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Nevada Administrative Code, Chapter 445B, Air Controls, Air Pollution; Nevada  
Administrative Code, Chapter 445, Air Controls, Air Pollution; Nevada Air Quality  
Regulations

General Provisions

6/26/07

**NAC 445B.220 [445.660] Severability.** If any of the provisions of NAC 445B.001 to 445B.3791, inclusive, or any application thereof to any person, thing or circumstance is held invalid, it is intended that such invalidity not affect the remaining provisions, or their application, that can be given effect without the invalid provision or application.

[Environmental Comm'n, Air Quality Reg. § 2.1.1, eff. 11-7-75]—(NAC A by R105-97, 3-5-98; R189-05, 5-4-2006; R154-06, 11-13-2006, eff. 1-1-2007)

**NAC 445B.22017 [445.721] Visible emissions: Maximum opacity; determination and monitoring of opacity.**

1. Except as otherwise provided in this section and NAC 445B.2202, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods:

(a) If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A of 40 C.F.R. Part 60.

(b) If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 C.F.R. § 60.13(h).

2. The provisions of this section and NAC 445B.2202 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.

3. If the provisions of 40 C.F.R. Part 60, Subpart D or Da apply to an emission unit, the emission unit must be allowed one 6-minute period per hour of not more than 27 percent opacity as set forth in 40 C.F.R. § 60.42(a)(2) and 40 C.F.R. § 60.42a(b).

4. The continuous monitoring system for monitoring opacity at a facility must be operated and maintained by the owner or operator specified in the permit for the facility in accordance with NAC 445B.256 to 445B.267, inclusive.

[Environmental Comm'n, Air Quality Reg. §§ 4.1 & 4.2, eff. 11-7-75; § 4.5.1.1, eff. 8-28-79]—(NAC A 9-19-90; 10-30-95; R118-00, 9-25-2000; R036-05, 10-31-2005, eff. 4-1-2006)

**NAC 445B.2202 [Article 43., 4.3.1, .2, .3 and .5] Visible emissions: Exceptions for stationary sources.** The provisions of NAC 445B.22017 do not apply to:

1. Smoke from the open burning described in NAC 445B.22067;

2. Smoke discharged in the course of training air pollution control inspectors to observe visible emissions, if the facility has written approval of the Commission;

3. Emissions from an incinerator as set forth in NAC 445B.2207; or

4. Emissions of stationary diesel-powered engines during warm-up for not longer than 15 minutes to achieve operating temperatures.

[Environmental Comm'n, Air Quality Reg. §§ 4.3.1-4.3.3, eff. 11-7-75; § 4.3.6, eff. 12-4-76; A and renumbered as § 4.3.4, 12-15-77; § 4.3.5, eff. 11-7-75; § 4.3.6, eff. 12-15-77; A 4-18-80]—(NAC A by R065-03, 10-30-2003; R198-03, 4-26-2004, eff. 3-1-2006; R036-05, 10-31-2005, eff. 4-1-2006)

12/29/78

16.3.3 Standard for Opacity

16.3.3.2 No person shall cause, suffer, allow, or permit the discharge from any clinker cooler which exhibits greater than 10 percent opacity.

16.3.3.3 On or after the date on which the performance test required by Article 2.6 is completed, no owner or operator subject to the provision of Article 16.3 shall cause to be discharged into the atmosphere from any affected facility other than the kiln and clinker cooler any gases which exhibit 10% opacity or greater.

10/26/82

Emissions of Particulate Matter

445.729 Process weight rate for calculating emission rates.

For purposes of NAC 445.729 to 445.737, inclusive, the process weight rate to be used to calculate allowable emission rates must be the weight rates for single sources.

[Environmental Comm'n, Air Quality Reg. § 7.2.4, eff. 11-7-75; A 12-4-76]

11/5/80

7.2.5.1 The maximum allowable weight of particulates which may be discharged per hour from the first barite grinding mill of Milchem Incorporated near Battle Mountain is the weight prescribed in paragraph (a) or the weight determined by the use of the equation in paragraph (b), whichever is less:

(a) Emissions of 5.6 kilograms (12.4 pounds) per hour.

(b) Emissions determined by the equation  $E = 0.0084 P^{0.67}$  ( $E = 1.79 P^{0.67}$ ), where

P = Process weight rate in kilograms (tons) per hour.

E = Emission allowed in kilograms (pounds) per hour.

9/14/83

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445.808

1. This section applies to those systems of the facilities described in subsection 2 which are used for crushing, screening, grinding, handling, transferring, concentrating, refining and storing crude barite.
2. No owner or operator may cause or permit the emission of particulate matter in excess of the following:
  - (a) IMCO Services' barite grinding mill in Battle Mountain in Air Quality Region 147, Humboldt River Basin, Basin 59, Lower Reese River Valley, for grinding barite ore, 0.06 pounds per short ton (0.03 kilograms per metric ton) of crude barite processed.
  - (b) Dresser Industries barite grinding mill south of Battle Mountain in Air Quality Control Region 147, Humboldt River Basin, Basin 55, Carico Lake Valley:
    - (1) For primary crushing of barite ore, 0.015 pounds per short ton (0.0075 kilograms per metric ton) of barite ore processed.
    - (2) For secondary crushing[, ] or screening of barite ore 0.035 pounds per short ton (0.0175 kilograms per metric ton) of barite ore processed.
  - (c) Dresser Industries barite grinding mill in Battle Mountain in Air Quality Control Region 147, Humboldt River Basin, Basin 59, Lower Reese River Valley:
    - (1) For grinding barite ore, 0.06 pounds per short ton (0.03 kilograms per metric ton) of crude barite processed.
    - (2) For bulk-loading barite ore, 0.18 pounds per short ton (0.09 kilograms per metric ton) of barite dispensed.
3. No owner or operator may cause or permit a discharge with an opacity of greater than 20 percent from a barite grinding mill. [with an opacity of greater than 20 percent.]
4. The owner or operator of any barite grinding mill, as indicated on the permit, shall record the production rates and hours of operation of the mill and shall comply with all requirements for notification and recordkeeping in NAC 445.660 to 445.700 inclusive.
5. All test methods and procedures in NAC 445.660 to 445.700, inclusive, and Appendix A, Reference Methods, of 40 C.F.R. Part 60, apply to barite grinding mills.

9/14/83

4

445.816

1. This section applies to those systems of the facilities described in subsection 2 which are used for crushing, screening, grinding, handling, transferring, concentrating, refining and storing any precious metals or precious metal ore.

2. No [owner or] operator may permit the emission of particulate matter in excess of the following:

(d) Freeport Gold Company's processing plant for precious metal in Air Quality Control Region 147, Basin 44, North Fork area:

3. No owner or operator may permit the discharge of particulate matter of greater than 20 percent opacity from a single source of a processing plant for precious metal.

4. The owner and the operator of any processing plant for precious metal shall record the yearly production rate and hours of operation for each source of particulate matter to which an emission standard applies. [All notification and recordkeeping must be performed in accordance with NAC 445.660 to 445.700, inclusive.]

5. All tests must be performed in accordance with [NAC 445.682 and] Appendix A of 40 C.F.R. Part 60.

10/26/82

445.730 Colemanite flotation processing plants.

1. The maximum amount of particulate matter which may be emitted in an hour by any colemanite flotation processing plant and the formulas by which the amount will be determined are:

(a) For a crushing, screening or grinding plant, a maximum of 2.5 pounds (1.13 kilograms) per hour as calculated by:

$$E = 0.02 \times 10^{-3} P (0.04P).$$

(b) For a storage bin for ore or an ore product, a maximum of 0.55 pounds (0.25 kilogram) per hour as calculated by:

$$E = 0.01 \times 10^{-3} P (0.02P).$$

(c) For a dryer and calciner, a maximum of 10.50 pounds (4.75 kilograms) per hour as calculated by:

$$E = 0.31 \times 10^{-3} P (0.62P).$$

2. For the purposes of subsection 1:

(a) "E" means the maximum emission rate allowed in pounds (kilograms) per hour.

(b) "P" means the process weight rate in tons (kilograms) per hour.

[Environmental Comm'n, Air Quality Reg. §§ 7.2.8.1-7.2.8.3, eff. 11-17-78]

4/12/06

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**NAC 445B.22027 [445.729] Emissions of particulate matter: Maximum allowable throughput for calculating emissions rates.** For purposes of NAC 445B.22027 to 445B.22037, inclusive, the maximum allowable throughput to be used to calculate allowable emission rates must be the maximum process weight for an emission unit.

[Environmental Comm'n, Air Quality Reg. § 7.2.4, eff. 11-7-75; A 12-4-76]—(NAC A 10-22-87; 12-26-91; R105-97, 3-5-98)—(Substituted in revision for NAC 445B.360)

**NAC 445B.2203 Emissions of particulate matter: Fuel-burning equipment.  
(NRS 445B.210)**

1. No person may cause or permit PM<sub>10</sub> emissions resulting from the combustion of fuel in fuel-burning equipment in excess of the quantity set forth in the following formulas:

(a) For maximum input of heat equal to or greater than 4 million Btu's per hour, but less than or equal to 10 million Btu's per hour, the allowable emission is 0.6 of a pound per million Btu's of input of heat.

(b) For maximum input of heat greater than 10 million Btu's per hour, but less than 4,000 million Btu's per hour, the allowable emissions must be calculated using the following equation:

$$Y = 1.02X^{-0.231}$$

(c) For maximum input of heat equal to or greater than 4,000 million Btu's per hour, the emission must be calculated using the following equation:

$$Y = 17.0X^{-0.568}$$

2. For the purposes of paragraphs (b) and (c) of subsection 1:

(a) "X" means the maximum operating rate in million Btu's per hour.

(b) "Y" means the allowable rate of emission in pounds per million Btu's.

[Environmental Comm'n, Air Quality Reg. §§ 7.1.1-7.1.1.2, eff. 11-7-75; § 7.1.3, eff. 11-7-75; renumbered as § 7.1.2, 12-15-77]—(NAC A 10-15-85; 9-19-90; 12-26-91; 10-30-95; R022-99, 9-27-99; R027-15, 10-27-2015)—(Substituted in revision for NAC 445B.362)

**NAC 445B.22033 [445.732] Emissions of particulate matter: Sources not otherwise limited.**

1. Owners or operators of stationary sources not otherwise included in NAC 445B.22027 to 445B.22037, inclusive, shall not cause or permit  $PM_{10}$  to be discharged from any emission unit into the atmosphere in excess of the allowable emission determined by the use of the formula contained in subsection 2 or 3.

2. When the maximum allowable throughput is less than 30 tons per hour, the maximum allowable weight discharged per hour must be determined by using the following equation:

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

3. When the maximum allowable throughput equals or exceeds 30 tons per hour, the maximum allowable weight discharged per hour must be determined by using the following equation:

$$E = \frac{55P^{0.11} - 40}{1}$$

4. For the purposes of subsections 2 and 3:

(a) "E" means the maximum rate of emission in pounds per hour.

(b) "P" means the maximum allowable throughput in tons per hour.

[Environmental Comm'n, Air Quality Reg. §§ 7.2.1-7.2.3, eff. 11-7-75]—(NAC A 10-19-83; 10-15-85; 10-22-87; 9-19-90; 12-26-91; 10-30-95; R105-97, 3-5-98)—(Substituted in revision for NAC 445B.363)



4/12/06

**NAC 445B.22037 [445.734] Emissions of particulate matter: Fugitive dust.**

1. No person may cause or permit the handling, transporting or storing of any material in a manner which allows or may allow controllable particulate matter to become airborne.

2. Except as otherwise provided in subsection 4, no person may cause or permit the construction, repair, demolition, or use of unpaved or untreated areas without first putting into effect an ongoing program using the best practical methods to prevent particulate matter from becoming airborne. As used in this subsection, "best practical methods" includes, but is not limited to, paving, chemical stabilization, watering, phased construction and revegetation.

3. Except as otherwise provided in subsection 4, no person may disturb or cover 5 acres or more of land or its topsoil until he has obtained an operating permit for surface area disturbance to clear, excavate, or level the land or to deposit any foreign material to fill or cover the land.

4. The provisions of subsections 2 and 3 do not apply to:

(a) Agricultural activities occurring on agricultural land; or

(b) Surface disturbances authorized by a permit issued pursuant to NRS 519A.180 which occur on land which is not less than 5 acres or more than 20 acres.

[Environmental Comm'n, Air Quality Reg. §§ 7.3.1 & 7.3.2, eff. 11-7-75; § 7.3.3, eff. 11-7-75; A 12-15-77]—(NAC A 9-19-90; 12-26-91; 12-13-93; 10-30-95)—(Substituted in revision for NAC 445B.365)

1/28/72

**8.2 Fuel Burning Equipment:**

8.2.1 No person shall cause, suffer, allow or permit the emission of sulfur compounds caused by the combustion of fuel in excess of the quantity set forth in the following table:

<u>Heat input, millions of British thermal units per hour</u>	<u>Maximum sulfur emission, pounds per hour</u>
10. . . . .	7.
100. . . . .	70.
1,000. . . . .	105.
10,000. . . . .	1050.
100,000. . . . .	10500.

12/29/78

8.2:[4]2 For purposes of [these regulations,] Article 8, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.

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1/12/06

**NAC 445B.2204 [445.742] "Sulfur emission" defined.** For purposes of NAC 445B.2204 to 445B.22063, inclusive, "sulfur emission" means the sulfur portion of the sulfur compounds emitted.

[Environmental Comm'n, Air Quality Reg. § 8.2.2.4, eff. 11-7-75; renumbered as § 8.2.4, 12-4-76; A and renumbered as § 8.2.2, 12-15-77]—(Substituted in revision for NAC 445B.370)

6/26/07

**NAC 445B.22043 [445.743] Sulfur emissions: Calculation of total feed sulfur.** For the purposes of NAC 445B.2204 to 445B.2205, inclusive, total feed sulfur must be calculated as the aggregate sulfur content of all fuels and other feed materials whose products of combustion and gaseous by-products are emitted to the atmosphere. When furnaces, sinter machines, sinter boxes, roasters, converters, or other similar devices are used for converting ores, concentrates, residues, or slag to the metal or the oxide of the metal either wholly or in part, the combined sulfur input of all units must be used to determine the allowable emission.

[Environmental Comm'n, Air Quality Reg. § 8.1.5, eff. 11-7-75]—(NAC A by R125-04, 9-24-2004)

4/12/06

**NAC 445B.22047 [Article 8.2, 8.2.1, 8.2.1.1, 8.2.1.2] Sulfur emissions: Fuel-burning equipment.**

1. No person may cause or permit the emission of compounds of sulfur caused by the combustion of fuel in fuel-burning equipment in excess of the quantity calculated by the use of the formula in subsection 2 or 3.

2. Where an emission unit has a maximum input of heat of less than 250 million Btu's per hour, the allowable emission must be calculated by the use of the following equation:

$$Y = 0.7X$$

For the purposes of this subsection:

(a) "X" means the maximum operating input of heat in millions of Btu's per hour.

(b) "Y" means the allowable rate of emission of sulfur in pounds per hour.

3. Where an emission unit has a maximum input of heat equal to or greater than 250 million Btu's per hour, the allowable emission of sulfur must be calculated by the use of the following equations:

Liquid fuel       $Y = 0.4X$

Solid fuel         $Y = 0.6X$

Combination Fuel       $Y = \frac{L(0.4X) + S(0.6X)}{L + S}$

For the purposes of this subsection:

(a) "X" means the maximum input of the operation in millions of Btu's per hour.

(b) "Y" means the allowable rate of emissions of sulfur in pounds per hour.

(c) "L" means the percentage of total input of heat derived from liquid fuel.

(d) "S" means the percentage of total input of heat derived from solid fuel.

[Environmental Comm'n, Air Quality Reg. § 8.2.1, eff. 11-7-75; § 8.2.2.1, eff. 11-7-75; A and renumbered as § 8.2.2, 12-4-76; renumbered as § 8.2.1.1, 12-15-77; § 8.2.2.2, eff. 11-7-75; A and renumbered as § 8.2.3, 12-4-76; renumbered as § 8.2.1.2, 12-15-77; § 8.2.2.3, eff. 11-7-75]—(NAC A 10-19-83; 10-15-85; 9-19-90; 12-24-91; 10-30-95; R105-97, 3-5-98; R022-99, 9-27-99)—(Substituted in revision for NAC 445B.373)

6/26/07

**NAC 445B.2205 [445.746, §§1-4] Sulfur emissions: Other processes which emit sulfur.**

1. No person may cause or permit the emission of sulfur compounds where the sulfur originates in the material being processed, excluding hydrogen sulfide and sulfur from all solid, liquid or gaseous fuel, in excess of the quantity determined by the following equation:

$$E = 0.292P^{0.904}$$

when "E" is equal to or greater than 10 pounds per hour. When "E" is less than 10 pounds per hour, the gas stream concentration must not exceed 1,000 ppm by volume.

2. For the purposes of subsection 1:

- (a) "E" means the allowable sulfur emission in pounds per hour.
- (b) "P" means the total feed sulfur, excluding hydrogen sulfide, in pounds per hour.

3. When sulfur emissions are due to sulfur contributions from both the fuel and the material being processed, the allowable emissions must be the sum of those allowed by this section and NAC 445B.22047.

4. Incinerators used solely for the control of odor by the combustion of noxious sulfur containing compounds are exempt from the provisions of NAC 445B.2204 to 445B.2205, inclusive, and are governed by the provisions of NAC 445B.22027 to 445B.22037, inclusive, and 445B.287 to 445B.3497, inclusive.

[Environmental Comm'n, Air Quality Reg. §§ 8.3.1-8.4, eff. 11-7-75]—(NAC A 9-5-84; 9-19-90; 12-26-91; 12-13-93; 10-30-95; 5-3-96; R105-97, 3-5-98; R125-04, 9-24-2004)

1/12/06

**NAC 445B.22067 [Article 5.1-5.3] Open burning.**

1. The open burning of any combustible refuse, waste, garbage or oil, or for any salvage operations, except as specifically exempted, is prohibited.

2. Open burning:

(a) For the purpose of weed abatement, conservation, disease control, game or forest management, personnel training or elimination of hazards is allowed if:

- (1) Approved in advance by the Director; or
- (2) Authorized by an officer of the State of Nevada or its political subdivisions and concurred in by the Director.

(b) Of yard waste and other untreated wood waste, as described in NAC 444.640, is allowed if approved in advance by the Director.

(c) Is allowed for agricultural purposes and management except where prohibited by local ordinances or regulations.

(d) Is allowed at single-family residences located in all areas of the State except in and within 1 mile of the boundaries of Babbitt, Battle Mountain, Caliente, Carlin, Douglas County, East Ely, Elko Township, Ely, Fallon, Fernley, Gabbs, Hawthorne, Lovelock, McGill, Tonopah, Virginia City, Weed Heights, Wells, Winnemucca and Yerington, and inside the limits of Carson City and in those portions of Lyon county that are within 1 mile of the Carson City line.

(e) Is allowed at single-family residences located in and within 1 mile of the boundaries of Babbitt, Battle Mountain, Caliente, Carlin, Douglas County, East Ely, Elko Township, Ely, Fallon, Fernley, Gabbs, Hawthorne, Lovelock, McGill, Tonopah, Virginia City, Weed Heights, Wells, Winnemucca and Yerington, and inside the limits of Carson City and in those portions of Lyon County that are within 1 mile of the Carson City line if:

- (1) Authorized by an officer of the State of Nevada or its political subdivisions;
- (2) Concurred in by the Director; and
- (3) Not specifically prohibited by local ordinances or regulations.

(f) Of small wood fires is allowed for recreational, educational, ceremonial, heating or cooking purposes.

3. All open burning must be attended and controlled at all times to eliminate fire hazards.

[Environmental Comm'n, Air Quality Reg. Art. 5, eff. 11-7-75; A 5-8-77]—(NAC A by R237-03, 4-15-2004)

**NAC 445B.2207 Incinerator burning. (NRS 445B.210)**

1. Except as otherwise provided in subsection 6:

(a) Burning in any incinerator other than the multiple-chamber type is prohibited.

(b) Incinerator burning which produces, for periods totaling 1 minute in 1 hour, a visible emission which is of an opacity equal to or greater than 20 percent is prohibited.

2. Incinerators used for the burning of pathological wastes, wet garbage or high moisture content material must be high temperature types with either grate or solid hearth construction, drying shelves for wet wastes and an auxiliary heating unit to ensure temperatures of 1400 degrees Fahrenheit (760 degrees Centigrade) for not less than 0.3 of a second. The hearth must be frequently cleaned at regular intervals to prevent buildup of residues and deposits.

3. The rated burning capacity, operating and maintenance procedures approved by the Director must be posted conspicuously at or near the incinerator.

4. Allowable PM<sub>10</sub> emissions from incinerators of less than 2,000 lb per hour rated burning capacity may not exceed 1.8 lb/ton of dry refuse charged.

5. Allowable PM<sub>10</sub> emissions from incinerators equal to or greater than 2,000 lb per hour burning capacity must be calculated using the following equation:

$$E = 0.6 (40.7 \times 10^{-5}C)$$

For the purposes of this subsection, "E" means the maximum allowable rate of PM<sub>10</sub> emissions in pounds per hour and "C" means the rate of charge of dry refuse in pounds per hour.

6. Single-chamber incinerators may be used at single-family residences, in all areas of the State, except in and within 1 mile of the boundaries of Babbitt, Battle Mountain, Caliente, Carlin, Douglas County, East Ely, Elko Township, Ely, Fallon, Fernley, Gabbs, Hawthorne, Lovelock, McGill, Tonopah, Virginia City, Weed Heights, Wells, Winnemucca and Yerington, and inside the limits of Carson City and in those portions of Lyon County that are within 1 mile of the Carson City line, unless otherwise prohibited by local ordinances or regulations.

[Environmental Comm'n, Air Quality Reg. §§ 6.1 & 6.2, eff. 11-7-75; § 6.3, eff. 11-7-75; A 3-31-77; §§ 6.4-6.6.2, eff. 11-7-75]—(NAC A 9-19-90; 12-26-91; R237-03, 4-15-2004; R027-15, 10-27-2015)

8/20/07

**NAC 445B.22083 [Approved by EPA as SIP revision 9-27-04] Construction, major modification or relocation of plants to generate electricity using steam produced by burning of fossil fuels.**

1.e Except as otherwise provided in subsections 2 and 3, a person shall not make a major modification to an existing plant or construct a new plant to generate electricity using steam produced by the burning of fossil fuels within:

- (a)e The Las Vegas Valley, Hydrographic Area 212;e
- (b)e The El Dorado Valley, Hydrographic Area 167;e
- (c)e The Ivanpah Valley, Hydrographic Areas 164 a and 164 b; ore
- (d)e The city limits of Boulder City.e

2.e Fossil fuel-fired power generating units Numbers 1, 2 and 3 at Clark Station and fossil fuel-fired power generating unit Number 1 at Sunrise Station may be relocated to the Ivanpah Valley and must comply with the provisions of NAC 445B.001 to 445B.3689, inclusive.e

3.e If an emission unit is relocated to Ivanpah Valley:e

(a)e The previously used emission unit must be deactivated and removed from the previous site when the relocated unit begins operation.e

(b)e Any credit for reduced emission is not available as an offset credit.e

4.e As used in this section, "major modification" has the meaning ascribed to it in 40 C.F.R. § 51.165, as adopted by reference in NAC 445B.221.e

(Added to NAC by Environmental Comm'n, eff. 9-4-92; A 3-29-94; R096-05, 10-31-2005)e

V/12/06

**NAC 445B.2209 [445.845] Reduction of animal matter.**

1. The operation of any machine, equipment or other contrivance for the reduction of animal matter is prohibited unless all gases, vapors and gas-entrained effluents are:

(a) Incinerated at temperatures of not less than 1400°F (760°C) for not less than 0.3 second;

2. This section does not apply to any machine, equipment or other contrivance used exclusively for the processing of food for human consumption.

[Environmental Comm'n, Air Quality Reg. §§ 10.2.1-10.2.2, eff. 11-7-75]—(Substituted in revision for NAC 445B.394)

6/26/07

**NAC 445B.22093 [445.846, §§1,3,4; §2: Article 9.2.1, 9.2.1.1, 9.2.1.2] Organic solvents and other volatile compounds.**

1. Solvents or other volatile compounds such as paints, acids, alkalies, pesticides, fertilizers and manure must be processed, stored, used and transported in such a manner and by such means as to minimize the tendency to evaporate, leak, escape or be otherwise discharged into the ambient air causing or contributing to air pollution. If methods of control are available and feasible effectively to reduce the contribution to air pollution from evaporation, leakage or discharge, as determined by the Director, the installation and use of such methods, devices or equipment for control is mandatory.

2. No person may place, store or hold in any new reservoir, stationary tank or other container with a capacity equal to or greater than 40,000 gallons (150 kiloliters) any gasoline, petroleum distillate, or volatile organic compound having a vapor pressure of 1.5 lb/square inch absolute (1,055 kg/square meter) or greater under actual storage conditions unless the tank, reservoir or other container is a pressure tank maintaining working pressure sufficient at all times to prevent loss of vapor or gas to the atmosphere or is equipped with one of the following devices properly installed, in good working order, and in operation:

(a) A floating roof which consists of a pontoon type or double-deck roof which rests on the surface of the liquid contents and is equipped with a seal to close the space between the roof eave and tank wall or a vapor balloon or a vapor dome designed in accordance with accepted standards of the petroleum industry. This control equipment is not permitted if the gasoline or petroleum distillate has a vapor pressure of 11 lb/square inch absolute (7,734 kg/square meter) or greater under actual conditions. All gauging and sampling devices for tanks must be gastight except when gauging or sampling is taking place.

(b) Other equipment proven to be of equal efficiency for preventing discharge of gases and vapors to the atmosphere.

3. Any tank for the storage of any other petroleum or volatile organic compound which is constructed or extensively remodeled on or after November 7, 1975, must be equipped with a submerged fill pipe for the control of emissions.

4. All facilities for dock loading of products consisting of petroleum or other volatile organic compounds having a vapor pressure of 1.5 lb/square inch absolute (1,055 kg/square meter) or greater at loading pressure must have facilities for submerged filling by a submerged fill pipe for the control of emissions.

[Environmental Comm'n, Air Quality Reg. Art. 9, eff. 11-7-75]—(NAC A 10-19-83; R096-05, 10-31-2005)

- **NAC 445B.22095 Emission limitation for BART. (NRS 445B.210)** The emission limitation for BART must be established on a case-by-case basis, taking into consideration:
- 1.e The technology available;
  - 2.e The costs of compliance;
  - 3.e The energy and nonair quality environmental impacts of compliance;
  - 4.e Any pollution control equipment in use or in existence at the source or unit;
  5. The remaining useful life of the source or unit; and
  - 6.e The degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology.



**NAC 445B.22096 Control measures constituting BART; limitations on emissions. (NRS 445B.210)**

1. The sources listed below must install, operate and maintain the following control measures which constitute BART and must not emit or cause to be emitted NO<sub>x</sub>, SO<sub>2</sub>, or PM<sub>10</sub> in excess of the following limits:

(a) For power-generating units numbers 1 and 2 of NV Energy’s Fort Churchill Generating Station, located in hydrographic area 108:

UNIT (Boiler)	NO <sub>x</sub>		SO <sub>2</sub>		PM <sub>10</sub>	
	Emission Limit (lb/10 <sup>6</sup> Btu, 12-month rolling average)	Control Type	Emission Limit (lb/10 <sup>6</sup> Btu, 24-hr average)	Control Type	Emission Limit (lb/10 <sup>6</sup> Btu, 3-hr average)	Control Type
1	0.20	Low NO <sub>x</sub> burners with flue gas recirculation	0.05	Pipeline natural gas and/or No. 2 fuel oil	0.03	Pipeline natural gas and/or No. 2 fuel oil
2	0.16		0.05		0.03	

(b) For power-generating units numbers 1, 2 and 3 of NV Energy’s Tracy Generating Station, located in hydrographic area 83:

UNIT (Boiler)	NO <sub>x</sub>		SO <sub>2</sub>		PM <sub>10</sub>	
	Emission Limit (lb/10 <sup>6</sup> Btu, 12-month rolling average)	Control Type	Emission Limit (lb/10 <sup>6</sup> Btu, 24-hr average)	Control Type	Emission Limit (lb/10 <sup>6</sup> Btu, 3-hr average)	Control Type
1	0.15	Low NO <sub>x</sub> burners with flue gas recirculation	0.05	Pipeline natural gas and/or No. 2 fuel oil	0.03	Pipeline natural gas and/or No. 2 fuel oil
2	0.12		0.05		0.03	
3	0.19	Low NO <sub>x</sub> burners with selective noncatalytic reduction	0.05		0.03	

(c) For power-generating units numbers 1, 2 and 3 of NV Energy’s Reid Gardner Generating Station, located in hydrographic area 218:

UNIT (Boiler)	NO <sub>x</sub>		SO <sub>2</sub>		PM <sub>10</sub>	
	Emission Limit (lb/10 <sup>6</sup> Btu, 30-day rolling average)	Control Type	Emission Limit (lb/10 <sup>6</sup> Btu, 24-hr average)	Control Type	Emission Limit (lb/10 <sup>6</sup> Btu, 3-hr average)	Control Type
1	0.20, averaged across all 3 units	Low NO <sub>x</sub> burners with over-fire air and selective noncatalytic reduction	0.15	Wet soda ash flue gas desulphurization	0.015	Fabric filter
2			0.15		0.015	
3			0.15		0.015	

(d) For power-generating units numbers 1 and 2 of Southern California Edison's Mohave Generating Station, located in hydrographic area 213:

UNIT (Boiler)	NO <sub>x</sub>			SO <sub>2</sub>		PM <sub>10</sub>	
	Emission Limit (lb/10 <sup>6</sup> Btu, 12-month rolling average)	Mass Emission Rate (lb/hr, 1-hr average)	Control Type	Emission Limit (lb/10 <sup>6</sup> Btu, 30-day rolling average)	Control Type	Emission Limit (lb/10 <sup>6</sup> Btu, 3-hr average)	Control Type
1	0.15	788	Low NO <sub>x</sub> burners with over-fire air and conversion to pipeline natural gas only	0.0019	Conversion to pipeline natural gas only	0.0077	Conversion to pipeline natural gas only
2	0.15	788		0.0019		0.0077	

2. The control measures established in subsection 1 may be replaced or supplemented with alternative technologies approved in advance by the Director, provided that the emission limits in subsection 1 are met. The established or approved control measures must be installed and operating:

(a) For NV Energy's Fort Churchill, Tracy and Reid Gardner generating stations:

(1) On or before June 30, 2016; or

(2) Not later than 5 years after approval of Nevada's state implementation plan for regional haze by the United States Environmental Protection Agency Region 9,  
 ↪ whichever occurs first.

(b) For Southern California Edison's Mohave Generating Station, at the time that each unit resumes operation.

3. If the ownership of any BART regulated emission unit changes, the new owner must comply with the requirements set forth in subsection 2.

4. For purposes of this section, PM<sub>10</sub> emissions include the components of PM<sub>2.5</sub> emissions as a subset.

(Added to NAC by Environmental Comm'n by R190-08, eff. 4-23-2009; A by R148-09, 1-28-2010; R051-12, 12-20-2012; R027-15, 10-27-2015)

**NAC 445B.22097 State standards of quality for ambient air. (NRS 445B.210)**

1. The table contained in this section lists the minimum state standards of quality for ambient air.

		STATE STANDARDS <sup>A, B, D</sup>
POLLUTANT	AVERAGING TIME	CONCENTRATION <sup>C</sup>
Ozone	8 hours	0.070 ppm
Ozone-Lake Tahoe Basin, #90	1 hour	0.10 ppm (195 $\mu\text{g}/\text{m}^3$ )
Carbon monoxide less than 5,000' above mean sea level	8 hours	9 ppm (10,500 $\mu\text{g}/\text{m}^3$ )
At or greater than 5,000' above mean sea level		6 ppm (7,000 $\mu\text{g}/\text{m}^3$ )
Carbon monoxide at any elevation	1 hour	35 ppm (40,500 $\mu\text{g}/\text{m}^3$ )

		STATE STANDARDS <sup>A, B, D</sup>
POLLUTANT	AVERAGING TIME	CONCENTRATION <sup>C</sup>
Nitrogen dioxide	Annual arithmetic mean	0.053 ppm (100 µg/m <sup>3</sup> )
	1 hour	100 ppb
Sulfur dioxide	Annual arithmetic mean	0.030 ppm (80 µg/m <sup>3</sup> )
	24 hours	0.14 ppm (365 µg/m <sup>3</sup> )
	3 hours	0.5 ppm (1,300 µg/m <sup>3</sup> )
	1 hour	75 ppb
Particulate matter as PM <sub>10</sub>	24 hours	150 µg/m <sup>3</sup>
Particulate matter as PM <sub>2.5</sub>	Annual arithmetic mean	12.0 µg/m <sup>3</sup>
	24 hours	35 µg/m <sup>3</sup>
Lead (Pb)	Rolling 3 mo. average	0.15 µg/m <sup>3</sup>
Hydrogen sulfide	1 hour	0.08 ppm (112 µg/m <sup>3</sup> ) <sup>E</sup>

Notes:

Note A: The Director shall use the state standards in considering whether to issue a permit for a stationary source and shall ensure that the stationary source will not cause the state standards to be exceeded in areas where the general public has access. For the 2006 particulate matter as PM<sub>2.5</sub> 24-hour and annual standards, the 2010 nitrogen dioxide 1-hour standard and the 2010 sulfur dioxide 1-hour standard, the Director shall use the form of the standards set forth in 40 C.F.R. §§ 50.11, 50.13 and 50.17, as those provisions existed on June 23, 2014, to ensure that the state standard is no more stringent than the national ambient air quality standard in determining whether the stationary source will comply with the state standards in areas where the general public has access.

Note B: National ambient air quality standards are used in determinations of attainment or nonattainment. The form of a national ambient air quality standard is the criteria which must be satisfied for each respective concentration level of a standard for the purposes of attainment. The form for each national ambient air quality standard is set forth in 40 C.F.R. Part 50 and may be viewed at <http://www.epa.gov/criteria-air-pollutants/naqs-table>. National primary standards are the levels of air quality necessary, with an adequate margin of safety, to protect the public health. National secondary standards are the levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a regulated air pollutant.

Note C: Where applicable, concentration is expressed first in units in which it was adopted. Measurements of air quality that are expressed as mass per unit volume, such as micrograms per cubic meter, must be corrected to a reference temperature of 25 degrees Centigrade and a reference pressure of 760 mm of Hg (1,013.2 millibars), except measurements of particulate matter as PM<sub>2.5</sub> and lead (Pb), which are calculated in micrograms per cubic meter at local conditions; “ppb” in this table refers to parts per billion by volume, or nanomoles of regulated air pollutant per mole of gas; “ppm” refers to parts per million by volume, or micromoles of regulated air pollutant per mole of gas; “µg/m<sup>3</sup>” refers to micrograms per cubic meter.

Note D: Any reference method or equivalent method designated in accordance with 40 C.F.R. Part 53 may be used to measure a regulated air pollutant.

Note E: The state ambient air quality standard for hydrogen sulfide does not include naturally occurring background concentrations.

2. The state standards of quality for ambient air are minimum goals, and it is the intent of the Commission in this section to protect the existing quality of Nevada's air to the extent that it is economically and technically feasible.

[Environmental Comm'n, Air Quality Reg. §§ 12.1-12.1.6, eff. 11-7-75; A and renumbered as § 12.1, 12-4-76; A 12-15-77; 8-28-79; §§ 12.2-12.4, eff. 11-7-75; § 12.5, eff. 12-4-76; A 8-28-79]—(NAC A 10-19-83; 9-5-84; 12-26-91; 10-30-95; R103-02, 12-17-2002; R198-03, 4-26-2004; R038-12, 9-14-2012; R042-13, 12-23-2013; R145-13, 6-23-2014; R027-15, 10-27-2015; R145-17, 5-16-2018)

6/26/07

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**NAC 445B.225 [445.663] Prohibited conduct: Concealment of emissions.** No person may install, construct or use any device which conceals any emission without reducing the total release of regulated air pollutants to the atmosphere.

[Environmental Comm'n, Air Quality Reg. § 2.2.1, eff. 11-7-75]—(NAC A 10-22-87; 10-30-95)

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**NAC 445B.227 [445.664] Prohibited conduct: Operation of source without required equipment; removal or modification of required equipment; modification of required procedure.** Except as otherwise provided in NAC 445B.001 to 445B.3497, inclusive, no person may:

1. Operate a stationary source of air pollution unless the control equipment for air pollution which is required by applicable requirements or conditions of the permit is installed and operating.

2. Disconnect, alter, modify or remove any of the control equipment for air pollution or modify any procedure required by an applicable requirement or condition of the permit.

[Environmental Comm'n, Air Quality Reg. § 2.2.2, eff. 12-15-77]—(NAC A 10-14-82; 10-15-85; 8-22-86; 10-22-87; 3-29-94, eff. 1-11-96; 10-30-95)

6/26/07

**NAC 445B.229 [445.665] Hazardous emissions: Order for reduction or discontinuance.** Without limiting the authority of any state officer to declare or to act on an emergency, the Director or local air pollution control agency, upon determining that a generalized condition of air pollution exists or that the emission from one or more stationary sources of regulated air pollutants is causing a danger to human health or safety, may order persons causing or contributing to the air pollution to immediately reduce or discontinue all emission of contaminants.

[Environmental Comm'n, Air Quality Reg. § 2.4.1, eff. 11-7-75]—(NAC A 10-30-95)

12/8/06

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445B.230 1. Any person who is able to cause or permit the emission of 100 tons (90.7 metric tons) or more per year of a regulated air pollutant from a stationary source shall prepare and submit to the Director a plan for reducing or eliminating that emission in accordance with the episode stages of alert, warning, and emergency as defined in the ~~{air quality plan for the State of Nevada.}~~ **applicable state implementation plan.**

2. Any person required to have an operating permit who is able to cause or permit the emission of less than 100 tons (90.7 metric tons) per year of a regulated air pollutant shall, upon written notice from the Director, prepare and submit to the Director a plan for reducing or eliminating that emission in accordance with the episode stages of alert, warning, and emergency as defined in the ~~{air quality plan for the State of Nevada.}~~ **applicable state implementation plan.**

3. The written notice required under subsection 2 must be transmitted in accordance with subsection 4 to all persons who are within the same classification of sources as defined in the *Standard Industrial Classification Manual*, ~~{1987.}~~ **adopted by reference in NAC 445B.221**, and who are able to cause or permit the emission of less than 100 tons (90.7 metric tons) per year of a regulated air pollutant.

4. Written notice shall be deemed to have been served if delivered to the person to whom addressed or if sent by registered or certified mail to the last known address of the person.

10/26/82

445.667 Excess emissions: Scheduled maintenance; testing; malfunctions.

1. Scheduled maintenance or testing approved by the director or repairs which may result in excess emissions of air contaminants prohibited by NAC 445.430 to 445.846, inclusive, must be performed during a time designated by the director as being favorable for atmospheric ventilation.

2. The director must be notified in writing of the time and expected duration at least 24 hours in advance of any scheduled maintenance or repairs which may result in excess emissions of air contaminants prohibited by NAC 445.430 to 445.846, inclusive.

3. The director must be notified of any excess emissions within 24 hours after any malfunction, breakdown, or upset of process or pollution control equipment or during startup of such equipment. Phone (702) 885-4670.

4. The owner or operator of an affected facility shall provide the director, within 15 days after any malfunction, breakdown, upset, startup or human error sufficient information to enable the director to determine the seriousness of the excess emissions. The submission must include as a minimum:

(a) The identity of the stack and other emission point or either of them where the excess emissions occurred.



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- (b) The estimated magnitude of the excess emissions expressed in opacity or in the units of the applicable emission limitation and the operating data and methods used in estimating the magnitude of the excess emissions.
- (c) The time and duration of the excess emissions.
- (d) The identity of the equipment causing the excess emissions.
- (e) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of the malfunctions.
- (f) The steps taken to limit the excess emissions.
- (g) Documentation that the air pollution control equipment, process equipment or processes were at all times maintained and operated, to a maximum extent practicable, in a manner consistent with good practice for minimizing emissions.

[Environmental Comm'n, Air Quality Reg. §§ 2.5.1-2.5.3, eff. 11-7-75; A 8-28-79; § 2.5.4, eff. 11-7-75; §§ 2.5.4.1-2.5.4.7, eff. 8-28-79]

10/31/75

2.5.4 Breakdown or upset, determined by the Director to be unavoidable and not the result of careless or marginal operations, shall not be considered a violation of these regulations.

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**NAC 445B.250 [Article 2.16.1, 2.16.1.1-5] Notification of Director: Construction, reconstruction and initial start-up; demonstration of continuous monitoring system performance.** Any owner or operator subject to the provisions of NAC 445B.001 to 445B.3689, inclusive, shall furnish the Director written notification of:

1. The date that construction or reconstruction of an affected facility is commenced, postmarked no later than 30 days after such date. This requirement does not apply in the case of mass-produced facilities which are purchased in completed form.

2. The anticipated date of initial start-up of an affected facility, postmarked not more than 60 days and not less than 30 days before such date.

3. The actual date of initial start-up of an affected facility, postmarked within 15 days after such date.

4. The date upon which demonstration of the continuous monitoring system performance commences in accordance with NAC 445B.256 to 445B.267, inclusive. Notification must be postmarked not less than 30 days before such date.

[Environmental Comm'n, Air Quality Reg. §§ 2.16.1-2.16.1.5, eff. 12-4-76]—(NAC R 12-13-93, eff. 11-15-94; A 10-30-95; R105-97, 3-5-98; R096-05, 10-31-2005)

4/12/06

**NAC 445B.252 [445.682] Testing and sampling.**

1. To determine compliance with NAC 445B.001 to 445B.3497, inclusive, before the approval or the continuance of an operating permit or similar class of permits, the director may either conduct or order the owner of any stationary source to conduct or have conducted such testing and sampling as the director determines necessary. Testing and sampling or either of them must be conducted and the results submitted to the director within 60 days after achieving the maximum rate of production at which the affected facility will be operated, but not later than 180 days after initial start-up of the facility and at such other times as may be required by the director.

2. Tests of performance must be conducted and data reduced in accordance with the methods and procedures of the test contained in each applicable subsection of this section unless the director:

(a) Specifies or approves, in specific cases, the use of a method of reference with minor changes in methodology; or

(d) Waives the requirement for tests of performance because the owner or operator of a stationary source has demonstrated by other means to the director's satisfaction that the affected facility is in compliance with the standard.

3. Tests of performance must be conducted under such conditions as the director specifies to the operator of the plant based on representative performance of the affected facility. The owner or operator shall make available to the director such records as may be necessary to determine the conditions of the test of performance. Operations during periods of start-up, shutdown and malfunction must not constitute representative conditions of a test of performance unless otherwise specified in the applicable standard.

4. The owner or operator of an affected facility shall give notice to the director 30 days before the test of performance to allow the director to have an observer present. A written testing procedure for the test of performance must be submitted to the director at least 30 days before the test of performance to allow the director to review the proposed testing procedures.

5. Each test of performance must consist of at least three separate runs using the applicable method for that test. Each run must be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the runs apply. In the event of forced shutdown, failure of an irreplaceable portion of the sampling train, extreme meteorological conditions or other circumstances with less than three valid samples being obtained, compliance may be determined using the arithmetic mean of the results of the other two runs upon the director's approval.

7. The cost of all testing and sampling and the cost of all sampling holes, scaffolding, electric power and other pertinent allied facilities as may be required and specified in writing by the director must be provided and paid for by the owner of the stationary source.

8. All information and analytical results of testing and sampling must be certified as to their truth and accuracy and as to their compliance with all provisions of these regulations, and copies of these results must be provided to the director no later than 60 days after the testing or sampling, or both.

9. Notwithstanding the provisions of subsection 2, the Director shall not approve an equivalent method or alternative method to determine compliance with a standard or emission limitation contained in Part 60, 61 or 63 of Title 40 of the Code of Federal Regulations for:

(a) An emission unit that is subject to a testing requirement pursuant to Part 60, 61 or 63 of Title 40 of the Code of Federal Regulations; or

(b) An affected source.

[Environmental Comm'n, Air Quality Reg. §§ 2.6.1-2.6.4, eff. 11-7-65; A 12-4-76; §§ 2.6.5-2.6.9, eff. 12-4-76]—(NAC A 10-15-85; 10-22-87; 10-30-95; R065-03, 10-30-2003)

1/12/06

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**NAC 445B.256 [Article 2.17.10, 2.17.10.1] Monitoring systems: Calibration, operation and maintenance of equipment.** The owners or operators of all stationary sources identified in Appendix P of 40 C.F.R. § 51(1.1) as amended from time to time, are required to install, calibrate, operate and maintain all monitoring equipment necessary for continuously monitoring the pollutants specified in Appendix P for the applicable source category. Those stationary sources must meet the basic requirements of Appendix P of 40 C.F.R. § 51(2.0 et seq.).

[Environmental Comm'n, Air Quality Reg. §§ 2.17.10 & 2.17.10.1, eff. 4-4-77]—(NAC A 10-30-95)

**NAC 445B.257 [Article 2.17.6, 2.17.7] Monitoring systems: Location.**

1. All continuous monitoring systems or monitoring devices must be installed so that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems are contained in the applicable Performance Specifications of Appendix B of 40 C.F.R. § 60.

[Environmental Comm'n, Air Quality Reg. §§ 2.17.6 & 2.17.7, eff. 12-4-76]—(Substituted in revision for NAC 445.684)

12/8/06

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445B.258 1. Unless otherwise approved by the Director or specified in NAC 445B.001 to 445B.3689, inclusive, the requirements of this section apply to all continuous monitoring systems required under applicable provisions of those sections.

2. All continuous monitoring systems and monitoring devices must be installed and operational ~~[prior to]~~ *before* conducting performance tests under NAC 445B.252. Verification of operational status must, as a minimum, consist of the following:

(a) For continuous monitoring systems referred to in subsection 2 of NAC 445B.259, completion of the conditioning period specified by applicable requirements in Appendix B of 40 C.F.R. [§] *Part* 60.

(b) For continuous monitoring systems referred to in NAC 445B.260, completion of 7 days of operation.

(c) For monitoring devices referred to in NAC 445B.256 to 445B.267, inclusive, completion of the manufacturer's written requirements or recommendations for checking the operation or calibration of the device.

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445B.259 1. During any performance tests required under NAC 445B.252 or within 30 days thereafter and at such other times as may be required by the Director under § 114 of the Act, the owner or operator of any affected facility shall conduct continuous evaluations of the performance of monitoring systems and furnish the Director within 60 days thereof two or upon request more copies of a written report of the results of such tests. These evaluations must be conducted in accordance with the specifications and procedures provided in this section and NAC 445B.260.

2. Except as provided in NAC 445B.260, continuous monitoring systems listed within this subsection must be evaluated in accordance with the requirements and procedures contained in the applicable performance specification of Appendix B of 40 C.F.R. ~~{§}~~ **Part 60**. Continuous monitoring systems for measuring:

- (a) Opacity of emissions must comply with Performance Specification 1.
- (b) Nitrogen ~~{oxide}~~ **oxides** emissions must comply with Performance Specification 2.
- (c) Sulfur dioxide emissions must comply with Performance Specification 2.
- (d) The oxygen ~~{content of}~~ **and** carbon dioxide content of effluent gases must comply with Performance Specification 3.

12/8/06

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445B.260 1. Except as *otherwise* provided in subsection 2, an owner or operator who, ~~[prior to]~~ *before* September 11, 1974, entered into a binding contractual obligation to purchase specific continuous monitoring system components shall comply with the following requirements:

(a) Continuous monitoring systems for measuring opacity of emissions must be capable of measuring, *with a confidence level of 95 percent*, emission levels within  $\pm 20$  percent ~~[with a confidence level of 95 percent. The Calibration Error Test]~~ *of the mean value of the data obtained using the applicable reference method set forth in terms of the units of the emission standard. The calibration drift test* and associated calculation procedures set forth in Performance Specification 1 in Appendix B of 40 C.F.R. ~~[\S]~~ *Part 60* must be used for demonstrating compliance with this specification.

(b) Continuous monitoring systems for measurement of nitrogen oxides or sulfur dioxide must be capable of measuring, *with a confidence level of 95 percent*, emission levels within  $\pm 20$  percent ~~[with a confidence level of 95 percent. The Calibration Error Test, the Field Test for Accuracy (Relative).]~~ *of the mean value of the data obtained using the applicable reference method set forth in terms of the units of the emission standard. The calibration drift test, the relative accuracy test* and associated operating and calculation procedures set forth in Performance Specification 2 in Appendix B of 40 C.F.R. ~~[\S]~~ *Part 60* must be used for demonstrating compliance with this specification.

2. Owners or operators of all continuous monitoring systems installed on an affected facility ~~[prior to]~~ *before* October 6, 1975, are not required to conduct tests under paragraphs (a) and (b) of subsection 1 unless requested by the Director.

3. All continuous monitoring systems referred to in subsection 1 must be upgraded or replaced, if necessary, with new continuous monitoring systems, and such improved systems must be demonstrated to comply with applicable performance specifications under NAC 445B.259 by September 11, 1979.

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**NAC 445B.261 [445.688] Monitoring systems: Adjustments.** Owners or operators of all continuous monitoring systems installed in accordance with the provisions of NAC 445B.256 to 445B.267, inclusive, shall check the zero and span drift at least once daily in accordance with the method prescribed by the manufacturer of the systems unless the manufacturer recommends adjustments at shorter intervals, in which case the recommendations must be followed. The zero and span must, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour calibration drift limits of the applicable performance specifications in Appendix B of 40 C.F.R. § 60 are exceeded.

[Environmental Comm'n, Air Quality Reg. part § 2.17.4, eff. 12-4-76; A 12-15-77]—  
(Substituted in revision for NAC 445.688)

**NAC 445B.262 [445.689] Monitoring systems: Measurement of opacity.**

1. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases must be cleaned before performing the zero or span drift adjustments, except that for systems using automatic zero adjustments, the optical surfaces must be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity. Unless otherwise approved by the director, the following procedures, as applicable, must be followed:

(a) For extractive continuous monitoring systems measuring gases, minimum procedures must include introducing applicable zero and span gas mixtures into the measurement system as near the probe as is practical. Span and zero gases certified by their manufacturer to be traceable to National Institute of Standards and Technology reference gases must be used whenever these reference gases are available. The span and zero gas mixtures must be the same composition as specified in Appendix B of 40 C.F.R. Part 60. Every 6 months after the date of manufacture, span and zero gases must be reanalyzed by conducting triplicate analyses with Reference Methods 6 for SO<sub>2</sub>, 7 for NO, and 3 for O<sub>2</sub> and CO<sub>2</sub>, respectively. The gases may be analyzed at less frequent intervals if longer shelf lives are guaranteed by the manufacturer.

(b) For nonextractive continuous monitoring systems measuring gases, minimum procedures include upscale checks using a certified calibration gas cell or test cell which is functionally equivalent to a known gas concentration. The zero check may be performed by computing the zero value from upscale measurements or by mechanically producing a zero condition.

(c) For continuous monitoring systems measuring opacity of emissions, minimum procedures include a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. These procedures must provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photodetector assembly.

2. Notwithstanding the provisions of subsection 1, the Director shall not approve an equivalent method or alternative method to determine compliance with a standard or emission limitation contained in Part 60, 61 or 63 of Title 40 of the Code of Federal Regulations for:

(a) An emission unit that is subject to a testing requirement pursuant to Part 60, 61 or 63 of Title 40 of the Code of Federal Regulations; or

(b) An affected source.

[Environmental Comm'n, Air Quality Reg. part § 2.17.4, eff. 12-4-76; § 2.17.4.1, eff. 12-4-76; A 12-15-77; §§ 2.17.4.2 & 2.17.4.3, eff. 12-4-76]—(NAC A by R065-03, 10-30-2003)

**NAC 445B.263 [455.690] Monitoring systems: Frequency of operation.** Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required by NAC 445B.261, all continuous monitoring systems must be in continuous operation and meet minimum frequency of operation requirements as follows:

1. All continuous monitoring systems referred to in NAC 445B.259 and 445B.260 for measuring opacity of emissions must complete a minimum of one cycle of operation (sampling, analyzing and data recording) for each successive 10-second period.

2. All continuous monitoring systems referred to in NAC 445B.259 for measuring oxides of nitrogen, sulfur dioxide, carbon dioxide or oxygen must complete a minimum of one cycle of operation (sampling, analyzing and data recording) for each successive 15-minute period.

3. All continuous monitoring systems referred to in NAC 445B.260, except opacity, must complete a minimum of one cycle of operation (sampling, analyzing and data recording) for each successive 1-hour period.

[Environmental Comm'n, Air Quality Reg. §§ 2.17.5-2.17.5.3, eff. 12-4-76]—(Substituted in revision for NAC 445.690)



V/12/06

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**NAC 445B.264 [455.691] Monitoring systems: Recordation of data.** 1. Owners or operators of all continuous monitoring systems for the measurement of opacity shall reduce all data to 6-minute averages and for systems other than opacity to 1-hour averages.

2. For systems other than opacity, 1-hour averages must be computed from four or more data points equally spaced over each 1-hour period.

3. Data recorded during periods of system breakdowns, repairs, calibration checks, and zero and span adjustments must not be included in the data averages computed under this section. An arithmetic or integrated average of all calibrated data must be used. The data output of all continuous monitoring systems may be recorded in reduced or nonreduced form, e.g., ppm pollutant and percent O<sub>2</sub> or lb/million Btu of pollutant.

4. All excess emissions must be converted into units of the standard using the applicable conversion procedures specified in NAC 445B.001 to 445B.3497, inclusive. After conversion into units of the standard, the data may be rounded to the same number of significant digits used in those sections to specify the applicable standard, e.g., rounded to the nearest 1 percent opacity.

5. As used in this section, "calibrated data" means data which is precise and accurate within a stated acceptance criteria for the instrument.

[Environmental Comm'n, Air Quality Reg. § 2.17.8, eff. 12-4-76]—(NAC A 10-22-87; R118-00, 9-25-2000)

**NAC 445B.265 [455.692] Monitoring systems: Records; reports.**

1. Any owner or operator subject to the provisions of NAC 445B.256 to 445B.267, inclusive, shall maintain records of the occurrence and duration of any start-up, shutdown or malfunction in the operation of an affected facility and any malfunction of the air pollution control equipment or any periods during which a continuous monitoring system or monitoring device is inoperative.

2. Each owner or operator required to install a continuous monitoring system shall submit a written report of excess emissions to the director for every calendar quarter. All quarterly reports

must be postmarked by the 30th day following the end of each calendar quarter and must include the following information:

(a) The magnitude of excess emissions computed in accordance with NAC 445B.256 to 445B.267, inclusive, any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.

(b) Specific identification of each period of excess emissions that occurs during start-ups, shutdowns and malfunctions of the affected facility.

(c) The nature and cause of any malfunction, if known, the corrective action taken or preventative measures adopted.

(d) Specific identification of each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of any repairs or adjustments that were made.

↳ When no excess emissions have occurred and the continuous monitoring system has not been inoperative, repaired or adjusted, such information must be included in the report.

3. Any owner or operator subject to the provisions of NAC 445B.256 to 445B.267, inclusive, shall maintain a file of all measurements, including:

(a) Continuous monitoring systems, monitoring devices and performance testing measurements;

(b) All continuous monitoring system performance evaluations;

(c) All continuous monitoring systems or monitoring device calibration checks;

(d) Adjustments and maintenance performed on these systems or devices; and

(e) All other information required by NAC 445B.256 to 445B.267, inclusive, recorded in a permanent form suitable for inspection.

↳ The file must be retained for at least 2 years following the date of the measurements, maintenance, reports and records.

[Environmental Comm'n, Air Quality Reg. §§ 2.16.2-2.16.4, eff. 12-4-76]—(NAC A 7-2-84)—(Substituted in revision for NAC 445.692)

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**NAC 445B.267 [455.693] Alternative monitoring procedures or requirements.**

1. Upon written application by an owner or operator, the director may approve alternatives to any monitoring procedures or requirements of NAC 445B.256 to 445B.267, inclusive, including, but not limited to, the following:

(a) Alternative monitoring requirements when installation of a continuous monitoring system or monitoring device specified by those sections would not provide accurate measurements due to liquid water or other interferences caused by substances with the effluent gases.

(b) Alternative monitoring requirements when the affected facility is infrequently operated.

(c) Alternative monitoring requirements to accommodate continuous monitoring systems that require additional measurements to correct for stack moisture conditions.

(d) Alternative locations for installing continuous monitoring systems or monitoring devices when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements.

(e) Alternative methods of converting regulated air pollutant concentration measurements to units of the standards.

(f) Alternative procedures for performing daily checks of zero and span drift that do not involve use of span gases or test cells.

(g) Alternatives to the test methods of the American Society for Testing and Materials or sampling procedures specified by any provision of NAC 445B.256 to 445B.267, inclusive.

(h) Alternative continuous monitoring systems that do not meet the design or performance requirements in Performance Specification 1, Appendix B of 40 C.F.R. Part 60, but adequately demonstrate a definite and consistent relationship between their measurements and the measurements of opacity by a system complying with the requirements in Performance Specification 1. The director may require that such demonstration be performed for each affected facility.

(i) Alternative monitoring requirements when the effluent from a single affected facility or the combined effluent from two or more affected facilities are released to the atmosphere through more than one point.

2. Notwithstanding the provisions of subsection 1, the Director shall not approve an equivalent method or alternative method to determine compliance with a standard or emission limitation contained in Part 60, 61 or 63 of Title 40 of the Code of Federal Regulations for:

(a) An emission unit that is subject to a testing requirement pursuant to Part 60, 61 or 63 of Title 40 of the Code of Federal Regulations; or

(b) An affected source.

[Environmental Comm'n, Air Quality Reg. §§ 2.17.9-2.17.9.7, eff. 12-4-76; § 2.17.9.8, eff. 12-4-76; A 12-15-77]—(NAC A 10-30-95; R065-03, 10-30-2003)

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**NAC 445B.275 [445.696] Violations: Acts constituting; notice.**

1. Failure to comply with any requirement of NAC 445B.001 to 445B.3791, inclusive, any applicable requirement or any condition of an operating permit constitutes a violation. As required by NRS 445B.450, the Director shall issue a written notice of an alleged violation to any owner or operator for any violation, including, but not limited to:

- (a) Failure to apply for and obtain an operating permit;
- (b) Failure to construct a stationary source in accordance with the application for an operating permit as approved by the Director;
- (c) Failure to construct or operate a stationary source in accordance with any condition of an operating permit;
- (d) Commencing construction or modification of a stationary source without applying for and receiving an operating permit or a modification of an operating permit as required by NAC 445B.001 to 445B.3497, inclusive, or a mercury operating permit to construct as required by NAC 445B.3611 to 445B.3689, inclusive;

(e) Failure to comply with any requirement for recordkeeping, monitoring, reporting or compliance certification contained in an operating permit; or

(f) Failure to pay fees as required by NAC 445B.327 or 445B.3689.

2. The written notice must specify the provision of NAC 445B.001 to 445B.3791, inclusive, the condition of the operating permit or the applicable requirement that is being violated.

3. Written notice shall be deemed to have been served if delivered to the person to whom addressed or if sent by registered or certified mail to the last known address of the person.

[Environmental Comm'n, Air Quality Reg. §§ 2.3.1 & 2.9.5-2.9.7, eff. 11-7-75; + § 13.1.8, eff. 11-7-75; A 12-15-77]—(NAC A 8-22-86; 10-22-87; 12-8-89; 12-13-93; 10-30-95; R103-02, 12-17-2002; R189-05, 5-4-2006)

**NAC 445B.277 [445.697] Stop orders.**

1. The Director shall issue a stop order if:

(a) The proposed construction, installation, alterations or establishment will not be in accordance with the provisions of the plans, specifications and other design material required to be submitted as part of the application for an operating permit and approved by the Director as a condition of the operating permit; or

(b) The design material or the construction itself is of such a nature that it patently cannot bring the stationary source into compliance with NAC 445B.001 to 445B.3791, inclusive.

2. A stop order may be issued at any time by the Director upon his determination that there has been a violation of any of the provisions of NAC 445B.001 to 445B.3791, inclusive, any applicable requirement or any condition of the operating permit.

3. A person served with a stop order:

(a) Shall immediately stop all activities specified in the stop order.

(b) May apply for its revocation at any time, setting forth the facts upon which he believes that the reasons for the issuance of the stop order no longer exist. If the Director finds that the reasons for the issuance of the stop order no longer exist, he shall withdraw the order promptly. If the Director finds that the reasons for the issuance of the stop order still exist, or that other reasons exist for continuing a stop order in effect, he shall, within 24 hours, serve a written statement of his reasons for so finding.

[Environmental Comm'n, Air Quality Reg. §§ 3.3.1-3.3.5, eff. 11-7-75]—(NAC A 10-22-87; 9-19-90; 12-13-93; 10-30-95; R189-05, 5-4-2006)

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445.694 Emission discharge information.

Emission discharge information, as correlated to mass emission rates or ambient air quality regulations related to all registration certificates and operating permits, will be maintained by the director as public information at 201 South Fall Street, Capitol Complex, Carson City, Nevada 89710..

[Environmental Comm'n, Air Quality Reg. § 3.1.9.1, eff. 11-7-75;  
A 12-4-76]

445.699 Violations: Administrative fines.

1. Any violation of a provision of NAC 445.430 to 445.846, inclusive, except NAC 445.662 and 445.721 to 445.724, inclusive, as they pertain to the internal combustion engine, is subject to an administrative fine levied by the commission or an approved local control agency of not more than \$5,000 per violation.

2. Unless otherwise provided, all violations are classified as major violations and a fine up to \$5,000 per occurrence may be levied.

3. Violations of NAC 445.734, 445.753, 445.754, 445.844 and 445.846 are classified as minor or lesser violations, unless there are four or more violations of any one of those sections by a person, occurring within a period of 12 consecutive months.

4. The schedule of fines for minor violations is as follows:

	First Offense	Second Offense	Third Offense
NAC 445.753, open burning.....	\$25	\$ 50	\$100
NAC 445.754, incinerator burning, equal to or less than 25 lbs (11 kg) per hour.....	25	50	100
greater than 25 lbs (11 kg) per hour.....	50	100	200
NAC 445.734, fugitive dust.....	50	100	200
NAC 445.846, organic solvents and other volatile compounds.....	50	100	200
NAC 445.844, odors.....	50	100	200

5. All minor violations become major violations upon the occurrence of the fourth violation within a period of 12 consecutive months.

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445.764 Reduction of employees' pay because of use of system prohibited.

If the owner or operator of a source uses a supplemental or intermittent control system, or other control system designed to vary with atmospheric conditions, for the purpose of meeting the requirements of an order issued pursuant to § 113(d) or 119 which relates to primary nonferrous smelters in the Act, he may not temporarily reduce the pay of any of his employees because of his use of that system.

[Environmental Comm'n, Air Quality Reg. § 14.1, eff. 8-17-81]