

### **23.1(455B) Emission standards.**

23.1(1) *In general.* The federal standards of performance for new stationary sources (new source performance standards) shall be applicable as specified in subrule 23.1(2). The federal standards for hazardous air pollutants (national emissions standards for hazardous air pollutants) shall be applicable as specified in subrule 23.1(3). Compliance with emission standards specified elsewhere in this chapter shall be in accordance with 567-Chapter 21.

23.1(5) *Emission guidelines.* The emission guidelines and compliance times for existing sources, as defined in 40 Code of Federal Regulations Part 60 as amended through June 9, 2006, shall apply to the following affected facilities. The corresponding 40 CFR Part 60 subpart designation is in parentheses. The control of the designated pollutants will be in accordance with federal standards established in Sections 111 and 129 of the Act and 40 CFR Part 60, Subpart B (Adoption and Submittal of State Plans for Designated Facilities), and the applicable subpart(s) for the existing source. Reference test methods (Appendix A), performance specifications (Appendix B), determination of emission rate change (Appendix C), quality assurance procedures (Appendix F) and the general provisions (Subpart A) of 40 CFR Part 60 also apply to the affected facilities.

*a. Emission guidelines for municipal solid waste landfills (Subpart Cc).* Emission guidelines and compliance times for the control of certain designated pollutants from designated municipal solid waste landfills shall be in accordance with federal standards established in Subparts Cc (Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills) and WWW (Standards of Performance for Municipal Solid Waste Landfills) of 40 CFR Part 60.

(1) *Definitions.* For the purpose of 23.1(5) "a," the definitions have the same meaning given to them in the Act and 40 CFR Part 60, Subparts A (General Provisions), B, and WWW, if not defined in this subparagraph.

"*Municipal solid waste landfill*" or "*MSW landfill*" means an entire disposal facility in a contiguous geographical space where household waste is placed in or on land. An MSW landfill may also receive other types of RCRA Subtitle D wastes such as commercial solid waste, nonhazardous sludge, and industrial solid waste. Portions of an MSW landfill may be separated by access roads. An MSW landfill may be publicly or privately owned. An MSW landfill may be a new MSW landfill, an existing MSW landfill or a lateral expansion.

(2) *Designated facilities.*

1. The designated facility to which the emission guidelines apply is each existing MSW landfill for which construction, reconstruction or modification was commenced before May 30, 1991.

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2. Physical or operational changes made to an existing MSW landfill solely to comply with an emission guideline are not considered a modification or reconstruction and would not subject an existing MSW landfill to the requirements of 40 CFR Part 60, Subpart WWW (40 CFR 60.750).

3. For MSW landfills subject to rule 567-22.101(455B) only because of applicability to subparagraph 23.1(5)"a"(2), the following apply for obtaining and maintaining a Title V operating permit under 567-22.104(455B):

The owner or operator of an MSW landfill with a design capacity less than 2.5 million megagrams or 2.5 million cubic meters is not required to obtain an operating permit for the landfill.

The owner or operator of an MSW landfill with a design capacity greater than or equal to 2.5 million megagrams and 2.5 million cubic meters on or before June 22, 1998, becomes subject to the requirements of 567-subrule 22.105(1) on September 20, 1998. This requires the landfill to submit a Title V permit application to the Air Quality Bureau, Department of Natural Resources, no later than September 20, 1999.

The owner or operator of a closed MSW landfill does not have to maintain an operating permit for the landfill if either of the following conditions are met: the landfill was never subject to the requirement for a control system under subparagraph 23.1(5)"a"(3); or the owner or operator meets the conditions for control system removal specified in 40 CFR § 60.752(b)(2)(v).

(3) Emission guidelines for municipal solid waste landfill emissions.

1. MSW landfill emissions at each MSW landfill meeting the conditions below shall be controlled. A design capacity report must be submitted to the director by November 18, 1997.

The landfill has accepted waste at any time since November 8, 1987, or has additional design capacity available for future waste deposition.

The landfill has a design capacity greater than or equal to 2.5 million megagrams or 2.5 million cubic meters. The landfill may calculate design capacity in either megagrams or cubic meters for comparison with the exemption values. Any density conversions shall be documented and submitted with the report. All calculations used to determine the maximum design capacity must be included in the design capacity report.

The landfill has a nonmethane organic compound (NMOC) emission rate of 50 megagrams per year or more. If the MSW landfill's design capacity exceeds the established thresholds in 23.1(5)"a"(3)"1," the NMOC emission rate calculations must be provided with the design capacity report.

2. The planning and installation of a collection and control system shall meet the conditions provided in 40 CFR 60.752(b)(2) at each MSW landfill meeting the conditions in 23.1(5)"a"(3)"1."

3. MSW landfill emissions collected through the use of control devices must meet the following requirements, except as provided in 40 CFR 60.24 after approval by the Director and U.S. Environmental Protection Agency.

An open flare designed and operated in accordance with the parameters established in 40 CFR 60.18; a control system designed and operated to reduce NMOC by 98 weight percent; or an enclosed combustor designed and operated to reduce the outlet NMOC concentration to 20 parts per million as hexane by volume, dry basis at 3 percent oxygen, or less.

(4) Test methods and procedures. The following must be used:

1. The calculation of the landfill NMOC emission rate listed in 40 CFR 60.754, as applicable, to determine whether the landfill meets the condition in 23.1(5)"a"(3)"3";

2. The operational standards in 40 CFR 60.753;

3. The compliance provisions in 40 CFR 60.755; and

4. The monitoring provisions in 40 CFR 60.756.

(5) Reporting and record-keeping requirements. The record-keeping and reporting provisions listed in 40 CFR 60.757 and 60.758, as applicable, except as provided under 40 CFR 60.24 after approval by the Director and U.S. Environmental Protection Agency, shall be used.

(6) Compliance times.

1. Except as provided for under 23.1(5)"a"(6)"2," planning, awarding of contracts, and installation of MSW landfill air emission collection and control equipment capable of meeting the emission guidelines established under 23.1(5)"a"(3) shall be accomplished within 30 months after the date the initial NMOC emission rate report shows NMOC emissions greater than or equal to 50 megagrams per year.

2. For each existing MSW landfill meeting the conditions in 23.1(5)"a"(3)"1" whose NMOC emission rate is less than 50 megagrams per year on August 20, 1997, installation of collection and control systems capable of meeting emission guidelines in 23.1(5)"a"(3) shall be accomplished within 30 months of the date when the condition in 23.1(5)"a"(3)"1" is met (i.e., the date of the first annual nonmethane organic compounds emission rate which equals or exceeds 50 megagrams per year).

b. *Emission guidelines for hospital/medical/infectious waste incinerators (Subpart Ce)*. This paragraph contains emission guidelines and compliance times for the control of certain designated pollutants from hospital/medical/infectious waste incinerator(s) (HMIWI) in accordance with Subparts Ce and Ec (Standards of Performance for Hospital/Medical/Infectious Waste Incinerators) of 40 CFR Part 60.

c. *Emission guidelines and compliance schedules for commercial and industrial solid waste incineration units that commenced construction on or before November 30, 1999*. Emission guidelines and compliance schedules for the control of designated pollutants from affected commercial and industrial solid waste incinerators that commenced construction on or before November 30, 1999, shall be in accordance with federal plan requirements established in Supart III of 40 CFR Part 62.

d. *Emission guidelines for mercury for coal-fired electric utility steam generating units*. The provisions of 40 CFR Part 60, Subpart HHHH, are set forth in 567-Chapter 34.

23.1(6) *Calculation of emission limitations based upon stack height*. This rule sets limits for the maximum stack height credit to be used in ambient air quality modeling for the purpose of setting an emission limitation and calculating the air quality impact of a source. The rule does not limit the actual physical stack height for any source.

For the purpose of this subrule, definitions of "stack," "a stack in existence," "dispersion technique," "nearby" and "excessive concentration" as set forth in 40 CFR §§51.100(ff) through (hh), (jj) and (kk) as amended through June 14, 1996, are adopted by reference.

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

(1) Sixty-five meters, measured from the ground level elevation at the base of the stack; or

(2) For stacks in existence on January 12, 1979, and for which the owner and operator had obtained all applicable permits or approvals required under 567-Chapter 22 and 40 CFR §52.21 as amended through June 13, 2007,

$$H_g = 2.5H$$

provided the owner or operator produces evidence that this equation was actually relied on in establishing an emission limitation;

For all other stacks,

$$H_g = H + 1.5L$$

where:

$H_g$  = good engineering practice stack height, measured from the ground level elevation at the base of the stack,

H = height of nearby structure(s) measured from the ground level elevation at the base of the stack,

L = lesser dimension, height or projected width, of nearby structure(s), provided that the department may require the use of a field study or fluid model to verify GEP stack height for the source; or

(3) The height demonstrated by a fluid model or a field study approved by the department, 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. Public notification of the availability of such study and opportunity for public hearing are required prior to approval by the department.

b. The degree of emission limitation required for control of any air contaminant under this chapter shall not be affected in any manner by:

(1) The consideration of that portion of a stack which exceeds GEP stack height; or

(2) Varying the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant; or

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

This rule is intended to implement Iowa Code section 455B.133.

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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 State Implementation Plan (SIP).

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CFR: 40 C.F.R. 52.820(c)(11)  
FRM: 40 FR 15879 (4/8/75)  
PRM: 39 FR 25502 (7/11/74)  
State Submission: 5/4/72  
State Proposal: unknown  
State Final: 12/11/73  
APDB File: IA-00  
Description: This revision created the Iowa Department of Environmental Quality. This section references New Source Performance Standards found in 40 C.F.R. Part 60.

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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.

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CFR: 40 C.F.R. 52.820(47)(i)(A)  
FRM: 53 FR 41600 (10/24/88)  
PRM: 52 FR 33437 (9/3/87)  
State Submission: 5/20/86  
State Proposal: 1/15/86 (ARC 6280)  
State Final: 4/22/86 (ARC 6566) (Effective 6/25/86)  
APDB File: IA-25  
Description: This revision adopted by reference those Federal rules necessary to implement the stack height calculations, modified the definition of good engineering practice, and included Federally mandated public notification requirements. This amendment affected section 23.1(4).

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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).

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CFR: 40 C.F.R. 62.3913  
FRM: 63 FR 20102 4/23/98  
PRM: 63 FR 20159 4/23/98  
State Submission: 12/22/97  
State Proposal: IAB 3/12/97 1472  
State Final: IAB 7/16/97 208  
APDB File: IA-63  
Description: This rule is the EPA approval of Iowa's section 111(d) plan for the control of landfill gas from existing municipal solid waste landfills, except those located in Indian Country.

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CFR: 40 C.F.R. 52.820(c)(67)(ii)(A)  
FRM: 63 FR 34600 (6/25/98)  
PRM: 63 FR 34618 (6/25/98)  
State Submission: 10/21/97  
State Proposal: IAB 3/12/97  
State Final: IAB 7/16/97 209  
APDB File: IA-58  
Description: The stack height provisions were renumbered to 23.1(6).

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CFR: 40 C.F.R. 52.820 (c)  
 FRM: 64 FR 17548 (4/12/99) and 65 FR 32030 (5/22/00) (correction)  
 PRM: 64 FR 17592 (4/12/99)  
 State Submission: 8/12/98  
 State Proposal: 1/14/98  
 State Final: IAB 4/8/98  
 APDB File: IA-71  
 Description: This revision updates the reference to 40 C.F.R. Part 51 and 40 C.F.R. Part 52, and corrects a reference to a rule citation.

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CFR: 40 C.F.R. 62.3914  
 FRM: 64 FR 32425 (6/17/99)  
 PRM: 64 FR 32464 (6/17/99)  
 State Submission: 2/11/99  
 State Proposal: 3/16/98  
 State Final: IAB 8/26/98  
 APDB File: IA-70  
 Description: This revision adds a revised paragraph 23.1-5(a) and new paragraph 23.1-5(b).

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CFR: 40 C.F.R. 52.820(c)  
 FRM: 64 FR 67784 (12/3/99)  
 PRM: 64 FR 25855 (5/13/99)  
 State Submission: 12/11/98  
 State Proposal: IAB 6/17/98  
 State Final: IAB 9/9/98  
 APDB File: IA-74  
 Description: This revision adds clarifying language to subrule 23.1(1).

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CFR: 40 C.F.R. 62.3914  
 FRM: 66 FR 64151 (12/12/2001)  
 PRM: 66 FR 64207 (12/12/2001)  
 State Submission: 09/19/2001  
 State Proposal: IAB 03/10/1999, 06/14/2000  
 State Final: IAC 02/07/2001  
 APDB File: IA-90  
 Description: This revision relates to Rule 23.1(5)"b," subparagraphs (4), (5), (6), (12), and (13) where the appropriate fixed date was inserted. It also corrects a typographical error in rule 23.1(5)"b," subparagraph (1).

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CFR: 40 C.F.R. 62.3913  
 FRM: 66 FR 64152 (12/12/2001)  
 PRM: 66 FR 64208 (12/12/2001)  
 State Submission: 09/19/2001  
 State Proposal: IAB 03/10/1999  
 State Final: IAC 02/07/2001  
 APDB File: IA-84  
 Description: A revision was made to rule 23.1(5)"a"(2) by adding subparagraph "3". Clarifying revisions were made in rules 23.1(5)"a"(3), paragraphs "1" and "2" and in rule 23.1(5)"a"(6), paragraph "1".

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CFR: 40 C.F.R. 62.3840  
 FRM: 68 FR 40531 (07/08/2003)  
 PRM: 68 FR 40618 (07/08/2003)  
 State Submission: 04/25/2002  
 State Proposal: IAB 12/12/01  
 State Final: IAC 03/20/02  
 State Effective Date: 04/24/02  
 APDB File: IA-100  
 Description: This revision updates the 40 CFR part 60 reference date from November 24, 1998, to July 23, 2001.

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CFR: 40 C.F.R. 62.3916  
 FRM: 69 FR 51958 (08/24/2004)  
 PRM: 69 FR 51987 (08/24/2004)  
 State Submission: 05/27/2004  
 State Proposal: IAB 12/10/03  
 State Final: IAC 03/17/04  
 State Effective Date: 04/21/04  
 APDB File: IA-82  
 Description: This revision adds paragraph "c" under 23.1(5) pertaining to emission guidelines and compliance schedules for commercial and industrial solid waste incineration units that commenced construction on or before November 30, 1999.

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CFR: 40 C.F.R. 62.3918  
FRM: 72 FR 72955 (12/26/2007)  
PRM: 72 FR 50913 (09/05/2007)  
State Submission: 8/15/2006 and 4/26/2007  
State Final: IAB 6/7/2006; 2/8/2007 (Effective 07/12/06; 04/04/2007, respectively)  
APDB File: IA-114; Docket No. EPA-R07-OAR-2007-0655  
Description: Revisions were made to subrule 23.1(5); subparagraphs 23.1(5)"a"(2)3;  
23.1(5)"b"(2)9. Subrule 23.1(5)"d" was added.

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FRM: 74 FR 68692(12/29/2009)  
PRM: 74 FR 68761 (12/29/2009)  
State Submission: 11/18/2008  
State Final: IAB 5/7/2008; effective 6/11/2008  
APDB File: IA-131 and IA-134; No. EPA-R07-OAR-2008-0895  
Description: Revisions to 23.1(6)"a"(2) amended to include the most recent date of Federally-  
approved revisions and corrected the symbol for "good engineering practice stack height".

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CFR: 40 C.F.R. 52.820(c), 62.3914 (a) and (b)  
FRM: 78 FR 63887 (10/25/2013)  
PRM: 78 FR 63937 (10/25/13)  
State Submission: 3/7/2008, 1/11/2010, 3/1/2011  
State Final: IAB 2/11/29 effective 3/18/09  
APDB File: IA-141 and IA 143; EPA-R07-OAR-2012-0410 (effective 12/24/13)  
Description: This revision to 23.1(5) b amends introductory paragraph and removes 23.1(5)"b"  
(1)through(13) which rescinds the HMIWI rule due to no HMIWI facilities in Iowa.

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Difference Between the State and EPA-Approved Regulation:

Sections 23.1(2)-(5) are not approved in the SIP. Section 23.1(5) is approved as part of the 111(d) plan.

Subrules 23.1 (2)-(5) are not SIP approved.