

## 2.4 Insignificant Activities

Insignificant activities are exempt from Title V permit fees. In addition, inclusion of detailed unit-specific information in the permit application is not required, provided there are no applicable air quality requirements. NMED's Operating Permit Program List of Insignificant Activities, dated September 29, 1995, lists categories of insignificant activities. Additionally, NMED published a list of Trivial Activities (Operating Permit Program, List of Trivial Activities, Dated January 10, 1996).

**Trivial Activities:** These specific activities, such as activities that occur strictly for maintenance of grounds or buildings, are established and approved by the Department and do not require further discussion in this operating permit application. However, any activity with applicable requirements does not qualify as a trivial activity and is discussed further in Chapter 3.

**Insignificant Activities:** Insignificant activities based on size, emissions, or production rates are exempt from fee unless there are applicable requirements. They must, however, be listed in this application. The insignificant activity exemptions that apply to LANL are described below by exemption number.

### Exemption 1(a)

Any emissions unit, operation or activity that has the potential to emit no more than one (1) ton per year of any regulated air pollutant, excluding 112(b) hazardous air pollutants, but including 112(r) flammable and toxic regulated pollutants that are not listed in Sections 500-502 of 20.2.72 NMAC. Regulated 112(r) pollutants that are listed in Sections 500-502 of 20.2.72 NMAC are insignificant if they are emitted in quantities less than the threshold (pound per hour) of that regulation.

The Laboratory has many activities and equipment that emit less than one ton per year of any pollutant. Individual pieces of equipment include approximately 40 process boilers used for personal comfort, as well as process heat and approximately 40 cooling

towers. Emissions from small boilers not used exclusively for comfort heat, ranging in size from 6.3 MMBtu/hr or less for low-NO<sub>x</sub> boilers and 2.3 MMBtu/hr or less for uncontrolled boilers are calculated from facility-wide fuel usage records. Emissions from cooling towers are estimated using AP-42, 01/95, Section 13.4, Wet Cooling Towers. In addition, LANL has hundreds of storage tanks larger than 500 gallons (and therefore do not qualify for Insignificant Activity #5) that have no applicable requirements and emit less than one ton per year.

Activities and operations that emit less than one ton per year of any pollutant include the operation of approximately thirty open burn and open detonation sites. These sites are used for research and development activities, disposal of explosive materials, and disposal of dangerous materials.

Examples of additional LANL equipment or activities that emit less than 1 ton per year of any pollutant and qualify for this exemption are listed below:

- Woodworking equipment for field use
- Degreasers with non-halogenated solvents
- Equipment cleaners
- Electroplating
- Lead melting
- Self-contained sandblasting
- Environmental Restoration field activities
- Waste reduction and treatment

In addition, this exemption covers many of LANL's R&D processes emitting 112(r) and criteria air pollutants because these activities are usually independent of each other, are not performed in identical or similar functions, have no applicable requirements, and involve very small amounts of chemicals. Some chemical uses for R&D activities qualify as trivial activities, such as calibration and maintenance of

laboratory equipment and use in bench scale laboratory equipment. Emissions from non-trivial R&D activities are calculated from facility-wide chemical purchasing records.

### **Exemption 1(b)**

Any emission unit, operation or activity that has the potential to emit no more than the lesser of either one (1) ton per year or the de minimis level of 112(b) HAPs in EPA's "Documentation of De Minimis Rates for Proposed 40 CFR Part 63, Subpart B," EPA-453/R-93-035 or de minimis levels established under subsequent rulemaking for 112(g).

R&D operations generally use very small amounts of chemicals and usually do not perform identical or similar functions. Therefore, this exemption applies to a number of LANL units/operations/activities emitting 112(b) HAPs. All non-trivial laboratory-wide chemical use is tracked and HAP emissions are estimated based on annual purchases.

### **Exemption 2**

Surface coating of equipment, including spray painting and roll coating, for sources with facility-wide total clean-up solvent and coating actual emissions of less than two (2) tons per year.

The Laboratory conducts surface coating operations for building, equipment, and road maintenance (center line striping). In addition, the Laboratory operates three paint booths used for painting newly constructed items, research or programmatic equipment, and maintenance.

Road maintenance and painting of buildings and equipment are trivial activities included under building and grounds maintenance. Additionally, paint dispensed from aerosol cans of 16 ounces or less capacity is considered a trivial activity. Neither of these activities have statutory applicable requirements. As trivial activities, without statutory

applicable requirements, these activities need not be listed in the 20.2.70 NMAC permit application.

The paint booths do not fall under the trivial activity exemptions. They are, however, covered by Exemption 2 for insignificant activities based on size or emission rate. To ensure that these booths remain under the 2 tons per year limit, paint and solvent use will be tracked, and emissions will be calculated annually.

### **Exemption 3**

Fuel burning equipment which uses gaseous fuel, has a design rate less than or equal to five (5) million BTU/hour, and is used solely for heating buildings for personal comfort or for producing hot water for personal use.

The Laboratory currently has approximately 1300 heaters and boilers burning natural gas or propane for personal comfort or to heat water for personal use. Any fuel burning equipment not exempt under this activity or Insignificant Activity #1 is included in Chapter 3. Emissions from all natural gas fired heaters and boilers are calculated using facility-wide natural gas usage data.

### **Exemption 4**

Fuel burning equipment which uses distillate oil, has a design rate less than or equal to one (1) million BTU/hour, and is used solely for heating buildings for personal comfort or for producing hot water for personal use.

The Laboratory currently has several distillate oil heaters designed for space and hot water heating that have design rates of less than one million Btu/hr.

### **Exemption 5**

Any emissions unit, operation, or activity that handles or stores a liquid with a vapor pressure less than 10 mm Hg or in quantities less than 500 gallons.

The Laboratory has several hundred tanks with capacities less than 500 gallons or that store material with vapor pressures less than 10 mm Hg. Emissions from these small tanks are so minor that LANL does not track these on an annual basis. Tanks that do not meet this exemption may qualify for Exemption 1(a). Tanks that have applicable regulatory requirements are addressed in Chapter 3.

### **Exemption 6**

Portable engines that have a design capacity or physically derated capacity less than or equal to the following:

- 200 horsepower (HP) if fueled by diesel fuel or natural gas;
- 500 HP if fueled by gasoline,
- 650 HP if fueled by JP-4 or JP-8, and
- 1,500 HP turbine if fueled by natural gas.

The Laboratory has over 100 small diesel- and gasoline-fueled portable generators. In addition, many of these generators are small enough that they are trivial activities under the category of portable generators that can be moved without the assistance of any motorized or non-motorized vehicle.

### **Exemption 7**

Emergency generators that comply with the definition of standby equipment in 20.2.71 NMAC.

In 20.2.71 NMAC, standby equipment is defined as “an emissions unit which on a temporary basis replaces equipment used in normal operation, and which either has an allowable emission rate or potential to emit for each fee pollutant that is equal to or less than the equipment replaced, or which does not operate for a period exceeding 500 hours

per calendar year.” LANL has approximately 45 standby generators, used in the event of power failures, which fall into this category. LANL tracks actual hours of operation on these units to ensure the 500 hours per year limit is not exceeded. Emissions are estimated based on hours of operation. Those generators that do not meet this definition are addressed in Chapter 3.

## **Exemption 8**

Emissions from fuel storage and dispensing equipment operated solely for company-owned, company-leased or company-rented vehicles, which have a capacity of less than 25,000 gallons.

All fuel storage and dispensing equipment at LANL results in emissions less than 1 ton per year and has been included under Exemption 1(a).