

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Standard Operating Permit Condition XI – SO₂ 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 – SO₂ Emissions from Oil Fired Fuel Burning Equipment

Emission Unit or Stationary Source 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 or stationary source specific conditions more adequately meet the requirements of 18 AAC 50.

Circumstances where emission unit or stationary source 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 SO₂, from <insert identification of emission units> 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 SO₂ emissions in PPM using either condition <insert cross reference to standard permit condition XII - SO₂ 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 SO₂ 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 - SO₂ 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 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 SO₂ 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.