

## **CHAPTER 6 STANDARDS FOR STATIONARY SOURCES**

### **Subchapter 6 – Incinerators**

#### **Rule 6.601 – Minimum Standards**

- (1) A person may not cause or authorize to be discharged into the outdoor atmosphere from any incinerator, particulate matter in excess of 0.10 grains per standard cubic foot of dry flue gas, adjusted to twelve percent (12%) carbon dioxide and calculated as if no auxiliary fuel had been used.
- (2) A person may not cause or authorize to be discharged into the outdoor atmosphere from any incinerator emissions that exhibit an opacity of ten percent (10%) or greater averaged over six consecutive minutes.
- (3) An incinerator may not be used to burn solid or hazardous waste unless the incinerator is a multiple chamber incinerator or has a design of equal effectiveness approved by the department prior to installation or use.
- (4) The department or Control Board shall place additional requirements on the design, testing and operation of incinerators constructed after March 20, 1992. This requirement does not apply to incinerators that burn paper waste or function as a crematorium or are in compliance with Lowest Achievable Emission Rate as defined in Rule 2.101(25) for all regulated air pollutants.

#### **Rule 6.602 – Hours of Operation**

- (1) The department may, for purposes of evaluating compliance with this rule, direct that a person may not operate or authorize the operation of any incinerator at any time other than between the hours of 8:00 AM and 5:00 PM, except that incinerators that burn only gaseous materials will not be subject to this restriction.
- (2) When the operation of incinerators is prohibited by the department, the owner or operator of the incinerator shall store the solid or hazardous waste in a manner that will not create a fire hazard or arrange for the removal and disposal of the waste in a manner consistent with ARM Title 17, Chapter 50, Subchapter 5.

#### **Rule 6.603 – Performance Tests**

- (1) The provisions of this chapter apply to performance tests for determining emissions of particulate matter from incinerators. All performance tests must be conducted while the affected facility is operating at or above the maximum refuse charging rate at which such facility will be operated and the material burned must be representative of normal operation and under such other relevant conditions as the department shall specify based on representative performance of the affected facility. Test methods set forth in 40 CFR, Part 60, or equivalent methods approved by the department must be used.

#### **Rule 6.604 – Hazardous Waste Incinerators**

Effective March 20, 1992, a new permit may not be issued to incinerate hazardous wastes as listed in ARM Title 17, Chapter 54, Subchapter 3, inside the Air Stagnation Zone.

#### **Rule 6.605 – Additional Air Quality Permit Requirements**

- (1) In addition to the permitting requirements of Chapter 6, subchapter 1, an application for an air

quality permit for a solid or hazardous waste incinerator must include the following:

- (a) A human health risk assessment protocol (hereafter “protocol”) detailing the human health risk assessment procedures; and
  - (b) A human health risk assessment (hereafter “assessment”) that shows that ambient concentrations of pollutants from emissions constitute no more than a negligible risk to the public health, safety, and welfare and to the environment.
- (2) The protocol must include, at a minimum, methods used in compiling the emission inventory, ambient dispersion models and modeling procedures used, toxicity values for each pollutant, exposure pathways and assumptions, any statistical analysis applied and any other information necessary for the department to review the adequacy of the assessment.
- (3) The assessment must include, at a minimum, the following:
- (a) a list of potential emissions of all pollutants specified in the federal Clean Air Act Hazardous Air Pollutants List (as defined in section 112(b) of the FCAA) from the following sources:
    - (i) emitting unit(s) to be permitted;
    - (ii) existing incineration unit(s) at the facility;
    - (iii) new or existing emitting units solely supporting any incineration unit at the facility (such as fugitive emissions from fuel storage); and
    - (iv) existing units that partially support the incineration unit if the type or amount of any emissions under an existing permit will be changed. If an existing emitting unit, wholly or partially supporting the incineration facility, increases the types or amount of its emissions, so that a permit alteration is required, that portion of the emissions increase attributable to the support of the incineration facility must be considered in the human health risk assessment.
  - (b) a characterization of emissions and ambient concentrations of air pollutants, including hazardous air pollutants, from any existing emission source at the facility; and
  - (c) an assessment of impacts of all pollutants inventoried in (a) above, except pollutants may be excluded if the department determines that exposure from inhalation is the only appropriate pathway to consider and if:
    - (i) the potential to emit the pollutant is less than  $1.28 \times 10^{-13}$  grams per second; the source has a stack height of at least 2 meters, a stack velocity of at least 0.645 meters per second, and a stack exit temperature of at least 800°F; and the stack is at least 5 meters from the property boundary; or
    - (ii) the ambient concentrations of the pollutants (calculated using the potential to emit; enforceable limits or controls may be considered) are less than the levels specified in ARM 17.8.770 (See Tables 1 and 2 in Appendix C).
- (4) The assessment must address risks from all appropriate pathways. Incineration facilities that do not emit or emit only minute amounts of hazardous air pollutants contained in Tables 3 or 4 in Appendix C need only address impact from the inhalation exposure pathway and may use a department supplied screening model to assess human health risk.
- (5) The assessment must be performed in accordance with accepted human health risk assessment practices, or state or federal guidelines in effect when the assessment is performed, and must address impacts on sensitive populations. The human health risk must be calculated using the source’s potential to emit. Enforceable limits or controls may be considered. The department may approve alternative procedures if site-specific conditions warrant.
- (6) The department may impose additional requirements for the assessment, on a case-by-case basis, if the department reasonably determines that the type or amount of material being incinerated, the proximity to sensitive populations, short-term emissions variations, acute health impact, or the

- local topographical or ventilation conditions require a more detailed assessment to adequately define the potential public health impact. Additional requirements for the assessment may include, but are not limited to, specific emission inventory procedures for determining emissions from the incineration facility, requiring use of more sophisticated air dispersion models or modeling procedures and consideration of additional exposure pathways.
- (7) The department shall include a summary of the protocol in the permit analysis. The summary must clearly define the scope of the assessment, must describe the exposure pathways used and must specify any pollutants identified in the emission inventory that were not required to be included in the assessment. The summary must also state whether, and to what extent, the impacts of existing emissions, or the synergistic effect of combined pollutants, were considered in the final human health risk level calculated to determine compliance with the negligible risk standard. The summary must also state that environmental effects unrelated to human health were not considered in determining compliance with the negligible risk standard, but were evaluated in determining compliance with all applicable rules or requirements requiring protection of public health, safety and welfare and the environment.