



## Fact Sheet

# Rule for Limiting Sulfur in Fuels (40 Code of Federal Regulations Part 49 Section 130)

### Federal Air Rules for Indian Reservations in Idaho, Oregon, and Washington

**What is the FARR?** The Federal Air Rules for Indian Reservations in Idaho, Oregon, and Washington, also called the FARR, is a set of air quality regulations established under the Clean Air Act. The FARR creates rules to manage activities that cause air pollution.

The FARR applies to all residents (both tribal members and non-tribal members) and businesses located within the exterior boundaries of reservations in Idaho, Oregon, and Washington. The ownership status of land on the reservation does not affect how the rules apply.

**What will the FARR do?** The FARR will protect human health and the environment for 200,000 people on reservations in the Pacific Northwest. The FARR will also:

- Establish federal air quality rules where EPA-approved state or tribal air quality programs do not exist
- Make air quality standards on reservations consistent with standards off of reservations
- Build capacity for tribes to develop tribal air programs.

#### Fact Sheet Series

The FARR includes 16 rules that address various air quality issues:

- 49.122 Partial Delegation of Administrative Authority to a Tribe
- 49.124 Visible Emissions
- 49.125 Particulate Matter
- 49.126 Fugitive Particulate Matter
- 49.127 Woodwaste Burners
- 49.128 Particulate Matter Emissions from Wood Products Industry Sources
- 49.129 Sulfur Dioxide
- 49.130 Sulfur Content of Fuels
- 49.131 Open Burning
- 49.132 General Open Burning Permits
- 49.133 Agricultural Burning Permits
- 49.134 Forestry and Silvicultural Burning Permits
- 49.135 Emissions Detrimental to Public Health or Welfare
- 49.136 [Reserved]
- 49.137 Air Pollution Episodes
- 49.138 Registration of Air Pollution Sources and Report of Emissions
- 49.139 Rule for Non-Title V Operating Permits

### *What is the purpose of this rule?*

The Rule for Limiting Sulfur in Fuels sets limits on the amount of sulfur that is contained in fuels that are burned at stationary sources within the Indian reservation. A stationary source is any building, structure, facility, or installation that produces or could produce air pollution. These limits will control the amount of sulfur dioxide that is released to the air. Sulfur dioxide is a form of sulfur oxide. Sulfur oxides are gases that are formed when fuel that has sulfur, such as coal and oil, is burned. Sulfur dioxide dissolves in water vapor to form acid.

### *Why is this rule important?*

Sulfur dioxide can irritate the respiratory system. Children, the elderly, people with heart or lung diseases, and people who have asthma are affected most by sulfur dioxide. Sulfur dioxide also reacts with other chemicals in the air to form tiny sulfate particles. When these particles are breathed, they build up in the lungs. Difficulty breathing, respiratory disease, and premature death can result.

### *To whom does this rule apply?*

This rule is for each of the 39 Indian reservations in Idaho, Oregon, and Washington specified in the FARR. This rule applies to anyone who sells, distributes, uses, or makes available any fuel oil, coal, solid fuel, liquid fuel, or gaseous fuel within an Indian reservation.

This rule does **not** apply to fuels for mobile sources such cars, trucks, farm equipment and marine (water) vessels.

### *What are the requirements of this rule?*

This rule limits the amount of sulfur that can be contained in various types of fuel. If the fuel contains more sulfur than allowed by these limits, then the fuel cannot be used. The rule also describes the methods that can be used to show that a fuel meets the sulfur limits. Finally, the rule specifies recordkeeping requirements for different fuel types.

Limits on the amount of sulfur that can be contained in fuel oil, used oil, other liquid fuel, coal, other solid fuels, and gaseous fuels are listed below. If the fuel contains **more** than the amount of sulfur listed, then the fuel cannot be sold, distributed, used, or made available to be used.

- Distillate fuel oil, ASTM Grade 1 fuel oil: 0.3 percent sulfur by weight
- Distillate fuel oil, ASTM Grade 2 fuel oil: 0.5 percent sulfur by weight

### **What are the requirements of this rule? (continued).**

- Residual fuel oil, ASTM Grades 4, 5, or 6 fuel oil: 1.75 percent sulfur by weight
- Used oil: 2.0 percent sulfur by weight
- Any other liquid fuel not listed above: 2.0 percent sulfur by weight
- Coal: 1.0 percent sulfur by weight
- Solid fuels: 2.0 percent sulfur by weight
- Gaseous fuels: 1.1 grams sulfur per dry standard cubic meter of gaseous fuel (400 parts per million at standard conditions).

The rule specifies the procedures, also called reference methods, to be used to determine the amount of sulfur in various types of fuel. The type of fuel and the reference method are listed below:

- Fuel oil or liquid fuels: ASTM methods D2880-03, D4294-03, and D6021-96(2001)e1
- Coal: ASTM methods D3177-02, D4239-02a, and D2492-02
- Solid fuels: ASTM method E775-87(2004)
- Gaseous fuels: ASTM methods D1072-90(1999), D3246-96, D4084-94(1999), D5504-01, D4468-85(2000), D2622-03, and D6228-98(2003).

The rule also requires a person who sells, distributes, uses, or makes available fuel oil, coal, solid fuel, liquid fuel, or gaseous fuel to keep records of the amount of sulfur in the fuel. Records must be maintained for 5 years from the date the fuel was purchased. The records must be available to the EPA if requested.

Owners or residents of a single-family residence and owners or managers of a residential building do not need to keep these records if the fuel is purchased from a licensed fuel distributor. The residential building must have four or fewer apartments or housing units.

- **Recordkeeping requirements for fuel oils and liquid fuels.** The percent sulfur by weight of the fuel must be obtained from the vendor for each fuel purchase. If the vendor cannot provide this information, then a representative grab sample of each fuel purchase must be obtained and tested using the reference method described previously.

- **Recordkeeping requirements for gaseous fuels.** The sulfur content can be obtained from the vendor or the sulfur content of the fuel gas line can be monitored continuously. The monitoring method must meet Performance Specification 5, 7, 9, or 15 of Appendix B and Appendix F of 40 *Code of Federal Regulations* (CFR) Part 60. If only purchased natural gas is used, then records showing that the gas meets the definition of natural gas in 40 CFR 72.2 must be kept.
- **Recordkeeping requirements for coal and solid fuels.** The percent sulfur by weight of the fuel can be obtained from the vendor for each fuel purchase. Or, a representative grab sample for each day of operation can be obtained and tested using the reference method described previously. If the only fuel used is wood, then records showing that only wood is used must be kept. The owner or operator of a coal or solid fuel-fired air pollution source can apply for a waiver of these recordkeeping requirements or an alternative fuel sampling program can be requested.

### **When does this rule take effect?**

This rule is effective June 7, 2005. The final rule was published in the *Federal Register* on April 8, 2005 (67 FR 18074).

### **Where can the public get more information about this rule?**

The final rule is available at the EPA Region 10 FARR website [www.epa.gov/r10earth/FARR.htm](http://www.epa.gov/r10earth/FARR.htm). The FARR website provides additional background information on the rule and implementation of the FARR. The FARR Hotline is available at 1-800-424-4EPA to provide information, permit forms and respond to questions.