

# **DEPARTMENT OF ENVIRONMENTAL CONSERVATION**

## **Standard Operating Permit Condition XI – SO<sub>2</sub> Emissions From Oil Fired Fuel Burning Equipment**

**Permit Condition for Air Quality Permits  
Adopted by Reference in 18 AAC 50.346**

**April 1, 2002**

**REVISED August 25, 2004**

# Standard Operating Permit Condition XI – SO<sub>2</sub> Emissions from Oil Fired Fuel Burning Equipment

**Emission Unit [SOURCE] or Stationary Source [FACILITY] Categories This Condition Applies to:** Any fuel burning equipment using liquid fuel.

The department will use standard permit condition XI in any operating permit unless the department determines that **emission unit [SOURCE]** or **stationary source [FACILITY]** specific conditions more adequately meet the requirements of 18 AAC 50.

**Circumstances where emission unit [SOURCE] or stationary source [FACILITY] specific conditions more adequately meet 18 AAC 50 include:**

1. if an alternate monitoring plan for sulfur emissions has been approved for the equipment under a New Source Performance Standard;
2. at a petroleum refinery;
3. if an alternative plan for sulfur emissions is approved for the equipment under a construction permit.

## **Permit Wording:**

1. **Sulfur Compound Emissions.** In accordance with 18 AAC 50.055(c), the permittee shall not cause or allow sulfur compound emissions, expressed as SO<sub>2</sub>, from <insert identification of **emission units [SOURCES]**> to exceed 500 ppm averaged over three hours.
2. **Sulfur Compound Emissions – Monitoring and Record Keeping.**
  - 2.1 The permittee shall do one of the following for each shipment of fuel:
    - a. if the fuel grade requires a sulfur content less than 0.5% by weight, keep receipts that specify fuel grade and amount; or
    - b. if the fuel grade does not require a sulfur content less than 0.5% by weight, keep receipts that specify fuel grade and amount and
      - (i) test the fuel for sulfur content; or
      - (ii) obtain test results showing the sulfur content of the fuel from the supplier or refinery; the test results must include a statement signed by the supplier or refinery of what fuel they represent.
  - 2.2 Fuel testing under condition XI.2.1 must follow an appropriate method listed in 18 AAC 50.035 or another method approved in writing by the department.

2.3 If a load of fuel contains greater than 0.75% sulfur by weight, the permittee shall calculate SO<sub>2</sub> emissions in PPM using either condition <insert cross reference to standard permit condition XII - SO<sub>2</sub> material balance calculation> or Method 19 of 40 C.F.R. 60, Appendix A-7, adopted by reference in 18 AAC 50.040(a).

**3. Sulfur Compound Emissions – Reporting.** The permittee shall report in accordance with this condition XI.3.

3.1 If SO<sub>2</sub> emissions are calculated under condition XI.2.3 to exceed 500 ppm, the permittee shall report under condition <insert cross reference to standard permit condition III - excess emissions and permit deviation reports>. When reporting under this condition XI.3.1, include the calculation under condition <insert cross reference to standard permit condition XII - SO<sub>2</sub> material balance calculation>.

3.2 The permittee shall include in the report required by condition <insert cross reference to standard permit condition VII - operating reports>

- a. a list of the fuel grades received at the **stationary source** [FACILITY] during the reporting period;
- b. for any grade with a maximum fuel sulfur greater than 0.5% sulfur, the fuel sulfur of each shipment; and
- c. for fuel with a sulfur content greater than 0.75%, the calculated SO<sub>2</sub> emissions in PPM.

**4. Sulfur Compound Emissions – North Slope – Monitoring, Record Keeping, and Reporting.** For liquid fuel from a North Slope topping plant, the permittee shall obtain from the topping plant the results of a monthly fuel sulfur analysis.

4.1 The permittee shall include in the report required by condition <insert cross reference to standard permit condition VII - operating reports> a list of the sulfur content measured for each month covered by the report.

4.2 The permittee shall report under condition <insert cross reference to standard permit condition III - excess emissions and permit deviation reports> if the sulfur content for any month exceeds 0.75%.

**The following applies to this standard permit condition:**

The department will include condition XI.4 only in the permit for a North Slope facility that receives fuel from one of the North Slope topping plants.