4.1 Compliance Status with Applicable Requirements

The New Mexico operating permit regulation defines "applicable requirement" at 20.2.70.7.E. NMAC. Under the Title V program, operating permits are to include identification of all applicable requirements that apply to emissions units at the permitted facility. The definition includes all relevant state and federal air quality requirements that apply to air emissions from a stationary source or facility. The major regulatory areas defined as applicable include: any requirement within the New Mexico State Implementation Plan (SIP) approved by EPA, any term or condition of an air quality construction permit, any federal National Emission Standard for Hazardous Air Pollutant (NESHAP), any federal New Source Performance Standard (NSPS), any air quality regulation adopted by the New Mexico Environmental Improvement Board (EIB), and any regulation adopted by EPA to protect stratospheric ozone under Title VI of the federal Clean Air.

The applicability of a specific regulation is typically determined by comparing the applicability criteria within the regulation with a given emissions unit's type, size of operation or equipment, the types of pollutants emitted, and/or the construction or modification date of the unit. A review of each potentially applicable requirement was conducted, and the results are described in Table 4.1-1. The table organizes air quality regulations into two categories: EIB Regulations and Federal Applicable Requirements Not Adopted in EIB Regulations. Requirements listed under EIB Regulations are enforceable by NMED and are also federally enforceable if approved by EPA as part of the New Mexico State Implementation Plan (SIP). Requirements listed under the second heading of Federal Applicable Requirements Not Adopted in EIB Regulations are enforceable by EPA and also must be included in Title V permits whether adopted by the EIB or not. Within the table, "N/A" means the regulation has been determined to not be an applicable requirement at LANL for Title V operating permit purposes.

Table 4.1-1. Review of Applicable Requirements by Regulation

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
EIB Regulations			
20.2.1 NMAC General Provisions	All	All	N/A -This regulation contains provisions that generally apply to all NMACs, but does not contain a requirement for an emissions unit at LANL.
20.2.2 NMAC Definitions	All	All	N/A - Applicable to other EIB regulations, but does not contain a requirement for an emissions unit at LANL - see applicability of those regulations.
20.2.3 NMAC Ambient Air Quality Standards	Pollutants with NM Ambient Air Quality Standards	All	N/A - 20.2.3 NMAC sets ambient air quality standards for most of New Mexico (NMAAQS). The NMAAQS are utilized by NMED in setting allowable emission limits in the construction permit program. The NMAAQS do not apply to emissions units at Part 70 sources.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
20.2.5 NMAC Source Surveillance	All	All	N/A – 20.2.5 NMAC requires sources, upon notification by NMED, to maintain records and report on emissions of applicable sources. LANL has not received such notification; therefore, this regulation will not be specifically addressed under this application. In addition, the regulation does not specify requirements for an emissions unit at LANL.
20.2.7 NMAC Excess Emissions during Malfunction, Startup, Shutdown, or Scheduled Maintenance	All	All	Applicable - This regulation defines compliance with emission limits in emission regulations and construction permit conditions and notification procedures for conditions creating excess emissions. It applies where an emission limit for a source is established in an EIB emission regulation or construction permit condition.
20.2.8 NMAC Emissions Leaving New Mexico	All Emissions Leaving New Mexico	All	N/A – The regulation does not contain requirements for individual emissions units at LANL. In addition, LANL emissions do not contribute to the exceedance of standards and regulations in adjacent states.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
20.2.10 NMAC Woodwaste Burners	Opacity	Woodwaste Burners	N/A – LANL does not operate a woodwaste burner.
20.2.11 NMAC Asphalt Process Equipment	Particulate Matter (PM)	Asphalt Plant	Applicable - The regulation applies to the Barber-Greene and BDM Engineering asphalt plants.
20.2.12 NMAC Cement Kilns	PM	Cement Kilns	N/A – LANL does not operate a cement kiln.
20.2.13 NMAC Gypsum Processing Plants	PM	Gypsum Plants	N/A – LANL does not operate a gypsum plant.
20.2.14 NMAC Particulate Emissions from Coal Burning Equipment	PM	Coal Burning Equipment	N/A – LANL does not operate coal burning equipment.
20.2.15 NMAC Pumice, Mica, Perlite Process Equipment	PM	Pumice, Mica, Perlite Equipment	N/A – LANL does not operate pumice, mica, or perlite processing equipment.
20.2.16 and 17 NMAC[1] Nonferrous Smelters - PM	PM	Nonferrous Smelters	N/A – LANL does not operate a nonferrous smelter.
20.2.18 NMAC Oil Burning Equipment - PM	PM	Oil Burning Equipment $\geq$ 250 MMBTU/Unit	N/A - The maximum capacity of LANL's largest boilers at TA-3-22 is 210 MMBTU/hr.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
20.2.19 NMAC Potash, Salt, or Sodium Sulfate Processing Equipment	PM	Potash, Salt Process Equipment	N/A – LANL does not operate potash, salt or sodium sulfate processing equipment.
20.2.20 NMAC Lime Manufacturing Plants - PM	PM	Lime Manufacturing	N/A – LANL does not operate a lime manufacturing plant.
20.2.21 NMAC Fugitive PM Emissions from Nonferrous Smelters	PM	Nonferrous Smelters	N/A – LANL does not operate a nonferrous smelter.
20.2.22 NMAC Fugitive PM Emissions from Roads within the Town of Hurley	PM	Roads - Town of Hurley	N/A – LANL is not within the Town of Hurley.
20.2.30 NMAC Kraft Mills	Total Reduced Sulfur	Kraft Mills	N/A – LANL does not operate a kraft mill.
20.2.31 NMAC Coal Burning Equipment - Sulfur Dioxide (SO_2)	SO_2	Coal Burning Equipment	N/A – LANL does not operate coal burning equipment.
20.2.32 NMAC Coal Burning Equipment - Nitrogen Dioxide (NO_2)	NO_2	Coal Burning Equipment	N/A – LANL does not operate coal burning equipment.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
20.2.33 NMAC Gas Burning Equipment -NO_2	NO_2	Gas Burning Equipment - Heat Inputs >1,000,000 MMBTU/unit	Applicable - LANL's three TA-3 boilers have a rated heat capacity greater than 1,000,000 MMBTU/year.
20.2.34 NMAC Oil Burning Equipment - NO_2	NO_2	Oil Burning Equipment - Heat Input >1,000,000 MMBTU/year/unit	Applicable - LANL's three TA-3 boilers have a rated heat capacity greater than 1,000,000 MMBTU/year.
20.2.35 NMAC Natural Gas Processing Plant - Sulfur	Sulfur	Natural Gas Processing Plants	N/A – LANL does not operate a natural gas processing plant.
20.2.36 NMAC[1] Petroleum Refinery - Sulfur	Sulfur	Petroleum Processing Facilities	N/A – LANL does not operate a petroleum refinery.
20.2.37 NMAC[1] Petroleum Processing Facilities	Ammonia, Carbon Monoxide (CO), Hydrocarbons, Hydrogen Sulfide (H_2S), Mercaptans, PM	Petroleum Processing Facilities	N/A - LANL does not operate a petroleum processing facility.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
20.2.38 NMAC[1] Hydrocarbon Storage Facilities	Hydrocarbons Containing H_2S	Tank Batteries and Hydrocarbon Storage Facilities Operated in Conjunction with Petroleum Production Facilities	N/A – LANL does not operate tank batteries or hydrocarbon storage facilities operated in conjunction with petroleum production facilities.
20.2.39 NMAC[1] Sulfur Recovery Plant - Sulfur	Sulfur	Sulfur Recovery Plants	N/A – LANL does not operate a sulfur recovery plant.
20.2.40 NMAC Sulfuric Acid Production Units - SO_2/Acid Mist/Visible Emissions	SO_2, Acid Mist, and Visible Emissions	Sulfuric Acid Production Units	N/A – LANL does not operate a sulfuric acid production unit.
20.2.41 NMAC Nonferrous Smelters - Sulfur	Sulfur	Nonferrous Smelters	N/A – LANL does not operate a nonferrous smelter.
20.2.42 NMAC[1] Coal Mining and Preparation Plants - PM	PM	Coal Mining and Preparation Plants	N/A – LANL does not operate a coal mining and preparation plant.
20.2.43[1] Gasification Plants	Various	Gasification Plants	N/A – LANL does not operate a gasification plant.
20.2.60 NMAC Open Burning	None	Open Burning	Applicable - LANL conducts open burning. LANL obtained open burn permits for those activities.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
20.2.61 NMAC Smoke and Visible Emissions	Smoke and Visible Emissions	Stationary Combustion Equipment; Diesel-Powered Vehicles; Diesel Powered Locomotives; Air Curtain Destructors	Applicable – LANL has stationary combustion sources not subject to Parts 10 through 18, 37, and 42 or any other part that specifically limits particulate emissions, and diesel-powered vehicles.
20.2.62 NMAC[1] Municipal Waste Combustion	Listed in regulation	Municipal Waste Incinerators	N/A – LANL does not operate a municipal waste combustion unit.
20.2.63 NMAC[1] Biomedical Waste Combustion	Listed in regulation	Biomedical Waste Incinerators	N/A – LANL does not operate a biomedical waste combustion unit.
20.2.64 NMAC Municipal Solid Waste Landfills	Nonmethane organic compounds	Municipal Landfill	N/A –LANL does not operate a municipal landfill.
20.2.70 NMAC Operating Permits	Criteria Pollutants, Section 112(b)HAPs, Section 112(r) regulated substances, NSPS/NESHAP-Regulated Pollutants, Title VI Class I/II substances	All Emission Units at Major Stationary Sources	Applicable – This application fulfills the requirements of 20.2.70.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
20.2.71 NMAC Operating Permit Emission Fees	All fee pollutants specified	All Emissions Units at Stationary Sources, except those considered "Insignificant Activities" or otherwise exempted.	Applicable – LANL has submitted operating permit fees for the past several years and will continue to pay fees based on the emission levels permitted. Fees are described in Chapter 2 of this application.
20.2.72 NMAC Construction Permits	All	New and Modified Sources with a potential emission rate greater than 10 lb/hr or 25 tpy of any air pollutant for which there is a NAAQS or NMAAQS, or 5 tpy of lead	Applicable – Construction permit applications, permit revisions, and permit exemption notifications have been submitted when required. Conditions in permits issued under 20.2.72 NMAC are applicable requirements.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
20.2.73 NMAC Notice of Intent and Emissions Inventory Requirements	All pollutants for which there is a NAAQS or NMAAQS	Notice of Intent for New and Modified Sources with a potential emission rate greater than 10 tpy of any pollutant for which there is a NAAQS or NMAAQS, or 1 tpy of lead Emission Inventory Requirements	Applicable - LANL must notify NMED of any new or modified source of regulated air contaminant with an emission rate greater than 10 tons per year of any regulated air contaminant or 1 ton per year of lead. LANL has been required to supply such notifications and will continue to do so as applicable. Applicable – LANL provides annual emissions information to NMED as required.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
20.2.74 NMAC Permits - Prevention of Significant Deterioration	All	Stationary Sources with a potential to emit greater than 250 tpy (or 100 tpy if a listed source)	Applicable - LANL has neither constructed nor modified a source with emissions greater than the significance levels listed in this regulation. There are no existing PSD permit conditions that are applicable requirements. LANL is applying for federally enforceable emission and operational limitations as part of this application to limit the Laboratory's potential to emit below 250 tons per year or 100 tons per year where necessary of any regulated air pollutant. When those conditions become effective, LANL will not be a “major source” subject to this regulation.
20.2.75 NMAC Construction Permit Fees	All	All	Applicable - Identifies fees to be paid for applications to construct or modify. LANL pays these fees on construction permits when required.
20.2.77 NMAC **Incorporating Federal New Source Performance Standards (NSPS) 40 CFR Part 60 By Reference**			

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart A - General Provisions	All NSPS Pollutants	General New Source Performance Standard Requirements	Applicable - This regulation affects sources subject to NSPS, unless otherwise exempted by the specific NSPS rule applicable to a source. LANL has sources regulated under four NSPS subparts: Dc, I, Kb, and CCCC.
Subpart B - Adoption and Submittal of State Plans for Designated Facilities	All NSPS Pollutants	All Facilities Affected by an NSPS	N/A - This regulation sets requirements for states, not individual facilities.
Subpart Cb - Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors Constructed on or before September 20, 1994	Metals, Organics, Acid Gases, Sulfuric Acid Mist, NO_x	Municipal Waste Combustors	N/A – LANL does not operate a large municipal waste combustor.
Subpart Cc – Emissions Guidelines and Compliance Times for Municipal Solid Waste Landfills	Metals, Organics, Acid Gases, Sulfuric Acid Mist, NO_x	Municipal Solid Waste Landfills	N/A – LANL does not operate a municipal solid waste landfill.
Subpart Cd – Emissions Guidelines and Compliance Times for Sulfuric Acid Production Units	SO_2 Sulfuric Acid Mist	Sulfuric Acid Production Units	NA – LANL does not operate a sulfuric acid production unit.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart Ce – Emission Guidelines and Compliance Times for Hospital/Medical/Infectious Waste Incinerators	PM CO Dioxins/furans Hydrogen chloride Sulfur dioxide Nitrogen oxides Lead Cadmium Mercury	Hospital/Medical/ Infectious Waste Incinerators	N/A – LANL does not operate a hospital/medical/infectious waste incinerator.
Subpart D - NSPS for Fossil-Fuel-Fired Steam Generators for which Construction is Commenced after August 17, 1971	PM SO_2 NO_x	Fossil-Fuel-Fired Steam Generators >250 MMBTU/hr	N/A - LANL does not operate a steam generator-greater than 250 MMBTU/hr.
Subpart Da - NSPS for Electric Utility Steam Generating Units for which Construction is Commenced after September 18, 1978	PM SO_2 NO_x	Electric Utility Steam Generating Unit >250 MMBTU/hr Constructed/Modified after September 18, 1978	N/A - The steam generating units at TA-3-22 were constructed prior to September 18, 1978 and are smaller than 250 MMBTU/hr.
Subpart Db - NSPS for Industrial-Commercial-Institutional Steam Generating Units	PM SO_2	Steam Generating Units Constructed/Modified after June 9, 1989 with a Heat Input of >100 MMBTU/hr	N/A -The boiler units with capacities greater than 100 MMBTU/hr are located at the TA-3 steam plant, but were constructed in 1950-1952.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart Dc - NSPS for Small Industrial-Commercial-Institutional Steam Generating Units	PM SO_2	Steam Generating Units Constructed or Modified after June 9, 1989 with Heat Capacity <100 MMBTU/hr and >10 MMBTU/hr	Applicable - LANL has two boilers at TA-55 with a rated capacity between 10 MMBTU/HR and 100 MMBTU/HR that were constructed after 1989.
Subpart E - NSPS for Incinerators	PM	Incinerators >50 tons/day charging rate	N/A – LANL does not operate an incinerator. A previously permitted incinerator (TA-16-1409) was dismantled and shipped off-site in August 2000.
Subpart Ea - NSPS for Municipal Waste Combustors	Metals Organics Acid Gases NO_x	Municipal Waste Combustors constructed or modified after December 20, 1989 and before September 20, 1994	N/A – LANL does not operate a municipal waste combustor.
Subpart Eb – NSPS for Large Municipal Waste Combustors for which construction commenced after September 20, 1994	Metals Organics Acid Gases NOx PM	Municipal Waste Combustors constructed after September 20, 1994 or modified after June 19, 1996	N/A – LANL does not operate a municipal waste combustor.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart Ec – NSPS for Hospital/Medical/Infectious Waste Incinerators for which construction is commenced after June 20, 1996	Metals Organics Acid Gases NOx	Hospital/Medical/Infectious Waste Incinerators constructed after June 20, 1996	N/A – LANL does not operate a hospital/medical/infectious waste incinerator.
Subpart F - NSPS for Portland Cement Plants	PM	Portland Cement Plants	N/A—LANL does not operate a Portland cement plant.
Subpart G - NSPS for Nitric Acid Plants	NO_x	Nitric Acid Plants and Production Units	N/A – LANL does not operate a nitric acid plant or production unit.
Subpart H - NSPS for Sulfuric Acid Plants	SO_2 Sulfuric Acid Mist	Sulfuric Acid Plants and Production Units	N/A – LANL does not operate a sulfuric acid plant or production unit.
Subpart I - NSPS for Hot Mix Asphalt Facilities	PM	Hot Mix Asphalt Facilities constructed or modified after June 11, 1973	Applicable – Subpart I applies to the BDM Engineering asphalt plant. Subpart I does not apply to LANL's existing asphalt plant which was constructed in 1960; the pollution control equipment was installed in 1962.
Subpart J - NSPS for Petroleum Refineries	PM CO	Petroleum Refineries	N/A – LANL does not operate a petroleum refinery.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart K - NSPS for Storage Vessels for Petroleum Liquids	Volatile Organic Compounds (VOCs)	Storage vessels (>40,000 gal) for petroleum liquids for which construction or modification commenced after June 11, 1973 and prior to May 19, 1978	N/A - LANL tanks of this size are exempt because they were either built before the effective date of this regulation or store exempt materials.
Subpart Ka - NSPS for Storage Vessels for Petroleum Liquids	VOCs	Storage vessels (>40,000 gal) for petroleum liquids for which construction or modification commenced after May 18, 1978, and prior to July 23, 1984	N/A - LANL tanks of this size are exempt because they were either built before the effective date of this regulation or store exempt materials.
Subpart Kb - NSPS for Volatile Organic Liquid Storage Vessels	VOCs	Storage vessels (>40 cubic meters) for volatile organic liquids for which construction or modification commenced after July 23, 1984	Applicable - However, the regulation only requires the Laboratory to keep records of the tank dimensions and capacities.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart L - NSPS for Secondary Lead Smelters	PM	Secondary lead smelters >250 Kg (550 lb) charging capacity	N/A – LANL does not operate a secondary lead smelter
Subpart M - NSPS for Secondary Brass and Bronze Production Plants	PM	Secondary brass and bronze Plants >1000 kg (2205 lb) production capacity	N/A – LANL does not operate a secondary brass or bronze production plant.
Subpart N - NSPS for Primary Emissions from Basic Oxygen Process Furnaces	PM	Basic Oxygen Process Furnace Constructed after June 11, 1973	N/A – LANL does not operate a basic oxygen process furnace.
Subpart Na - NSPS for Secondary Emissions from Basic Oxygen Steelmaking Facilities	PM	Steelmaking Facilities with Basic Oxygen Process Furnace Constructed after January 20, 1983	N/A – LANL does not operate a steelmaking facility.
Subpart O - NSPS for Sewage Treatment Plants	PM	Incinerators Used to Treat Municipal Sewage	N/A – LANL does not operate an incinerator used to treat municipal sewage.
Subpart P - NSPS for Primary Copper Smelters	PM SO_2	Primary Copper Smelters	N/A – LANL does not operate a primary copper smelter.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart Q - NSPS for Primary Zinc Smelters	PM SO_2	Primary Zinc Smelters	N/A – LANL does not operate a primary zinc smelter.
Subpart R - NSPS for Primary Lead Smelters	PM SO_2	Primary Lead Smelters	N/A – LANL does not operate a primary lead smelter.
Subpart S - NSPS for Primary Aluminum Reduction Plants	Fluorides	Aluminum Reduction Plants	N/A – LANL does not operate an aluminum reduction plant.
Subpart T - NSPS for the Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	Fluorides	Phosphate Fertilizer Industry - Wet Process Phosphoric Acid Plants	N/A – LANL does not operate a wet process phosphoric acid plant.
Subpart U - NSPS for the Phosphate Fertilizer Industry: Superphosphoric Acid Plants	Fluorides	Phosphate Fertilizer Industry - Superphosphoric Acid Plants	N/A – LANL does not operate a superphosphoric acid plant.
Subpart V - NSPS for the Phosphate Fertilizer Industry: Diammonium Phosphate Plants	Fluorides	Phosphate Fertilizer Industry - Diammonium Phosphate Plants	N/A – LANL does not operate a diammonium phosphate plant.
Subpart W - NSPS for the Phosphate Fertilizer Industry: Triple Superphosphate Plants	Fluorides	Phosphate Fertilizer Industry - Triple Superphosphoric Acid Plants	N/A – LANL does not operate a triple superphosphoric acid plant.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart X - NSPS for the Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	Fluorides	Phosphate Fertilizer Industry - Triple Superphosphoric Storage Facilities	N/A – LANL does not operate a triple superphosphoric storage facility.
Subpart Y - NSPS for Coal Preparation Plants	PM	Coal Preparation Plants	N/A – LANL does not operate a coal preparation plant.
Subpart Z - NSPS for Ferroalloy Production Facilities	PM	Ferroalloy Production Facilities	N/A – LANL does not operate a ferroalloy production facility.
Subpart AA - NSPS for Electric Arc Furnaces	PM	Steel Plants - Electric Arc Furnaces	N/A – LANL does not operate a steel plant.
Subpart AAa - NSPS for Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels	PM	Steel Plants - Electric Arc Furnaces and Argon-oxygen Decarburization Vessels	N/A -- LANL does not operate a steel plant.
Subpart BB - NSPS for Kraft Pulp Mills	PM Sulfur	Kraft Pulp Mills	N/A – LANL does not operate a kraft pulp mill.
Subpart CC - NSPS for Glass Manufacturing Plants	PM	Glass Manufacturing Plants > 4550 kg/day Production	N/A – LANL does not operate a glass manufacturing plant.
Subpart DD - NSPS for Grain Elevators	PM	Grain Elevators	N/A – LANL does not operate a grain elevator.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart EE - NSPS for Surface Coating of Metal Furniture	VOCs	Organic Surface Coating of Metal Furniture Constructed/Modified after November 28, 1980	N/A - LANL has 2 existing paint booths. Metal furniture is occasionally painted in the paint booths at TA-3-38. This facility was constructed prior to the applicability date of this regulation. The TA-60 paint booth was constructed in 1986, but no furniture painting takes place in that facility.
Subpart GG - NSPS for Stationary Gas Turbines	NO_x SO_2	Stationary Gas Turbines with Heat Input > 10 gigajoules/hour	N/A - LANL does not operate any stationary gas turbines. LANL has only steam turbines.
Subpart HH - NSPS for Lime Manufacturing Plants	PM	Lime Manufacturing Plants	N/A – LANL does not operate a lime manufacturing plant.
Subpart KK - NSPS for Lead-Acid Battery Manufacturing Plants	Lead	Lead-Acid Battery Manufacturing Plants	N/A – LANL does not operate a lead-acid battery manufacturing plant.
Subpart LL - NSPS for Metallic Mineral Processing Plants	PM	Metallic Mineral Processing Plants	N/A – LANL does not operate any metallic mineral processing plants.
Subpart MM - NSPS for Automobile and Light-Duty Truck Surface Coating Operations	VOCs	Auto and Light Truck Assembly Plants	N/A – LANL does not operate any auto or light truck assembly plants.
Subpart NN - NSPS for Phosphate Rock Plants	PM	Phosphate Rock Plants	N/A – LANL does not operate any phosphate rock plants.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart PP - NSPS for Ammonium Sulfate Manufacture	PM	Ammonium Sulfate Manufacturing	N/A – LANL does not operate any ammonium sulfate manufacturing operations.
Subpart QQ - NSPS for Graphics Art Industry: Publication Rotogravure Printing	VOCs	Graphics Arts Industry - Publication Rotogravure Printing	N/A – LANL does not operate any publication rotogravure printing operations.
Subpart RR - NSPS for Pressure Sensitive Tape and Label Surface Coating Operations	VOCs	Pressure Sensitive Tape and Label Manufacturing	N/A – LANL does not operate any pressure sensitive tape or label manufacturing operations.
Subpart SS - NSPS for Industrial Surface Coating - Large Appliances	VOCs	Large Appliance Surface Coating Lines	N/A – LANL does not operate any large appliance surface coating operations.
Subpart TT - NSPS for Metal Coil Surface Coating	VOCs	Metal Coil Surface Coating	N/A – LANL does not operate any metal coil surface coating operations.
Subpart UU - NSPS for Asphalt Processing and Asphalt Roofing Manufacture	PM	Asphalt Processing and Asphalt Roofing Manufacturing and Petroleum Refineries	N/A -LANL does not operate any asphalt processing or asphalt roofing manufacturing operations. Note that here asphalt processing plant means a plant that blows asphalt for use in the manufacture of asphalt products.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart VV - NSPS for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry [SOCMI]	VOCs	SOCMI Facilities	N/A – LANL does not operate any synthetic organic chemical manufacturing operations.
Subpart WW - NSPS for the Beverage Can Surface Coating Industry	VOCs	Beverage Can Surface Coating Lines	N/A – LANL does not operate any beverage can surface coating operations.
Subpart XX - NSPS for Bulk Gasoline Terminals	VOCs	Loading Racks at Bulk Gasoline Terminals Constructed or Modified after December 17, 1980	N/A – LANL does not operate any bulk gasoline terminals. While LANL has gasoline storage tanks, it is not a bulk gasoline terminal, which must receive gasoline by pipeline, barge, or ship and transfer fuel to tank trucks. LANL receives gasoline by truck and transfers it to Laboratory-owned vehicles.
Subpart BBB - NSPS for the Rubber Tire Manufacturing Industry	VOCs	Rubber Tire Manufacturers	N/A – LANL does not operate a rubber tire manufacturing operation.
Subpart DDD - NSPS for VOC Emissions from the Polymer Manufacturing Industry	VOCs	Manufacturers of Polymers	N/A – LANL does not operate a polymer manufacturing operation.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart FFF - NSPS for Flexible Vinyl and Urethane Coating and Printing	VOCs	Rotogravure Printing Lines	N/A – LANL does not operate a flexible vinyl or urethane coating or printing operation.
Subpart GGG - NSPS for Equipment Leaks of VOC in Petroleum Refineries	VOCs	Equipment Leaks in Petroleum Refineries	N/A – LANL does not operate a petroleum refinery.
Subpart HHH - NSPS for Synthetic Fiber Production Facilities	VOCs	Solvent-spun Synthetic Fiber Process > 500 mg Fiber Capacity per year	N/A – LANL does not operate a synthetic fiber production facility.
Subpart III - NSPS for VOC Emissions from the SOCMI Air Oxidation Unit Processes	VOCs	SOCMI Air Oxidation Units	N/A – LANL does not operate a SOCMI air oxidation unit.
Subpart JJJ - NSPS for Petroleum Dry Cleaners	VOCs	Petroleum Dry Cleaners	N/A – LANL does not operate a petroleum dry cleaning operation.
Subpart KKK - NSPS for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants	VOCs	Equipment Leaks from Onshore Natural Gas Processing Plants	N/A – LANL does not operate an onshore natural gas processing facility.
Subpart LLL - NSPS for Onshore Natural Gas Processing: SO_2 Emissions	SO_2	Onshore Natural Gas Processing	N/A – LANL does not operate an onshore natural gas processing facility.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart NNN - NSPS for VOC Emissions from SOCMI Distillation Operations	VOCs	SOCMI Distillation Operations	N/A – LANL does not operate a SOCMI distillation operation.
Subpart OOO - NSPS for Nonmetallic Mineral Processing Plants	PM	Nonmetallic Mineral Processing Plants	N/A – LANL does not operate a nonmetallic mineral processing plant.
Subpart PPP - NSPS for Wool Fiberglass Insulation Manufacturing Plants	PM	Rotary Spin Wool Fiberglass Insulation Manufacturing Lines	N/A – LANL does not operate a wool fiberglass insulation manufacturing plant.
Subpart QQQ - NSPS for VOC Emissions from Petroleum Refinery Wastewater Systems	VOCs	Petroleum Refinery Wastewater Systems	N/A – LANL does not operate a petroleum refinery.
Subpart RRR - NSPS for VOC Emissions from SOCMI Reactor Processes	VOCs	Reactor and Recovery Processes in the SOCMI Industry	N/A – LANL does not operate a SOCMI manufacturing operation.
Subpart SSS - NSPS for Magnetic Tape Coating Facilities	VOCs	Magnetic Tape Manufacturing Facilities	N/A – LANL does not operate a magnetic tape manufacturing facility.
Subpart TTT - NSPS for Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	VOCs	Spray Booths used in Business Machines Manufacturing	N/A – LANL does not operate a spray booth used in business machines manufacturing.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart UUU - NSPS for Calciners and Dryers in Mineral Industries	PM	Calciners and Dryers at Mineral Processing Plants	N/A – LANL does not operate a mineral processing plant.
Subpart VVV - NSPS for Polymeric Coating of Supporting Substrates Facilities	VOCs	Elastomer/ Polymer/ Prepolymer Web Coating Processes	N/A – LANL does not operate a polymer coating of supporting substrates facility.
Subpart WWW-NSPS for Municipal Solid Waste Landfills	Non-Methane Organic Compounds	Municipal Solid Waste Landfills	N/A – LANL does not operate a municipal waste landfill.
Subpart AAAA – NSPS for Small Municipal Waste Combustion Units	Dioxins/furans Cadmium Lead Mercury Particulate matter Hydrogen chloride Nitrogen oxides Sulfur dioxide Carbon monoxide Fugitive ash	Small Municipal Waste Combustion Units (>35 tons/day and <250 tons/day)	N/A – LANL does not operate a small municipal waste combustion unit.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart BBBB – Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units	Dioxins/furans Cadmium Lead Mercury Particulate matter Hydrogen chloride Nitrogen oxides Sulfur dioxide Carbon monoxide Fugitive ash	Applies to State Air Quality Program Offices	N/A – The regulation only applies to state air quality program offices.
Subpart CCCC – NSPS for Commercial and Industrial Solid Waste Incineration Units	Opacity	Commercial and Industrial Solid Waste Incinerators	Applicable – LANL operates air curtain incinerators for burning wood and yard wastes. These units are only subject to the opacity limits and reporting and recordkeeping requirements of this rule (Sections §60.2245 to 60.2260.).
Subpart DDDD – Emission Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units	Cadmium Carbon monoxide Dioxins/furans Hydrogen chloride Lead Mercury Opacity Nitrogen oxides Particulate matter Sulfur dioxide	Applies to State Air Quality Program Offices	N/A– The regulation only applies to state air quality program offices.
20.2.78 NMAC **Incorporating By Reference 40 CFR Part 61, National Emissions Standards for Hazardous Air Pollutants (NESHAP)**			

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart A - NESHAP - General Provisions	All NESHAP-regulated pollutants	Various	Applicable – LANL's beryllium machining operations are subject to 40 CFR 61, Subpart C. The provisions of Subpart A are also incorporated into the construction permits for those operations. Because the requirements of Subpart A are incorporated into these other subparts, it will not be separately addressed in this application.
Subpart C - NESHAP for Beryllium	Beryllium	Extraction Plants Ceramic Plants Foundries Incinerators Propellant Plants Machine Shops	Applicable – LANL's beryllium machining operations are subject to Subpart C.
Subpart D - NESHAP for Beryllium Rocket Motor Firing	Beryllium	Rocket Motor Firing	N/A – LANL does not operate a rocket motor firing operation.
Subpart E - NESHAP for Mercury	Mercury	Mercury ore processors and mercury chlor-alkali cells which produce chlorine gas and incinerate or dry wastewater plant sludge	N/A – LANL does not operate a mercury ore processing operation or a mercury chlor-alkali cell.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart F - NESHAP for Vinyl Chloride	Vinyl Chloride	Vinyl chloride and ethylene dichloride manufacturing facilities	N/A – LANL does not operate any vinyl chloride or ethylene dichloride manufacturing operations.
Subpart J - NESHAP for Equipment Leaks of Benzene	Benzene	Equipment leaks from equipment used to process benzene from plants that produce or use >1000 megagrams of benzene per year	N/A – LANL does not operate any sources intended to operate in benzene service.
Subpart L - NESHAP for Benzene Emissions from Coke By-Product Recovery Plants	Benzene	Coke by-product recovery plants	N/A – LANL does not operate a coke by-product recovery facility.
Subpart M -NESHAP for Asbestos	Asbestos	Asbestos mills, asbestos manufacturing, demolition and renovation, spraying, fabrication	Applicable - LANL participates in demolition and renovation activities involving asbestos.
Subpart N - NESHAP for Inorganic Arsenic Emissions from Glass Manufacturing Plants	Inorganic Arsenic	Glass Manufacturing Plants	N/A – LANL does not operate a glass manufacturing plant.
Subpart O - NESHAP for Inorganic Arsenic Emissions from Primary Copper Smelters	Inorganic Arsenic	Primary Copper Smelters	N/A – LANL does not operate a primary copper smelter.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart P - NESHAP for Inorganic Arsenic Emissions from Arsenic Trioxide and Metallic Arsenic Production Facilities	Inorganic Arsenic	Arsenic Production Facilities	N/A – LANL does not operate an arsenic production facility.
Subpart V - NESHAP for Equipment Leaks	Benzene Vinyl Chloride	Equipment in Volatile Hazardous Air Pollutant Service	N/A – LANL does not operate any sources intended to operate in volatile hazardous air pollutant service.
Subpart Y - NESHAP for Benzene Emissions from Benzene Storage Vessels	Benzene	Benzene Storage Vessels >10,000 gallons	N/A – LANL does not operate a benzene storage vessel.
Subpart BB - NESHAP from Benzene Emissions from Benzene Transfer Operations)	Benzene	Benzene Loading Racks at Benzene Production Facilities and Bulk Terminals	N/A – LANL does not operate a benzene transfer operation.
Subpart FF - NESHAP for Benzene Waste Operations	Benzene	Chemical Manufacturing Coke Byproduct Petroleum Refineries	N/A – LANL does not operate a benzene waste operation.
20.2.79 NMAC Permits - Nonattainment Areas	All	Sources in Nonattainment Areas	N/A - The regulation does not specify requirements for individual emissions units at LANL. LANL is located in an attainment area for all criteria pollutants.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
20.2.80 NMAC Stack Heights	All	Sources Applying for Construction Permits under Parts 72, 74 or 79	N/A - The regulation does not specify requirements for individual emissions units at LANL.
20.2.82 NMAC Incorporating By Reference 40 CFR Part 63, Maximum Achievable Control Technology (MACT) Standards			
Subpart A - General Provisions	112(b) HAPs	All Categories with Standards Regulated under 40 CFR 63	Applicable - However, this subpart applies only if specific source categories have had standards promulgated. Therefore, the Subpart A requirements are addressed under other subparts setting standards applicable to Laboratory sources. Subpart A is not separately covered in this application.
Subpart B - Requirements for Control Technology Determinations	112(b) HAPs	Major Sources of HAPs	N/A - LANL is not a major source of HAPs.
Subpart D - Regulations Governing Compliance Extensions for Early Reduction of HAPs	112(b) HAPs	A voluntary program for all sources subject to MACT wishing to obtain a compliance extension	N/A - LANL is not a major source of HAPs.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart E - Approval of State Program and Delegation of Federal Authorities	112(b) HAPs	All sources affected under Section 112	N/A - This section establishes procedures for approval of state rules and programs to implement Section 112 requirements.
Subpart F - National Emission Standards of Organic Hazardous Air Pollutants from the SOCMI	Organic HAPs	Chemical Manufacturing Process Units	N/A - LANL does not operate any synthetic organic chemical manufacturing operations.
Subpart G - National Emission Standards for Organic Hazardous Air Pollutants from SOCMI Process Vents, Storage Vessels, Transfer Operations, and Wastewater	Organic HAPs	Process Vents, Storage Vessels, Transfer Racks, and Wastewater Steams within a source subject to 40 CFR 63 Subpart F	N/A - LANL does not operate any synthetic organic chemical manufacturing operations.
Subpart H - NESHAP for Organic Hazardous Air Pollutants for Equipment Leaks	Organic HAPs	Pumps, Compressors, Agitators, etc., in Organic HAP Service >300 hours/year	N/A – The regulation only applies to a facility that is subject to another subpart of 40 CFR Part 63, and which references this subpart.
Subpart I - NESHAP for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks	112(b) HAPs	Equipment Leaks at Specified SOCMI Sources	N/A - LANL does not operate any synthetic organic chemical manufacturing operations.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart L - NESHAP for Coke Oven Batteries	112(b) HAPs	Coke Ovens	N/A – LANL does not operate a coke oven battery.
Subpart M - NESHAP for Perchloroethylene for Dry Cleaning Facilities	Perchloroethylene	Dry Cleaners	N/A – LANL does not operate a dry cleaning facility.
Subpart N -Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks	Chromium	Chromium Electroplating and Anodizing Tanks	N/A - LANL chromium electroplating operations are used for research and development purposes only. These activities are specifically exempt under 40 CFR 63.340(d).
Subpart O -Ethylene Oxide Emissions Standards for Sterilization Facilities	Ethylene Oxide	Sterilization Facilities	N/A – LANL does not operate an ethylene oxide sterilization facility.
Subpart Q -NESHAP for Industrial Process Cooling Towers	Chromium	Cooling Towers	N/A - LANL does not use chromium-based chemicals to treat its cooling tower water.
Subpart R - NESHAP for Gasoline Distribution Facilities	112(b) HAPs	Bulk Gasoline Terminals Terminals Pipeline Breakout Stations	N/A – LANL does not operate a bulk gasoline terminal or pipeline breakout station.
Subpart S -NESHAP for Pulp and Paper Industry	112(b) HAPs	Pulp and Paper Industry	N/A – LANL does not operate any process that produces pulp paper or paperboard.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart T – MACT for Halogenated Solvent Cleaning	6 listed halogenated solvents	Solvent cleaning machines with a capacity of 2 gallons or greater	Applicable – LANL operates 3 solvent cleaning machines with regulated solvents.
Subpart U - National Emission Standards for Hazardous Air Pollutants Emissions: Group 1 Polymers and Resins	112(b) HAPs	Elastomer Product Process Units	N/A – LANL does not operate an elastomer product process unit.
Subpart W - NESHAP for Epoxy Resins Production and Non-nylon Polyamides Production	112(b) HAPs	Resin Manufacturers	N/A – LANL does not operate a basic liquid epoxy or wet strength resin manufacturing facility.
Subpart X -NESHAP for Secondary Lead Smelting	Lead Compounds	Secondary Lead Smelting	N/A – LANL does not operate a secondary lead smelter.
Subpart Y - National Emission Standards for Marine Tank Vessel Loading Operations	112(b) HAPs	Marine Tank Vessel Loading Operations	N/A – LANL does not operate a marine tank vessel loading operation.
Subpart AA -NESHAP for Phosphoric Acid Manufacturing Plants	112(b) HAPs	Phosphoric Acid Manufacturing Plants	N/A – LANL does not operate a phosphoric acid manufacturing operation.
Subpart BB -NESHAP for Phosphate Fertilizer Production Plants	112(b) HAPs	Fertilizer Production Plants	N/A – LANL does not operate a fertilizer production plant.
Subpart CC -NESHAP from Petroleum Refineries	112(b) HAPs	Petroleum Refineries	N/A – LANL does not operate a petroleum refinery.
Subpart DD -NESHAP from Off-Site Waste and Recovery Operations	112(b) HAPs	Off-Site Waste and Recovery Operations	N/A - LANL does not operate an off-site waste and recovery operation.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart EE -National Emission Standards for Magnetic Tape Manufacturing Operations	112(b) HAPs	Magnetic Tape Manufacturing Operations	N/A – LANL does not operate a magnetic tape manufacturing operation.
Subpart GG - National Emission Standards for Aerospace Manufacturing and Rework Facilities	112(b) HAPs	Manufacture or rework of aerospace vehicles or components	N/A - Research and development activities are exempt from the requirements of this regulation, per 40 CFR 63.741(f).
Subpart HH - NESHAP for Oil and Natural Gas Production Facilities	112(b) HAPs	Fuel Production Facilities	N/A – LANL does not operate a gas production facility.
Subpart II - National Emission Standards for Shipbuilding and Ship Repair (Surface Coating)	112(b) HAPs	Shipbuilding and Ship Repair	N/A – LANL does not operate a shipbuilding and repair facility.
Subpart JJ - National Emission Standards for Wood Furniture Manufacturing Operations	112(b) HAPs	Wood Furniture Manufacturing	N/A – LANL does not operate a wood furniture manufacturing operation.
Subpart KK - National Emission Standards for the Printing and Publishing Industry	112(b) HAPs	Printing and Publishing Industry	N/A – LANL does not operate a printing and publishing operation.
Subpart LL - NESHAP for Primary Aluminum Reduction Plants	Aluminum Polycyclic Organic Matter Fluorides	Primary Aluminum Reduction Plants	N/A – LANL does not operate a primary aluminum reduction plant.
Subpart MM – NESHAP for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-alone Semichemical Pulp Mills	112(b) HAPs	Pulp Mills	N/A – LANL does not operate a pulp mill.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart OO - National Emission Standards for Tanks - Level 1	112(b) HAPs	Tanks	N/A –The regulation only applies to a facility that is subject to another subpart of 40 CFR 60, 61 or 63, and that references this subpart.
Subpart PP - National Emission Standards for Containers	112(b) HAPs	Containers	N/A –The regulation only applies to a facility that is subject to another subpart of 40 CFR 60, 61 or 63, and that references this subpart.
Subpart QQ - National Emission Standards for Surface Impoundments	112(b) HAPs	Surface Impoundments	N/A –The regulation only applies to a facility that is subject to another subpart of 40 CFR 60, 61 or 63, and that references this subpart.
Subpart RR - National Emission Standards for Individual Drain Systems	112(b) HAPs	Drain Systems	N/A –The regulation only applies to a facility that is subject to another subpart of 40 CFR 60, 61 or 63, and that references this subpart.
Subpart SS - National Emission Standards for Closed Vent Systems, Control Devices, and Recovery Devices and Routing to a Fuel Gas System or a Process	VOCs 112(b) HAPs	Fuel Gas Systems	N/A –The regulation only applies to a facility that is subject to another subpart of 40 CFR 60, 61 or 63, and that references this subpart.
Subpart TT - National Emission Standards for Equipment Leaks – Control Level 1	VOCs 112(b) HAPs	Equipment Leaks	N/A –The regulation only applies to a facility that is subject to another subpart of 40 CFR 60, 61, or 63, and that references this subpart.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart UU - National Emission Standards for Equipment Leaks – Control Level 2 Standards	VOCs 112(b) HAPs	Equipment Leaks	N/A –The regulation only applies to a facility that is subject to another subpart of 40 CFR 60, 61, or 63, and that references this subpart.
Subpart VV - National Emission Standards for Oil- Water Separators and Organic-Water Separators	112(b) HAPs	Oil- Water Separators and Organic-Water Separators	N/A –The regulation only applies to a facility that is subject to another subpart of 40 CFR 60, 61 or 63, and that references this subpart.
Subpart WW - National Emission Standards for Storage Vessels (Tanks) - Control Level 2	112(b) HAPs	Storage Vessels	N/A –The regulation only applies to a facility that is subject to another subpart of 40 CFR 60, 61, or 63, and that references this subpart.
Subpart YY - NESHAP for Source Categories: Generic Maximum Achievable Control Technology Standards	112(b) HAPs	Acetal Resins Production, Acrylic and Modacrylic Fibers Production, Hydrogen Fluoride Production , and Polycarbonate Production	N/A – LANL does not have any of the listed source operations.
Subpart CCC - NESHAP for Steel Pickling-HCl Process Facilities and Hydrochloric Acid Regeneration Plants	112(b) HAPs	Steel Pickling Facilities and Hydrochloric Acid Regeneration Plants	N/A – LANL does not operate a steel pickling facility or a hydrochloric acid regeneration plant.
Subpart DDD - NESHAP for Mineral Wool Production	112(b) HAPs	Mineral Wool Production	N/A – LANL does not operate a mineral wool production facility

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart EEE - NESHAP from Hazardous Waste Combustors	Dioxins/furans 112(b) HAPs Carbon Monoxide Hydrocarbons PM	Hazardous Waste Combustors	N/A – LANL does not operate a hazardous waste combustor.
Subpart GGG - National Emissions Standards for Pharmaceuticals Production	112(b) HAPs	Pharmaceuticals Production	N/A – LANL does not operate a pharmaceutical production facility.
Subpart HHH - NESHAP for Natural Gas Transmission and Storage Facilities	112(b) HAPs	Natural Gas Transmission Facilities	N/A – LANL does not operate a natural gas transmission facility.
Subpart III - NESHAP for Flexible Polyurethane Foam Production	112(b) HAPs	Flexible Polyurethane Foam Production	N/A – LANL does not operate a flexible polyurethane foam production facility.
Subpart JJJ - NESHAP for Group IV Polymers and Resins	112(b) HAPs	Thermoplastic Product Process Units	N/A – LANL does not operate a thermoplastic product process unit.
Subpart LLL - NESHAP for Portland Cement Manufacturing Industry	PM Opacity Dioxins/furans Total hydrocarbons	Portland Cement Plants	N/A – LANL does not operate a Portland cement plant.
Subpart MMM - NESHAP for Pesticide Active Ingredient Production	112(b) HAPs VOCs	Pesticide Manufacturing	N/A – LANL does not operate a pesticide manufacturing operation.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart NNN - NESHAP for Wool Fiberglass Manufacturing	112(b) HAPs	Wool Fiberglass Manufacturing	N/A – LANL does not operate a wool fiberglass manufacturing facility.
Subpart OOO - NESHAP for Manufacture of Amino/Phenolic Resins	112(b) HAPs	Amino/Phenolic Resin Productions	N/A – LANL does not operate a amino/phenolic resin production facility.
Subpart PPP - NESHAP for Polyether Polyols Production	112(b) HAPs	Polyether Polyols Production	N/A – LANL does not operate a polyether polyols production facility.
Subpart QQQ – NESHAP for Primary Copper Smelters	112(b) HAPs	Primary Copper Smelting	N/A – LANL does not operate a primary copper smelter.
Subpart RRR - NESHAP for Secondary Aluminum Production	112(b) HAPs	Secondary Aluminum Production	N/A – LANL does not operate a secondary aluminum production facility.
Subpart TTT - NESHAP for Primary Lead Smelting	Lead	Primary Lead Smelting	N/A - LANL does not operate a primary lead smelter.
Subpart UUU – NESHAP for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units	112(b) HAPs	Petroleum Refineries	N/A – LANL does not operate a petroleum refinery.
Subpart VVV – NESHAP for Publicly Owned Treatment Works	112(b) HAPs	Publicly Owned Treatment Works	N/A – LANL does not operate a POTW.
Subpart XXX - NESHAP for Ferroalloys Production: Ferromanganese and Silicomanganese	112(b) HAPs Opacity	Ferroalloys Production	N/A – LANL does not operate a ferroalloys production operation.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
Subpart CCCC – NESHAP for Manufacture of Nutritional Yeast	112(b) HAPs VOCs	Nutritional Yeast Manufacturing	N/A – LANL does not operate a nutritional yeast manufacturing operation.
Subpart GGGG – NESHAP for Solvent Extraction for Vegetable Oil Production	112(b) HAPs	Vegetable Oil Production	N/A – LANL does not operate a vegetable oil production operation.
Subpart HHHH – NESHAP for Wet-Formed Fiberglass Mat Production	112(b) HAPs	Wet-Formed Fiberglass Production	N/A – LANL does not operate a wet-formed fiberglass production operation.
Subpart SSSS – NESHAP for Surface Coating of Metal Coil	112(b) HAPs	Metal Coil Surface Coating Operations	N/A – LANL does not operate a metal coil surface coating operation.
Subpart TTTT – NESHAP for Leather Finishing Operations	112(b) HAPs	Leather Finishing Operations	N/A – LANL does not operate a leather finishing operation.
Subpart UUUU – NESHAP for Cellulose Products Manufacturing	112(b) HAPs	Cellulose Products Manufacturing	N/A – LANL does not operate a cellulose products manufacturing operation.
Subpart VVVV – NESHAP for Boat Manufacturing	112(b) HAPs	Fiberglass and Aluminum Boat Manufacturing	N/A – LANL does not operate a fiberglass or aluminum boat manufacturing operation.
20.2.84 NMAC – incorporating 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 – Acid Rain Program	SO_2 NO_x	Sources Affected under the Federal Acid Rain Program	N/A – The only existing boilers at LANL that generate electricity are at TA-03. None of these units are affected sources under the Acid Rain Program.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
20.2.98 NMAC Conformity of General Federal Actions to the State Implementation Plan	Criteria Pollutants	Federal Facilities in Nonattainment or Maintenance Areas	N/A - This regulation applies only to federal facilities located in nonattainment or maintenance areas. LANL is located in an attainment area.
20.2.99 NMAC Conformity to the State Implementation Plan of Transportation Plans, Programs, and Projects	Criteria Pollutants	Federal Transportation Agencies	N/A - This regulation applies only to federal transportation agencies and their planning activities in nonattainment and maintenance areas.
Federal Applicable Requirements Not Adopted in EIB Regulations			
40 CFR Part 50 – National Primary and Secondary Ambient Air Quality Standards	Criteria Pollutants	All	Applicable – 20 NMAC 2.70 includes NAAQS as an applicable requirement. All LANL operations are located within an area designated attainment for all NAAQS primary and secondary standards.
40 CFR 60 Subpart AAA - NSPS for New Residential Wood Heaters	PM	Residential Wood Heaters Manufactured after July 1, 1988, or Sold at Retail on or after July 1, 1990	N/A – LANL does not operate any residential wood heaters.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
40 CFR 61 Subpart B - NESHAP for Radon Emissions from Underground Uranium Mines	Radon	Underground Uranium Mines	N/A – LANL does not operate an underground uranium mine.
40 CFR 61 Subpart H - NESHAP for Radionuclides other than Radon from DOE Facilities	Radionuclides	Department of Energy Facilities	Applicable - LANL is subject to 40 CFR 61, Subpart H.
40 CFR 61 Subpart I - NESHAP for Radionuclide Emissions from Federal Facilities Other Than Nuclear Regulatory Commission (NRC) Licensees and Not Covered by Subpart H	Radionuclides	Federal Facilities not Licensed by the NRC and Not Covered by Subpart H	N/A - LANL is covered by Subpart H.
40 CFR 61, Subpart K -NESHAP for Radionuclide Emissions from Elemental Phosphorus Plants	Radionuclides	Elemental Phosphorous Plants	N/A – LANL does not operate an elemental phosphorous plant.
40 CFR 61, Subpart Q -NESHAP for Radon Emissions from DOE Facilities	Radon-222	DOE Facilities Storing By-product Materials	Applicable – LANL is subject to 40 CFR 61, Subpart Q.
40 CFR 61, Subpart R -NESHAP for Radon Emissions From Phosphogypsum Stacks	Radon-222	Wet Acid Phosphorus Production Facilities	N/A – LANL does not operate a wet acid phosphorous production facility.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
40 CFR 61, Subpart T - NESHAP for Radon Emissions from the Disposal of Uranium Mill Tailings	Radon	Uranium Mill Tailings	N/A – LANL does not operate a unit that disposes of uranium mill tailings.
40 CFR 61, Subpart W -NESHAP for Radon Emissions from Operating Mill Tailings	Radon-222	Uranium Mills	N/A - LANL does not operate a uranium mill tailings unit.
40 CFR 62 Subpart GG - Approval and Promulgation of State Plans for Designated Facilities and Pollutants – New Mexico	Fluoride Reduced Sulfur Sulfuric Acid Mist Landfill Gas Emissions Municipal Waste Combustor Emissions	Kerr-McGee Nuclear Corp in McKinley County Climax Chemical in Lea County Municipal Waste Landfills	N/A – LANL does not operate any of the identified facilities.
40 CFR 64 Compliance Assurance Monitoring	Criteria HAPs	Emission units with potential pre-controlled emission rate > 100% of 40 CFR 70 major source threshold, equipped with a control device, and subject to an emission limit or standard.	Applicable – The three power plant boilers controlled with an FGR system are each subject to the rule for NOx only. A monitoring plan for NOx will be submitted as specified at 40 CFR 64.5 (b) within the application for the first operating permit renewal.

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
40 CFR 68 – Chemical Accident Prevention Provisions	112(r) regulated substances	All	N/A - LANL does not store quantities of 112(r) toxic or flammable materials in quantities above the thresholds for triggering applicability of this regulation.
40 CFR 82 Subpart A - Production and Consumption Controls	Chlorofluoro-carbons (CFCs) and Hydrochloro-fluorocarbons (HCFCs)	Manufacturers of CFCs and HCFCs	N/A - LANL uses, but does not manufacture, CFCs or HCFCs.
40 CFR 82 Subpart B - Servicing of Motor Vehicle Air Conditioners	CFCs and HCFCs	Repair and Service of Motor Vehicle Air Conditioners	Applicable
40 CFR 82 Subpart C - Ban on Nonessential Products Containing Class I Substances	CFCs and HCFCs	Non-essential Products	N/A
40 CFR 82 Subpart D - Federal Procurement	CFCs and HCFCs	General Services Department of Defense	N/A
40 CFR 82 Subpart E - Labeling of Products using ODSs	CFCs and HCFCs	Containers filled with CFCs or HCFCs and products manufactured with CFCs	N/A

Regulation	Regulated Pollutants	Regulated Source Category	Applicability
40 CFR 82 Subpart F - Recycling and Emission Reduction	CFCs and HCFCs	Stationary Refrigeration Appliances	Applicable
40 CFR 82 Subpart G - Significant New Alternatives Policy	CFCs and HCFCs	Sources using Class I or Class II ODSs	N/A
40 CFR 82 Subpart H – Halon Emissions Reduction	Halons	Halon Containing Equipment	Applicable

(1) These regulations are not in the SIP and are not federally enforceable

Table 4.1-2 provides a list of each applicable requirement that currently applies to LANL. For each requirement cited, the table indicates whether or not the regulation is federally enforceable. The NMED operating permit regulation requires each Title V permit to specify which requirements are federally enforceable. The table also shows whether the requirement applies to the entire LANL facility, i.e., is a facility-wide requirement, or to an emission unit or units, i.e., a unit-specific requirement. Additional information, including proposed monitoring, recordkeeping, and reporting, for sources subject to unit-specific requirements is provided in Chapter 3 of this application.

Table 4.1-2. Current Applicable Requirements for LANL

Applicable Requirement	Federally Enforceable?	Facility-wide Requirement?	Unit-specific Requirement?
20.2.7 NMAC - Excess Emissions during Malfunction, Startup, Shutdown, or Scheduled Maintenance	Yes	Yes	No
20.2.11 NMAC - Asphalt Process Equipment	Yes	No	Yes. Applicable to existing Barber-Greene and new BDM Engineering asphalt plants.
20.2.33 NMAC - Gas Burning Equipment - NO_2	Yes	No	Yes. Applicable to (3) boilers at TA-3 Power Plant.
20.2.34 NMAC - Oil Burning Equipment - NO_2	Yes	No	Yes. Applicable to (3) boilers at TA-3 Power Plant.
20.2.60 NMAC - Open Burning	Yes	Yes	Yes. Applicable to (3) air curtain destructors and operational burns.
20.2.61 NMAC - Smoke and Visible Emissions	Yes	Yes	Yes. Applicable to certain combustion sources as described in Chapter 3.
20.2.70 NMAC - Operating Permits	Yes	Yes	No
20.2.71 NMAC - Operating Permit Emission Fees	Yes	Yes	No
20.2.72 NMAC - Construction Permits	Yes	Yes	No
20.2.72 NMAC Permit Conditions	Yes	No	Yes. Current 20.2.72 permits have been issued for beryllium activities, a portable rock crusher, the flue gas recirculation NO_x control project at the TA-3 Power Plant, an asphalt plant, and a diesel generator.
20.2.73 NMAC - Notice of Intent and Emissions Inventory Requirements	Yes	Yes	No
20.2.74 NMAC - Permits - Prevention of Significant Deterioration	Yes	Yes	No
20.2.75 NMAC - Construction Permit Fees	Yes	Yes	No
40 CFR Part 50 – National Primary and Secondary Ambient Air Quality Standards	Yes	Yes	No

Applicable Requirement	Federally Enforceable?	Facility-wide Requirement?	Unit-specific Requirement?
40 CFR Part 60 - Subpart Dc - NSPS for Small Industrial-Commercial-Institutional Steam Generating Units	Yes	No	Yes. Applicable to (2) 12.4 MMBtu/hr boilers at TA-55.
40 CFR Part 60 – Subpart I - NSPS for Hot Mix Asphalt Facilities	Yes	No	Yes. Applicable to the BDM Engineering asphalt plant.
40 CFR Part 60 - Subpart Kb - NSPS for Volatile Organic Liquid Storage Vessels	Yes	No	Yes. Applicable to each storage tank listed in Table 3.14-2 of this application.
40 CFR Part 60 - Subpart CCCC - NSPS for Commercial and Industrial Solid Waste Incineration Units	Yes	No	Yes. Applicable to (3) air curtain destructors described in Section 3.1 of this application.
40 CFR Part 61 - Subpart C - NESHAP for Beryllium	Yes	No	Yes. Applicable to beryllium operations as described in Section 3.3 of this application.
40 CFR 61- Subpart H - NESHAP for Radionuclides other than Radon from DOE Facilities	Yes	Yes	No
40 CFR Part 61 - Subpart M - NESHAP for Asbestos	Yes	Yes	No
40 CFR 61 – Subpart Q - NESHAP for Radon Emissions from DOE Facilities	Yes	Yes	No
40 CFR Part 63 - Subpart T - MACT for Halogenated Solvent Cleaning	Yes	No	Yes. Applicable to (3) degreasers described in Section 3.7 of this application.
40 CFR 64 – Compliance Assurance Monitoring	Yes	No	Yes. Applicable to (3) boilers at TA-3 Power Plant.
40 CFR 82 – Subpart B - Servicing of Motor Vehicle Air Conditioners	Yes	Yes	No
40 CFR 82 – Subpart F - Recycling and Emission Reduction	Yes	Yes	No
40 CFR 82 – Subpart H – Halon Emissions Reduction	Yes	Yes	No

4.1.1. 20.2.7 NMAC - Excess Emissions during Malfunction, Startup, Shutdown, or Scheduled Maintenance

This regulation requires notification to the NMED in the event of the occurrence of excess emissions during a malfunction, startup, shutdown, or scheduled maintenance. *"Excess emissions"* is defined as the emission of air contaminants in excess of an applicable emission limitation or requirement. This includes emission limitations established through permit conditions or by NMED air quality regulation, such as the opacity standards in 20.2.61 NMAC, which apply to boilers, generators, rock crushers, and air curtain destructors at LANL.

If notification is triggered, a verbal notification is required no later than 24 hours after the start of the next regular business day followed by a written notification within 10 days after the start of the next business day. Notification of excess emissions due to scheduled maintenance must be done verbally no later than 24 hours prior to the initial occurrence of the excess emissions and followed by a written notification. The rule specifies information to be included in the notification. The rule also specifies criteria that the NMED must use to determine whether or not a violation has occurred due to the excess emission during the limited circumstances of startup, shutdown, malfunction, or scheduled maintenance.

LANL provides notifications as required under 20.2.7 NMAC when excess emissions occur. Notifications in the past have been primarily for excursions over opacity limits, i.e., the degree to which an exhaust plume is visible to the human eye. LANL has complied with the requirements of this rule.

4.1.2. 20.2.11 NMAC - Asphalt Process Equipment

This regulation specifies an allowable particulate matter emission rate in pounds per hour. It also requires the use of a fugitive dust control system so that all particulate matter emissions are limited to the stack outlet.

The maximum asphalt production rate of the Barber-Green asphalt plant at TA-3-73 is 60 tons per hour (120,000 pounds per hour). This process rate equates to an allowable emission rate of 33.8 pounds per hour. A source test was conducted on this plant on August 25, 1993 and is included in Appendix C. As shown in the test report, the particulate matter emission rate at maximum capacity is 4 pounds per hour, well below the allowable emission limit of 33.8 pounds per hour. The plant also has a control system for fugitive dust, which ensures emissions are limited to the stack outlet. Therefore, the plant is in compliance with 20.2.11 NMAC.

The new BDM Engineering asphalt plant is limited to 35.4 pounds per hour of particulate matter under this regulation. A source test for particulate matter will be conducted once the plant is operational.

4.1.3. 20.2.33 NMAC - Gas Burning Equipment - NO_2

This regulation applies to the three boilers at the TA-3 Power Plant described in Section 3.10 of this application. Each boiler has a nameplate rating of 210 MMBtu/hr heat input. These units are the only boilers at LANL large enough to meet the applicability criteria of the regulation, which is a heat input of greater than 1,000,000 MMBtu per year. Because the boilers were installed in the 1950's, they meet the definition of "existing gas burning equipment" within the regulation. The regulation specifies an emission limit of no greater than 0.3 pounds of nitrogen dioxide per MMBtu of heat input.

LANL conducted two source tests on Boiler 3, which are included in Appendix D. Each test was conducted prior to installation of the flue gas recirculation (FGR) system designed to lower nitrogen dioxide emissions. The August 1995 test report showed the nitrogen dioxide emission rate to be 0.136 lb/MMBtu at full load. The February 2000 test showed the nitrogen dioxide emission rate to be 0.187 lb/MMBtu. The test results show Boiler 3 is in compliance with 20.2.33 NMAC without the FGR control system. It is anticipated Boilers 1 and 2, having the same design rate and burning the same fuel as

Boiler 3, also have nitrogen dioxide emission rates below the 0.3 lb/MMBtu limit.

4.1.4. 20.2.34 NMAC - Oil Burning Equipment - NO_2

This regulation also applies to the three boilers at the TA-3 Power Plant described in Section 3.10 of this application. These units are the only boilers at LANL large enough to meet the applicability criteria of the regulation, which is a heat input of greater than 1,000,000 MMBtu per year. The regulation specifies an emission limit of no greater than 0.3 pounds of nitrogen dioxide per MMBtu of heat input for each boiler meeting the heat input criteria.

The TA-3 Power Plant boilers have the capability to use No. 2 fuel oil as a standby fuel. Emission tests are not typically conducted on standby fuels, which are used infrequently, so emission testing at the plant has been conducted on natural gas only. However, using the AP-42 emission factor and fuel oil heat value from Table 3.10-2 in the Section 3.10 TA-3 Power Plant emission unit description, compliance with the emission limit can be demonstrated by the following calculation:

$$Emission\,Rate\left(\frac{lb}{MMBtu}\right)=\left[Emission\,Factor\left(\frac{24\,lbNOx}{1000\ galoil}\right)\right]\left[OilHeatValue\left(\frac{gal}{0.137\ MMBtu}\right)\right]=0.18\ \frac{lb\,NOx}{MMBtu}$$

4.1.5. 20.2.60 NMAC - Open Burning

20.2.60 NMAC - Open Burning prohibits certain types of burning, allows certain unrestricted burning, allows restricted open burning of refuse and agricultural materials without permitting, and requires permitting, i.e., issuance of an open burn permit for other activities. Open burning activities at LANL fall under either unrestricted burning or the open burn permitting program.

Section 108.C. of 20.2.60 NMAC allows the unrestricted open burning of explosive materials where the transportation of such materials to other facilities could be dangerous. Sites at LANL that conduct burning of pure explosive material fall under this

exemption to 20.2.60 NMAC. Under the operating permit requirements, each of these sites meet the criteria of Insignificant Activity #1.a.

The current open burn permit issued to LANL is for a five year period from August 18, 1997 to December 21, 2002. Two updated open permit applications are being prepared and will be submitted to NMED prior to expiration of the current permit. The open burn permitting process is separate and distinct from the new source review or construction permit processes under NMED permit regulations 20.2.72 NMAC, 20.2.73 NMAC, and 20.2.74 NMAC. The following burn sites are included in open burn permits:

- TA-11 Fire Testing Area
- TA-14 Burn Cage
- TA-16 Burn Ground
- TA-36 Open Burn Area
- TA-36 Sled Track

Except for the requirements of 20.2.60 NMAC, each of these sites meet the criteria of Insignificant Activity #1.a, under the operating permit requirements.

LANL has complied with the 20.2.60 NMAC requirement to obtain an open burn permit for the disposal of dangerous materials. LANL also complies with open burn permit conditions. The current open burn permit requires the following conditions:

- Twenty-four (24) hour advance burn notification;
- Obtaining pre-approval of operational changes affecting burn conditions;
- Submittal of an annual fire activity report;
- Making Standard Operating Procedures (SOPs) available for inspection;
- Conducting burns on good dispersion days; and
- Ensuring NAAQS and NMAAQS are not violated.

Additional operation specific conditions are included in the current open burn permit. LANL demonstrates compliance with specific conditions of the burn in the

annual fire activity report submitted to NMED. The current permit expires at the end of 2002. The open burn permit conditions are subject to change when the new permits are issued.

At the direction of NMED, the three air curtain destructors described in Section 3.1 of this application are also permitted under 20.2.60 NMAC. The compliance status of these units is discussed in Section 4.1.15 of this Chapter.

4.1.6. 20.2.61 NMAC - Smoke and Visible Emissions

20.2.61 NMAC limits visible emissions, i.e., emissions detected by the human eye, from certain stationary combustion equipment and diesel-powered vehicles. The regulation limits opacity to less than 20%. At LANL, the opacity limit applies primarily to boilers, generators, and diesel-powered vehicles used for construction purposes. The rule also applies to the three air curtain destructors described in Chapter 3. However, the rule exempts all stationary equipment that is subject to any other particulate emission limit under other NMED regulations, and all equipment that is classified as an insignificant activity under the Title V operating permit program. Emissions from the cold engine start-up from diesel-powered vehicles are also exempt.

LANL has found that opacity violations do not occur during normal operation of the stationary combustion units, cold startup on natural gas, or when natural gas is switched to fuel oil for “hot” boilers. However, exceedances can occur during cold startup on fuel oil or during malfunctions of the Power or Steam Plants. Therefore, opacity readings are made in accordance with the EPA standard method for opacity from 40 CFR Part 60, Appendix A, Method 9 during these occurrences. Opacity is read during each scheduled cold startup on fuel oil. During malfunctions where visible smoke is produced, a certified opacity observer reads the opacity as soon as possible.

LANL maintains a number of diesel-powered vehicles for construction purposes. No opacity violations have been reported during warm engine operation of these vehicles. Rather than having a program to read opacity on these vehicles, LANL has maintenance

programs that follow manufacturer's recommendations to ensure that vehicles are running efficiently.

LANL complies with the requirements of 20.2.60 NMAC during routine operations and has a program in place to conduct opacity observations during non-routine operations of stationary equipment that could generate visible emissions.

4.1.7. 20.2.70 NMAC - Operating Permits

20.2.70 NMAC requires the owner or operator of a major stationary source to apply for and obtain a Title V operating permit. LANL is a major stationary source and submitted an operating permit application as required in December 1995. The application was ruled complete by the NMED in April 1996. This application is a comprehensive replacement to the initial 1995 application. LANL has complied with 20.2.70 NMAC.

4.1.8. 20.2.71 NMAC - Operating Permit Emission Fees

This regulation requires Part 70 sources to pay an annual operating permit fee. LANL has paid the annual fee as required and is in compliance with this regulation.

4.1.9. 20.2.72 NMAC - Construction Permits

20.2.72 requires construction permits for new or modified sources that exceed specified emission rates for criteria or NMED-regulated pollutants, and sources subject to NSPS or NESHAP regulations. LANL has obtained construction permits as required by this regulation and currently has permits for beryllium machining, the FGR system at the TA-3 Power Plant, a portable rock crusher, an asphalt plant, and a diesel generator. Each source and permit is described in Chapter 3 of this application. LANL has also filed administrative permit revisions for small exempt operations under Section 202.B of the regulation. LANL has complied with the requirements of 20.2.72 NMAC.

4.1.10. 20.2.72 NMAC - Permit Conditions

LANL currently has air quality construction permits issued under 20.2.72 NMAC for beryllium activities, a portable rock crusher, the FGR NO_x control project at the TA-3 Power Plant, an asphalt plant, and a diesel generator. Permit revisions for small exempted sources have also been issued by NMED under the provisions of Section 202.B of 20.2.72 NMAC. Only the compliance status of current non-exempt emission units is discussed. Compliance with permit conditions for beryllium activities is discussed in Section 4.1.19 of this Chapter.

LANL was issued Permit No. 2195 on June 16, 1999 for a 150 ton per hour portable rock crusher described in Section 3.12 of this application. The crusher is intended to be used intermittently to crush concrete and rock removed from buildings as part of decontamination and decommissioning activities. At the time of this application, the crusher has not yet operated. Once operation begins, initial compliance tests are required to verify compliance with opacity limits specified in the permit. Therefore, compliance has not yet been determined for this source. It is anticipated control measures in place for fugitive particulate emissions will ensure opacity limits are met.

LANL was issued Permit No. 2195B on September 27, 2000 for the installation of an FGR system to control NO_x emissions at the TA-3 Power Plant. The permit established hourly and annual emission limits for criteria pollutants, which are shown in Table 3.10-1 in Section 3.10 of this application. These emission limits became applicable once the FGR system became operational on October 1, 2002.

LANL conducted initial compliance testing required by the permit for NO_x and CO on September 25th through 27th, 2002. Test results showed compliance with all permit limits except for NO_x emissions from Boiler 3. Permit 2195B was revised in November 2002 to adjust the NO_x limit for this unit from 9.0 to 9.9 pounds NO_x per hour.

At the time of this application, the permitted asphalt plant and diesel generator were in initial startup. Compliance will be demonstrated as required by permit conditions.

4.1.11. 20.2.73 NMAC - Notice of Intent and Emissions Inventory Requirements

This regulation contains two separate requirements. A Notice of Intent (NOI) application is required to be submitted prior to construction of a new source or modification of an existing source if specified emission rates are exceeded for regulated air contaminants. NMED reviews the application and determines if a construction permit is needed for the new or revised source. LANL has submitted NOI applications when this requirement has been triggered and has complied with the regulation.

20.2.73 NMAC also requires submission of an annual emission inventory by specified sources within the state. LANL prepares this report each year and has complied with the regulation by submission of the required report. LANL has also voluntarily included information regarding HAP emissions when requested by the NMED in the annual report.

4.1.12. 20.2.74 NMAC - Permits - Prevention of Significant Deterioration (PSD)

20.2.74 NMAC implements the federal new source review requirements for areas of the state that are designated as being in attainment of NAAQS. PSD construction permits are required to construct new major stationary sources or make major modifications to existing sources. The definitions of major stationary source and major modification are specified within the regulation. This regulation and the requirement to obtain a PSD permit have not been triggered by modifications at LANL.

4.1.13. 20.2.75 NMAC - Construction Permit Fees

This regulation establishes fees for construction permits or permit revisions. A filing fee must be submitted with each application, and the NMED sends an invoice for the permit fee. Permit fees are specified based on the type of permit and technical complexity of review. LANL has submitted all fees as required for construction permits and is in compliance with this regulation

4.1.14. 40 CFR Part 50 - National Primary and Secondary Ambient Air Quality Standards

NAAQS are established by EPA for criteria pollutants in order to protect human health and welfare. NAAQS have been established for ozone, sulfur dioxide, nitrogen dioxide, particulate matter, carbon monoxide, and lead. The primary NAAQS are set at concentrations designed to be protective of human health. All areas of the country are designated as being in attainment or nonattainment of the primary NAAQS. States are required to develop revisions to their SIPs to bring nonattainment areas into attainment.

In developing requirements for state regulations implementing the Title V operating permit program, EPA chose not to specify the NAAQS as an applicable requirement except for temporary portable sources, which move to different locations. In developing 20.2.70 NMAC, NMED chose to be more stringent than required by EPA for an approvable Title V program and specified the NAAQS as an applicable requirement for all sources. However, recognizing the EIB or the NMED had reviewed dispersion modeling analyses and determined that many facilities in New Mexico did not cause or contribute to ambient air concentrations in excess of the NAAQS, 20.2.70 NMAC does not require additional modeling from sources that have been issued construction permits after January 1, 1986, or were subject to 20.2.14, 20.2.16, 20.2.19, 20.2.31 or 20.2.32 NMAC and were not modified since the modeling was performed. LANL has been issued several construction permits since this date. All dispersion modeling analyses included in construction permit applications for LANL have shown compliance with the NAAQS. In addition, LANL is located within a geographic area designated attainment for the NAAQS by the NMED and EPA. LANL operations do not cause or contribute to any violation of the NAAQS.

4.1.15. 40 CFR Part 60 - Subpart Dc - NSPS for Small Industrial-Commercial-Institutional Steam Generating Units

There are two boilers at LANL that are regulated under NSPS Subpart Dc. These are the two Sellers boilers with a design input rating of 12.4 MMBtu/hr which are located at TA-55 and which are discussed in Section 3.4 of this application. For gas-fired boilers of this size, Subpart Dc does not establish any emission standards. The only requirement is to measure and record the amount of natural gas consumed as fuel. The rule requires daily fuel monitoring. NMED approved an alternate monitoring plan that requires monthly fuel monitoring. A flow meter is used to measure fuel usage and monthly values are recorded as required. LANL is in compliance with the requirements of this regulation.

4.1.16. 40 CFR Part 60 - Subpart I - NSPS for Hot Mix Asphalt Facilities

The NSPS Subpart I applies to the BDM Engineering asphalt plant. The emission standard of Subpart I limits particulate matter to 0.04 grains per dry standard cubic foot. At the time of this application, the plant was in initial startup. A source test will be conducted as required by the NSPS to demonstrate compliance.

4.1.17. 40 CFR Part 60 - Subpart Kb - NSPS for Volatile Organic Liquid Storage Vessels

There are 15 storage tanks at LANL that are regulated by the NSPS Subpart Kb. Each tank is listed in Table 3.14-2 of this application. Under Subpart Kb, requirements for the installation of control equipment are based on the design capacity of the tank and the vapor pressure of the stored liquid. All liquids stored in Subpart Kb regulated tanks have very low vapor pressures, and therefore are not subject to any control requirement or standard under the rule. The only applicable requirement under the NSPS that applies to LANL storage tanks is the requirement at §60.116b(b) to maintain a record of the dimensions and capacity of each tank. LANL maintains these records and is in compliance with Subpart Kb.

4.1.18. 40 CFR Part 60 - Subpart CCCC NSPS for Commercial and Industrial Solid Waste Incineration Units

LANL operates three air curtain destructors to burn wood and yard waste from operating areas to support fire mitigation efforts that are each subject to the NSPS Subpart CCCC. These units are described in Section 3.1 of this application. Subpart CCCC limits opacity to 10% during normal operation and 35% during startup within the first 30 minutes of operation.

Under the NSPS, an initial opacity test using EPA Method 9 is required no later than 180 days after initial startup. All three units initiated startup in the fall of 2001. Initial opacity tests were conducted in December 2001 and results submitted to NMED in January 2002. Test results showed the units were in compliance with the opacity standard. Following the initial test, an annual opacity test is also required. Annual opacity tests are scheduled for fall 2002, and a report will be submitted to the NMED in approximately December 2002. In addition to required testing, LANL also conducts unofficial opacity readings to assist operators in determining and establishing operating conditions that minimize smoke. All test results have shown the units are in compliance with Subpart CCCC.

4.1.19. 40 CFR Part 61 - Subpart C - NESHAP for Beryllium

There are several facilities at LANL that are subject to the NESHAP Subpart C for beryllium. Each source subject to Subpart C is described in Section 3.3 of this application. As described in Section 3.3, new or modified beryllium sources are required to obtain construction permits from NMED under the provisions of 20.2.72 NMAC. There are currently four active sites at LANL for which a construction permit was required due to applicability of the Subpart C NESHAP. These facilities are: the TA-3-141 Beryllium Test Facility, the TA-55-PF4 Plutonium Facility, the TA-35-213 Target Fabrication Facility, and the TA-3-102 Main Shops Facility.

The Subpart C emission standard limits beryllium emissions from each source to 10 grams (0.022 lb) of beryllium over a 24-hour period. As shown in Table 3.3-2 of this application, the allowable emission rates established in the construction permit for each

of the four permitted sites is less than 1 gram per 24-hour period for all four sites combined. An allowable annual emission limit was also established in the construction permit process for each site.

Subpart C and permit conditions require an initial startup emission test for each new or modified source. Emission tests have been completed for TA-3-141, TA-35-213, and TA-3-102, and the TA-55-PF4 south stack. All test results showed compliance with the permitted allowable emission limits and Subpart C emission standard. Operations vented to the north stack of TA-55-PF4 have not yet initiated startup.

The facility exhaust stack at TA-3-141 is also required to be equipped with a continuous emission monitor (CEM) to measure beryllium emissions. LANL is required to provide a quarterly report to NMED that describes the compliance status of the site with permitted allowable emission rates based on CEM data collected. CEM data collection began in 2001. All CEM measurements have shown compliance with permitted emission limits and the Subpart C emission standard.

4.1.20. 40 CFR Part 61 - Subpart H - NESHAP for Radionuclides other than Radon from DOE Facilities

LANL is an applicable source under 40 CFR 61, Subpart H - National Emissions Standard for Emissions of Radionuclides Other than Radon from Department of Energy Facilities. This regulation requires that LANL not cause any member of the public to receive more than 10 mrem/yr from airborne radionuclide emissions. The regulation also specifies the mechanisms that will be used to demonstrate this dose standard is not exceeded. NMED has neither requested nor obtained oversight of this regulation, therefore authority for its implementation remains with EPA.

In 1990, LANL notified EPA that it was unable to demonstrate compliance with all requirements of Subpart H. This notification was followed by a Notice of Non-

compliance (NON) and an on-site inspection by the EPA. Upon completion of this inspection, the EPA issued a second NON to the Laboratory.

LANL and EPA began negotiations for the development of a Federal Facility Compliance Agreement (FFCA) and Compliance Plan that would provide direction for LANL to come into compliance with the Subpart H requirements. These documents provided critical tools needed by LANL to demonstrate compliance, including approval for environmental monitoring of non-point sources. These negotiations were completed in 1997, and shortly thereafter LANL informed EPA that it was in compliance with the requirements of Subpart H, as implemented through the FFCA.

Since implementation of the FFCA was completed, LANL has continued to demonstrate compliance with Subpart H requirements, through submission of the annual report required under 40 CFR 61.94. All annual reports since implementation of the FFCA have demonstrated compliance with Subpart H standards.

In addition to this deliverable, LANL has several mechanisms in place to ensure continued compliance with the requirements. These mechanisms include stack sampling, ambient air sampling, periodic surveys of unmonitored release points, dose assessment, and periodic internal and external audits. The complete compliance program is documented in a quality assurance project plan maintained by LANL.

4.1.21. 40 CFR Part 61 - Subpart M - NESHAP for Asbestos

LANL performs asbestos renovation and demolition activities covered by NESHAP Subpart M, Section 61.145. Radioactively contaminated material is disposed of on-site in a designated radioactive asbestos burial area. Subpart M requirements at 61.154 for active waste disposal sites apply to this activity. Non-radioactive asbestos material is transported off-site to designated asbestos disposal areas. This disposal activity is regulated under Subpart M, Section 61.150. These Subpart M sections set numerous work practice standards for asbestos removal and disposal as well as

notification and recordkeeping requirements. LANL has an on-going successful asbestos program that undergoes NMED review and inspection. LANL is in compliance with applicable Subpart M requirements.

4.1.22. 40 CFR Part 61 - Subpart Q - NESHAP for Radon Emissions from DOE Facilities

NMED has not requested delegation of the Subpart Q NESHAP. Therefore, the responsibility for administering this regulation resides with EPA. This regulation applies to radon-222 (Rn-222) emissions from DOE storage/disposal facilities that contain byproduct material, as defined under section 11.e(2) of the Atomic Energy Act of 1954. "*Byproduct material"* is the tailings or wastes produced by the extraction or concentration of uranium or thorium from ore. While this regulation targets uranium mills, LANL has likely stored small amounts of byproduct material used in experiments in the TA-54 low level waste (LLW) disposal facility, making LANL subject to this regulation. Subject facilities cannot exceed an emissions rate of 20 picocuries per square meter per second (pCi/m^2/sec) of Rn-222.

Because the regulation provides no guidance on how compliance should be demonstrated, DOE and EPA negotiated a method in an April 5, 1995, DOE memorandum entitled "Memorandum of Understanding (MOU) with the Environmental Protection Agency Concerning the Radionuclide National Emission Standards for Hazardous Air Pollutants." This document states the following:

> "For sources subject to the standard of Section 61.192, DOE will demonstrate compliance through direct measurement of radon-222 in accordance with Appendix B, Method 115, or use alternative procedures (based on best available data) that do not underestimate emissions. Where flux measurements demonstrate compliance with the 20 pCi/m^2-sec standard, no further measurements are required so long as the storage or disposal site remains in the condition for which compliance was demonstrated."

In 1993 and 1994, LANL conducted a study to characterize emissions from the Area G disposal site, entitled "Measurement of Emission Fluxes from Technical Area 54,

Areas G and L." This study shows a maximum measured radon emission rate of 0.33 pCi/m^2-sec (20 pCi/m^2-min) and an average emission rate of 0.14 pCi/m^2-sec (8.1 pCi/m^2-min) for the entire site. An analysis performed for the DOE-required performance assessment for Area G shows that, based on historic and future waste disposal patterns, Rn-222 activity will not increase for more than 1000 years. It can be concluded that the site has remained in the same condition for which compliance was demonstrated (e.g., the site condition has not been altered by adverse weather conditions, a natural catastrophe has not occurred, greater concentrations of wastes are not being disposed of, etc.). Therefore, in accordance with the conditions in the MOU, LANL is in compliance with Subpart Q.

4.1.23. 40 CFR Part 63 - Subpart T - MACT for Halogenated Solvent Cleaning

MACT, Subpart T applies to minor or area sources of HAP emissions. LANL operates three solvent cleaning machines, or degreasers, which are subject to the Subpart T NESHAP due to the usage of trichloroethylene as a cleaning solvent. These units are described in Section 3.7 of this application. Each degreaser is a cold batch design that is subject to work practice standards under Subpart T. There are no physical controls required by the rule.

Work practice standards that apply to the degreasers are listed in Table 3.7-2 and are intended to minimize evaporative emissions of the cleaning solvent. LANL complies with these requirements.

4.1.24. 40 CFR Part 64 - Compliance Assurance Monitoring

The Part 64 Compliance Assurance Monitoring (CAM) rule was developed by EPA to meet the Clean Air Act Amendments of 1990 requirement for Title V sources to implement enhanced compliance monitoring. The purpose of the rule is to provide an assurance of compliance with emission limitations or standards. Emission units at Part 70 sources that are not subject to the CAM rule are subject to the periodic monitoring requirements of state Title V operating permit regulations. CAM requirements only apply

at Part 70 sources, and the rule is to be implemented by the permitting authority, i.e., NMED.

CAM requirements only apply to certain emission units at a Part 70 source. In order for the CAM rule to apply, all three of the following criteria must be met: (1) the unit must be subject to an emission limitation or standard, (2) the unit must use a control device to achieve compliance with the emission limitation or standard, and (3) the unit must have potential pre-control device emissions equal or greater than 100 percent of the amount in tons per year required for a source to be classified as a major source. The criteria are applied on a pollutant by pollutant basis.

The only emission units at LANL with pre-control potential emissions greater than 100 tons per year (the major source threshold for LANL) are the three boilers at the TA-3 Power Plant. Potential pre-control NO_x emissions from each boiler exceed 100 tons per year. The boilers are also subject to a NO_x emission limitation established in the construction permit for the FGR system, and the FGR control system is used to achieve compliance with the NO_x emission limits in the permit.

EPA finalized the CAM rule after many sources had either begun work on or already submitted a Title V operating permit application. As such, the rule has a phased approach to implementation of CAM requirements. 40 CFR §64.5 specifies deadlines for submission of a plan to meet CAM requirements. Under this section, each boiler at TA-3 meets the criteria at 40 CFR §64.5 (b) for *Other pollutant-specific emissions units*. CAM plans for these units must be submitted as part of the application for renewal of a Title V operating permit.

LANL will comply with this rule and include a CAM plan in the first application for renewal of a Title V operating permit.

4.1.25. 40 CFR Part 82 - Subpart B - Servicing of Motor Vehicle Air Conditioners

This Subpart established standards and requirements related to recycling equipment used in the servicing of motor vehicle air conditioners, and training and certification of technicians providing such services. LANL services motor vehicle air conditioners and uses recycling equipment certified in accordance with 40 CFR §82.36. All technicians servicing motor vehicle air conditioners at LANL are certified in accordance with 40 CFR §82.40.

4.1.26. 40 CFR Part 82 - Subpart F - Recycling and Emission Reduction

This Subpart prohibits individuals from knowingly venting ozone-depleting substances used as refrigerants into the atmosphere while maintaining, servicing, repairing, or disposing of air conditioning or refrigeration equipment. Under Section 608 of the CAA, it has been illegal since November 15, 1995, to knowingly vent substitutes for chlorofluorocarbons (CFC) and hydrochlorofluorocarbons (HCFC) refrigerants during the maintenance, service, repair and disposal of air-conditioning and refrigeration equipment. LANL recovers all refrigerants during maintenance, service, repair and disposal of refrigeration equipment at the Laboratory and does not vent refrigerants to the atmosphere.

Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR §82.156. LANL has adopted procedures to comply with 40 CFR §82.156 and performs all maintenance, service, repair and disposal in accordance with 40 CFR §82.156 requirements.

Equipment used during the maintenance, service, repair and disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR §82.158. All of LANL's refrigerant recovery

equipment meets the requirements of 40 CFR §82.158 and is certified by EPA approved equipment testing organizations as specified in 40 CFR §82.160.

Persons performing maintenance, service, repair and disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR §82.161. All technicians performing refrigeration work at LANL are certified in accordance with 40 CFR §82.161.

4.1.27. 40 CFR Part 82 – Subpart H – Halon Emissions Reduction

LANL services and maintains equipment that contains halons. All technicians employed who maintain the equipment have been trained regarding halon emissions reduction. During maintenance of halon equipment, technicians do not knowingly vent or otherwise release halon into the environment. LANL also disposes of halon-containing equipment in accordance with Subpart H requirements. LANL is in compliance with this regulation.