphalt batching plants.* No person shall cause, allow or permit the operation of an asphalt batching plant in a manner such that the particulate matter discharged to the atmosphere exceeds 0.15 grain per standard cubic foot of exhaust gas.

23.4(3) *Cement kilns.* Cement kilns shall be equipped with air pollution control devices to reduce the particulate matter in the gas discharged to the atmosphere to no more than 0.3 percent of the particulate matter entering the air pollution control device. Regardless of the degree of efficiency of the air pollution control device, particulate matter discharged from such kilns shall not exceed 0.1 grain per standard cubic foot of exhaust gas.

23.4(4) *Cupolas for metallurgical melting.* The emissions of particulate matter from all new foundry cupolas, and from all existing foundry cupolas with a process weight rate in excess of 20,000 pounds per hour, shall not exceed the amount specified in paragraph 23.3(2) "a," except as provided in 567-Chapter 24.

The emissions of particulate matter from all existing foundry cupolas with a process weight rate less than or equal to 20,000 pounds per hour shall not exceed the amount determined from Table II of these rules, except as provided in 567-Chapter 24.

TABLE II
ALLOWABLE EMISSIONS FROM
EXISTING SMALL FOUNDRY CUPOLAS

Process weight rate (lb/hr)	Allowable emission (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

23.4(5) *Electric furnaces for metallurgical melting.* The emissions of particulate matter to the atmosphere from electric furnaces used for metallurgical melting shall not exceed 0.1 grain per standard cubic foot of exhaust gas.

23.4(6) *Sand handling and surface finishing operations in metal processing.* This subrule shall apply to any new foundry or metal processing operation not properly termed a combustion, melting, baking or pouring operation. For purposes of this subrule, a new process is any process which has not started operation, or the construction of which has not been commenced, or the components of which have not been ordered or contracts for the construction of which have not been let on August 1, 1977. No person shall allow, cause or permit the operation of any equipment designed for sand shakeout, mulling, molding, cleaning, preparation, reclamation or rejuvenation or any equipment for abrasive cleaning, shot blasting, grinding, cutting, sawing or buffing in such a manner that particulate matter discharged from

any stack exceeds 0.05 grains per dry standard cubic foot of exhaust gas, regardless of the types and number of operations that discharge from the stack.

23.4(7) Grain handling and processing plants. The owner or operator of equipment at a permanent installation, for the handling or processing of grain, grain products and grain by-products shall not cause, allow or permit the particulate matter discharged to the atmosphere to exceed 0.1 grain per dry standard cubic foot of exhaust gas, except as follows:

a. The particulate matter discharged to the atmosphere from a grain bin vent at a country grain elevator, as "country grain elevator" is defined in 567-subrule 22.10(1), shall not exceed 1.0 grain per dry standard cubic foot of exhaust gas.

b. The particulate matter discharged to the atmosphere from a grain bin vent that was constructed, modified or reconstructed before March 31, 2008, at a country grain terminal elevator, as "country grain terminal elevator" is defined in 567-subrule 22.10(1), or at a grain terminal elevator, as "grain terminal elevator" is defined in subrule 567-22.10(1), shall not exceed 1.0 grain per dry standard cubic foot of exhaust gas.

c. The particulate matter discharged to the atmosphere from a grain bin vent that is constructed or reconstructed on or after March 31, 2008, at a country grain terminal elevator, as "country grain terminal elevator" is defined in 567-subrule 22.10(1), or at a grain terminal elevator, as "grain terminal elevator" is defined in 567-subrule 22.10(1), shall not exceed 0.1 grain per dry standard cubic foot of exhaust gas.

23.4(8) Lime kilns. No person shall cause, allow or permit the operation of a kiln for the processing of limestone such that the particulate matter in the gas discharged to the atmosphere exceeds 0.1 grain per standard cubic foot of exhaust gas.

23.4(9) Meat smokehouses. No person shall cause, allow or permit the operation of a meat smokehouse or a group of meat smokehouses, which consume more than ten pounds of wood, sawdust or other material per hour such that the particulate matter discharged to the atmosphere exceeds 0.2 grain per standard cubic foot of exhaust gas.

23.4(10) Phosphate processing plants.

a. Phosphoric acid manufacture. No person shall allow, cause or permit the operation of equipment for the manufacture of phosphoric acid that was in existence on October 22, 1974, in a

manner that produces more than 0.04 pound of fluoride per ton of phosphorous pentoxide or equivalent input.

b. Diammonium phosphate manufacture. No person shall allow, cause or permit the operation of equipment for the manufacture of diammonium phosphate that was in existence on October 22, 1974, in a manner that produces more than 0.15 pound of fluoride per ton of phosphorous pentoxide or equivalent input.

c. Nitrophosphate manufacture. No person shall allow, cause or permit the operation of equipment for the manufacture of nitrophosphate in a manner that produces more than 0.06 pound of fluoride per ton of phosphorous pentoxide or equivalent input.

d. No person shall allow, cause or permit the operation of equipment for the processing of phosphate ore, rock or other phosphatic material (other than equipment used for the manufacture of phosphoric acid, diammonium phosphate or nitrophosphate) in a manner that the unit emissions of fluoride exceed 0.4 pound of fluoride per ton of phosphorous pentoxide or its equivalent input.

e. Notwithstanding "a" through "d", no person shall allow, cause or permit the operation of equipment for the processing of phosphorous ore, rock or other phosphatic material including, but not limited to, phosphoric acid, in a manner that emissions of fluorides exceed 100 pounds per day.

f. "Fluoride" means elemental fluorine and all fluoride compounds as measured by reference methods specified in appendix A to 40 C.F.R. part 60 as amended through March 15, 1979.

g. Calculation. The allowable total emission of fluoride shall be calculated by multiplying the unit emission specified above by the expressed design production capacity of the process equipment.

23.4(11) *Portland cement concrete batching plants.* No person shall cause, allow or permit the operation of a portland cement concrete batching plant such that the particulate matter discharged to the atmosphere exceeds 0.1 grain per standard cubic foot of exhaust gas.

23.4(12)¹ *Incinerators.* No person shall cause, allow or permit the operation of an incinerator with a rate refuse burning capacity of 1000 or more pounds per hour in a manner such that

¹Effective July 1, 1978

the particulate matter discharged to the atmosphere exceeds 0.2 grain per standard cubic foot of exhaust gas adjusted to 12 percent carbon dioxide.

a. *Particulate matter.* No person shall cause, allow or permit the operation of an incinerator with a rated refuse burning capacity of 1000 or more pounds per hour in a manner such that the particulate matter discharged to the atmosphere exceeds 0.2 grain per standard cubic foot of exhaust gas adjusted to 12 percent carbon dioxide.

b. *Visible emissions.* No person shall allow, cause or permit the operation of an incinerator in a manner such that it produces visible air contaminants in excess of 40 percent opacity; except that visible air contaminants in excess of 60 percent opacity may be emitted for a period or periods aggregating not more than three minutes in any 60-minute period during an operation breakdown or during the cleaning of air pollution control equipment.

23.4(13) *Coating and surface treating operations.* No person shall allow, cause or permit coating and surface treating operations in a manner such that particulate matter in the gas discharge to the atmosphere exceeds 0.01 grain per standard cubic foot of exhaust gas.

567-23.4

EPA Rulemakings

CFR: 40 C.F.R. 52.820(b)

FRM: 37 FR 10842 (5/31/72)

PRM: None

State Submission: 1/27/72

State Proposal: unknown

State Final: Effective 4/1/72

APDB File: IA-00

Description: This rule was approved as part of the original SIP.

CFR: 40 C.F.R. 52.820(c)25

FRM: 42 FR 27892 (6/1/77)

PRM: 41 FR 48750 (11/5/76)

State Submission: 6/9/76

State Proposal: unknown

State Final: Effective 4/26/76

APDB File: IA-3

Description: This revision changed authority from commission to director and also deleted section limiting emissions from animal feed processing.

CFR: 40 C.F.R. 52.820(c) (26a)

FRM: 47 FR 22531 (5/25/82)

PRM: None

State Submission: 6/20/77

State Proposal: 8/9/76

State Final: 5/19/77

APDB File: IA-17

Description: This revision added new subrule 4.4(6), now 23.4(6), which established a specific particulate emission limitation for new sand handling and surface finishing operations in metal processing. In 23.4(12) the reference to objectionable odors from incinerators was deleted.

CFR: 40 C.F.R. 52.820(c) (43)
 FRM: 50 FR 37176 (9/12/85)
 PRM: 49 FR 45761 (11/20/84)
 State Submission: 7/18/84
 State Proposal: None
 State Final: 7/1/83
 APDB File: IA-19
 Description: Recodification of the regulations from chapter 3 of the Iowa Department of Environmental Quality into Department 900, Title II Chapters 20-39 of the Iowa Department of Water, Air & Waste Management (IDWAWM).

CFR: 40 C.F.R. 62.3850
 FRM: 50 FR 52920 (12/27/85)
 PRM: None
 State Submission: 10/19/79
 State Proposal: 9/6/78
 State Final: 8/29/79
 APDB File: IA-20
 Description: This revision approved Iowa's section III(d) plan for the control of fluoride emissions from existing phosphate fertilizer plants.

CFR: 40 C.F.R. 52.820(c) (52) (i) (B)
 FRM: 55 FR 26690 (6/29/90)
 PRM: None
 State Submission: 5/7/90
 State Proposal: IAB 11/15/89 (ARC 412A)
 State Final: IAB 2/7/90 (ARC 658A) (Effective 3/14/90)
 APDB File: IA-32
 Description: This rulemaking recodified Chapters 20-29. It was Water, Air and Waste Management (900) and is now Environmental Protection Commission (567).

CFR: 40 C.F.R. 52.820(c) (57) (i) (A)
 FRM: 58 FR 27939 (5/12/93)
 PRM: None
 State Submission: 1/5/93
 State Proposal: IAB 9/16/92 (ARC 3350A)
 State Final: IAB 1/20/93 (ARC 3694A) (Effective 2/24/93)
 APDB File: IA-37
 Description: This revision deleted the reference to the Ringelman Chart so that the limitation is expressed as opacity.

567-23.4

CFR: 40 C.F.R. 52.820(c)(59)(i)(B)

FRM: 59 FR 65717 (12/21/94)

PRM: 59 FR 65744 (12/21/94)

State Submission: 5/5/94

State Proposal: 10/13/93

State Final: Effective 4/20/94 (Published 3/16/94)

APDB File: IA-46

Description: This revision corrects a typographical error. The rule itself is unchanged.

CFR: 40 C.F.R. 52.820(c)

FRM: 67 FR 9591 (3/4/2002)

PRM: 67 FR 9640 (3/4/2002)

State Submission: 8/7/2000

State Final: IAB 06/16/1999

APDB File: IA-79

Description: This revision provides clarification to subrule 23.4(4).

CFR: 40 C.F.R. 52.820(c)

FRM: 73 FR 49950 (8/25/2008)

PRM: 73 FR 49981 (8/25/2008)

State Submission: 4/14/2008

State Final: IAB 2/13/08; effective 3/19/2008

APDB File: IA-129; EPA-R07-OAR-2008-0403

Description: This revision provides clarification to subrule 23.4(4).

Difference Between the State and EPA-Approved Regulation:

In the state's current regulations there are several minor differences: use of the word "rule" and "subrule" instead of "section" and "subsection."

Section 23.4(13): the state regulations say "painting and surface treating operations" and the EPA-approved version says "Coating and surface treating operations."

Section 23.4 (10) is approved pursuant to section 111(d) and is not part of the approved SIP.