

**STATE OF NEW MEXICO  
ENVIRONMENTAL IMPROVEMENT BOARD**

**IN THE MATTER OF THE PETITION FOR  
HEARING ON TITLE V AIR QUALITY  
PERMIT NO. P100-R2 FOR  
LOS ALAMOS NATIONAL LABORATORY**

EIB 15-02 (A)

**Tewa Women United,  
Dr. Maureen Merritt, and  
Concerned Citizens for Nuclear Safety,**

**Petitioners.**



**Introduction**

Tewa Women United, Dr. Maureen Merritt and Concerned Citizens for Nuclear Safety (the "Petitioners") petition the New Mexico Environmental Improvement Board ("Board") for a hearing concerning the Title V Air Quality Permit No. P100-R2 issued by the New Mexico Environment Department ("the Department") to the U.S. Department of Energy ("DOE"), National Nuclear Security Administration and Los Alamos National Security, LLC ("Permittees") for Los Alamos National Laboratory ("LANL"). The Petitioners submit this petition under 20.1.2.200 NMAC.

The Petitioners certify that we have standing to submit this petition to the Board under the New Mexico Air Quality Control Act, Sections 74-2-7(H) NMSA 1978. Petitioners participated in the permitting action and are adversely affected by it. On January 18, 2015, Petitioners filed timely public comments in response to the Department's "Public Notice for Air Quality Operating Permit for Los Alamos National Laboratory of U.S. Department of Energy National Nuclear Security Administration." On February 2, 2015, Petitioners responded to the Department's January 26, 2015 response to our comments. On February 24, 2015, Petitioners participated in a teleconference with the Department and a representative of the Permittees. On February 26, 2015, Petitioners submitted additional comments to the Department.

We received the Department's "Notification of the Issuance of Title V Air Quality Permit No. P100-R2 for Los Alamos National Laboratory" electronically on March 2, 2015.

Petitioners will deliver a copy of this petition to the Department. 20.2.70.403.A NMAC.

## The Petitioners

**Tewa Women United** is a collective intertribal women's voice in the Tewa homelands of Northern New Mexico. The name Tewa Women United comes from the Tewa words *wi don gi mu*, which translated to "we are one."

TWU began in 1989 as a support group for women concerned with the traumatic effects of colonization leading to issues including alcoholism, suicide, terricide, environmental violence and domestic and sexual violence. In a safe space women created, transformed and empowered one another through critical analysis and the embracing and re-affirming of our cultural identity.

In 2001 TWU transitioned from an informal, all volunteer group to a formal 501(c)(3) non-profit organization. TWU was incorporated for educational, social and benevolent purposes, specifically for ending all forms of violence against Native women and girls, Mother Earth and to promote peace in New Mexico.

**Maureen Merritt, DO** is a board certified Family Practice physician and Occupational Medicine practitioner with 30 years experience, a retired Chief Medical Officer and Lieutenant Commander with the United States Public Health Service and Indian Health Service, and a recipient of two different State Governors' Awards for public health initiatives.

Dr. Merritt is founder of the local group New Mexico Alliance of Nuclear Worker Advocacy. She also serves on the advisory board of Cold War Patriots ("CWP"), a 501(c)(3) non-profit organization with over 20,000 members nationwide. CWP is dedicated to honoring and helping former uranium miners, millers, ore haulers and nuclear workers with health and safety issues related work under the DOE, Department of Labor and Department of Justice.

Dr. Merritt also created the New Mexico State Office of Nuclear Worker Advocacy, which is the first in the nation. In addition, she assists individual workers with difficult claims under the Energy Employees Occupational Illness Compensation Program Act. She speaks at town hall meetings nationwide on these and other nuclear industry issues.

**Concerned Citizens for Nuclear Safety ("CCNS")** formed in 1988 to address community concerns about the proposed transportation of nuclear waste from LANL to the Waste Isolation Pilot Plant ("WIPP") on St. Francis Drive in Santa Fe. CCNS is a 501(c)(3) non-profit organization, based in Santa Fe, New Mexico. *Our mission is to protect all living beings and the environment from radioactive and other hazardous materials now and in the future.*

For over 27 years, CCNS has actively participated in state and federal administrative proceedings about LANL. The proceedings have concerned air emissions, surface water discharges, ground water protection, and hazardous waste disposal storage and disposal.

In 2010, CCNS participated in the Department's public hearings about the LANL and WIPP hazardous waste permits. We raised public concerns about waste characterization, emergency preparedness and response, protection of human health and the environment, and protection of surface and ground water, among others. The facilities, along with the regulators, did not take many of our concerns as seriously as we did. Now, because of mis-characterization of the waste at LANL and acceptance of that waste at WIPP (some of the issues raised by CCNS in the administrative processes), in February 2014 radionuclides and hazardous chemicals exploded from the underground mine. The WIPP waste disposal site is closed, and remains closed with a possible re-opening date of 2018 at a cost to the taxpayers of at least \$1 billion. We take our community participation in public processes seriously.

### **Previous Clean Air Act Appeals to the Board**

In 2005, Tewa Women United and CCNS came before the Board to successfully appeal two Clean Air Act permits which allowed for the open burning and open detonation of hazardous waste at LANL. At the beginning of the Board's December 2005 public hearing, the Permittees withdrew their application. *See* Statement of Basis – Narrative Title V Permit, Section 5.0 History, Permit Nos. 2195J-R1 and 2195K-R1, p. 6.

### **Applicable Title V and Prevention of Significant Deterioration Requirements**

The Department describes the applicable Title V and Prevention of Significant Deterioration ("PSD") permits as:

**Title V Operating Permits** (under the Title V program) are required for major sources that have a potential to emit more than 100 tons per year for criteria pollutants, or for landfills greater than 2.5 million cubic meters (2.5 million-mg). In addition, TV major sources also include facilities that have the potential to emit greater than ten tons per year of a single Hazardous Air Pollutant, or 25 tons per year of any combination of Hazardous Air Pollutants (HAP). These facilities are subject to and the associated operating permits are issued pursuant to the New Mexico Administrative Code (NMAC) regulation **20.2.70 NMAC**.

"Permit Programs Overview," accessed March 30, 2015,  
<http://www.nmenv.state.nm.us/aqb/permit/index.htm>

**Prevention of Significant Deterioration (PSD) Permits** (subject to 20.2.74 NMAC) are required prior to construction or modification of sources subject to 20.2.74 NMAC. PSD permit applications may require pre-construction air monitoring before submittal of the application.

1. Any stationary source listed in table 1 (20.2.74.501 NMAC) which emits, or has the potential to emit, emissions equal to or greater than one hundred (100) tons per year of any regulated new source review pollutant.
2. Any stationary source not listed in table 1 (20.2.74.501 NMAC) and which emits or has the potential to emit two hundred fifty (250) tons per year or more of any regulated new source review pollutant.

"Permit Programs Overview," accessed March 30, 2015,  
<http://www.nmenv.state.nm.us/aqb/permit/index.htm>

### The Issues

We begin by acknowledging the sacred place where the emissions are occurring. The Permittees are emitting, and have emitted for over 73 years, chemicals, including volatile organic compounds ("VOCs"), radionuclides and particulates into the air of the Sacred Jemez Mountains of the Pueblo Peoples. In the early 1940s the U.S. Government told the Pueblo Peoples that the Pajarito Plateau (where LANL is situated) would be used for a short time and then it would be returned to them. This has not been the case. The Plateau has been used, and projected for use, by the U.S. Government and the nuclear weapons enterprise for at least the next 50 years. One hundred and twenty years is not a short amount of time.

#### **A. Environmental Justice**

The New Mexico Health Department defines environmental justice as:

**Environmental Justice** - The right to a safe, healthy, productive, and sustainable environment for all, where "environment" is considered in its totality to include the ecological (biological), physical (natural and built), social, political, aesthetic, and economic environments. Environmental justice refers to the conditions in which such a right can be freely exercised, whereby individual and group identities, needs, and dignities are preserved, fulfilled, and respected in a way that provides for self-actualization and personal and community empowerment. This term acknowledges environmental "injustice" as the past and present state of affairs and expresses the socio-political objectives needed to address them.

Accessed March 31, 2015, <http://nmhealth.org/publication/view/help/309/>

The highest number of minority and low-income peoples of any of the DOE sites in the U.S reside within a 50-mile radius of LANL. See Final Site-Wide Environmental Impact Statement for Continued Operation of Los Alamos National Laboratory, Los Alamos, New Mexico, DOE/EIS-0380, May 2008, Fig. 4-33 on p. 474 and Fig. 4-34 on p. 476 at <http://energy.gov/sites/prod/files/EIS-0380-FEIS-01-2008.pdf>

The Peoples living downwind and downstream of LANL have borne the cumulative burden of over 70 years of emissions of chemicals, particulates and radionuclides into the air. The pollutants have been transported throughout the watershed - they have been deposited on the soil, been transported by water, and re-suspended in the winds.

The Environmental Protection Agency ("EPA") requires analysis of the cumulative effects to minority and low-income populations from polluting facilities. The Petitioners will also file an appeal with EPA as well.

**B. Request for Additional Monitoring to Verify Whether Sources Are In Fact "Insignificant"**

Petitioners requests additional monitoring of sources the Department has determined are "insignificant" in order to verify that they are, in fact, insignificant sources.

**1. Request for Continuous Monitoring at the Soil Extraction System at Technical Area 54.**

Because of our concerns about VOC emissions, including 1.1.1-trichloroethane ("TCA"), from the Soil Extraction System (SVE) at Technical Area 54 (TA-54), the permit now requires the Permittees to conduct monitoring and calculate emissions. EPA has determined that TCA is a possible carcinogen. It does have liver and kidney toxicity that can lead to organ failure via acute or chronic exposure over time. See Petitioners' February 2, 2015 comments to the Department, pp. 3-6.

The Department previously determined that these SVE emissions were "insignificant." The Petitioners raised concerns and provided additional information in our comments that the Permittees needed to demonstrate that the emissions are in fact "insignificant." As a result, the Department has required monitoring. Below is the permit language, which we believe serves as a model for our other requests below, with one requested addition:

A113 Other Provisions - (20.2.70.302.G.3 NMAC)

- A. To verify Insignificant Activity 1.a and 1.b status of the TA-54 MDA L Soil Vapor Extraction System (SVE), the Permittees shall perform the following actions.
- (1) At least once every 3 months, the permittee shall calculate and record the tons of VOC and HAP emissions from both SVE units (east and west) using data collected from the SVE stack monitoring system and periodic sampling of the SVE stack gas. The record shall include both measured individual HAPs and total HAPs. These calculations and records shall begin upon startup of the SVE system and shall continue for a period of no less than 12-months to determine the actual ton per year emissions.
  - (2) The permittee shall report the available tons of HAPs (individual and total) and total VOC emissions data in the Semi-Annual reports required in Condition A109.A.
  - (3) Within 45 days of collecting 12 months of emissions data, the permittee shall submit the final ton per year VOC and HAPs emissions, the calculations, and the supporting data to AQB's Permit Program Manager that verifies the Insignificant Activity status of TA-54 MDA L SVE. This submittal shall also cite the Title V Insignificant activity number that applies to the SVE units. Within 30 days of the receipt of the submittal, the AQB will complete a review of the information and respond to the permittee in writing. Once the AQB provides a written response of this Insignificant source verification, the monitoring, calculations, and reporting of the SVE system emissions no longer applies.

Section A113 "Other Provisions" (20.2.70.302.G.3 NMAC).

In order to definitively verify the emissions, Petitioners believe that the monitoring must be continuous. We suggest that the word "continuous" be inserted in A.(1) above - "using data collected **continuously** from the SVE stack monitoring system and **continuous** sampling of the SVE stack gas."

2. Request for Activated Carbon Filtration on the SVE at TA-54.

The Permittees conducted a SVE pilot test in 2006 at this location. At that time an activated carbon filter was installed to capture the emissions. We respectfully request that the permit be modified to require activated carbon filtration of the emissions. See Petitioners' February 2, 2015 comments, pp. 3 - 6.

3. Request for Continuous Monitoring of Previously Permitted Beryllium Facilities and/or Beryllium Operations Deemed "Insignificant" Sources.

Petitioners are concerned that all beryllium sources are not being monitored. The permit requires monitoring at only four sites. For people who are sensitive to beryllium, one exposure can lead them onto the path of contracting chronic beryllium disease, or berylliosis. We are concerned that beryllium is leaving LANL and exposing the public.

Dr. Merritt summarizes her comments about beryllium (Be) exposure here. *See also* Petitioners' January 18, 2015 comments, pp. 5 - 7, and February 2, 2015 comments, pp. 6 - 7.

Beryllium (Be) exposure IS a serious occupational and public health issue. For example, an initial health screening in 1998 by the DOE of 23,000 former workers for Be has revealed an incidence of 3-4% beryllium sensitivity (BeS), and about 1% incidence of chronic beryllium disease (CBD) at the time of screening. Time exposed, route (inhaled vs. skin) and intensity of exposure are just part of the risk picture. There is a genetic component that can increase likelihood of contracting berylliosis, a chronic and progressive, irreversible respiratory illness that can lead to cancer and death.

An additional example, a Be+ machinist has a much higher incidence of conversion annually from BeS to CBD (30% or>). For scientists and engineers and the like, the incidence of conversion is about 10%.

From current scientific research it is learned that anyone who is sensitized (BeS) will on average convert to CBD at a rate of about 6-8% a year. There are some who do not go on to succumb to CBD, but many do.

Once a worker tests positive by blood beryllium lymphocyte proliferation test (BeLPT), then medical centers such as National Jewish Medical Center in Denver (nationally recognized leaders on Be disease), who partners with DOE and the Department of Labor (DOL), will use their clinical protocols on Beryllium to do more invasive testing, such as CT Scans, bronchoscopy, and/or lung lavage and biopsy, to look for classic pulmonary signs of CBD.

Monitoring is typically done about every two years, more frequently once a person acquires the disease. It is not a benign process and in fact, is often deadly.

Another side note: Of 16 nuclear weapons facilities around the country listed on DOE's web site that are part of the free Beryllium worker screening program since 1998 to present, LANL was not among them. LANL did not begin routine Be screening for their workers until 2000.

The old 1999 Occupational Safety and Health Administration ("OSHA") standards for "acceptable" Be exposure in the workplace was a permissible exposure limits ("PEL") no greater than 2 mcg/m<sup>3</sup> (micrograms per cubic meter) as a time weighted average ("TWA") over an 8 hour period. The EPA regulations limit exposure to no greater than 0.01 mcg/m<sup>3</sup> released into the air over a 30-day period (a miniscule amount). The ACGIH (Industrial Hygienists Association) recommends no more than 0.02 mcg/m<sup>3</sup> per 8 hour TWA. That is two orders of magnitude smaller than OSHA's PEL.

In light of the efforts of OSHA to revise the standards downward to those recommended by the ACGIH, we find the permit limits for beryllium to be excessive and increases the health risks to the public. Permit Table 702.A allows emissions of beryllium particulate matter - and are in units of grams per hour or 24 hour -- which are not in the same units as the OSHA and EPA standards - causing confusion for the public.

Further, the permitted Beryllium Technology Facility at TA-3-141 is allowed to use 10,000 pounds of beryllium per calendar year and process 1,000 pounds per day. See A707C "Other - Beryllium Activities - Recordkeeping Requirements. Again, this amount of beryllium in one place is excessive and increases the public health risks.

The National Jewish Medical Center of Denver, as well as other medical experts, acknowledge there IS NO safe level of Be exposure. See, <http://www.atsdr.cdc.gov> for toxfacts on Beryllium. Also in the past year or so, the National Institute for Occupational Safety and Health (NIOSH) has only recently begun publishing newsletters on the topic.

General awareness of Be causing some health problems has been known for decades. But refined knowledge of the beryllium exposure/disease process is not that old and is evolving; only in the last ~ 10 years has it been on the federal government's front burner. This includes DOE.

Monitoring of all facilities that have used beryllium must be a requirement of the permit. We respectfully request that Section A700 "Regulated Sources - Beryllium Activities" including continuous monitoring requirements similar to that required for the TA-54 SVE in order to verify Insignificant Activity 1.a and 1.b status.

The Department has determined that some of the beryllium operations listed below are Insignificant. Because of the danger of exposure, we question whether the beryllium has been cleaned up.

The beryllium facilities requiring monitoring are included in the permit action history (in descending chronological order, showing NSR and TV). Unfortunately, it is not clear whether the list covers those facilities permitted under the Title V permit (TA-3-66

(Sigma Facility), TA-3-141 (Beryllium Technology Facility), TA-35-213 (Target Fabrication Facility) and TA-55-PF4 (Plutonium Facility).

<u>Permit No.</u>	<u>Issue Date</u>	<u>Action Type</u>	<u>Description of Action (Changes)</u>
P100M2	7/16/07	Adm. Amend-ment	Retired Beryllium operations at the Chemistry and Metallurgy Research Facility at TA-3-29 [Petitioners question whether the beryllium has been cleaned up.]
2195Q	1/30/07	NPR	NPR for the construction and operation of two micro electric discharge machines used to create small holes in beryllium gaskets at LANL, TA-39-89. This application was submitted as a follow up to the Department's June 22, 2005 determination (See 2195-O) that the micro electric discharge machines required a permit.
1081-M1-R6	5/12/06	Technical Rev	Replaced permitted vacuum furnace (1081M1R3) with a CM Model 1712 electric furnace. Modifies 1081-M1.
2195O	6/22/05	Denial of NPR - Closed	The proposed research activity will use Electric Discharge Machines (EDM) to cause a static discharge and form a 50- $\mu$ m-diameter hole in a beryllium gasket submerged in dielectric fluid. The Micro EDM device meets the definition of a "Machine Shop" found at 40 CFR § 61.31(d) and therefore the proposed research activity is subject to 40 CFR Part 60, Subpart C, National Emission Standard (NESHAP) for Beryllium. Therefore, a construction permit is required. [Petitioners question whether the beryllium has been cleaned up.]
635-R1	11/25/02	Admin Rev - Closed	Surrendered Air Quality Permit 635 for the facility. Request received on Oct. 25, 2002. The final beryllium activities were conducted in the facility in Jan. 2001; thus the machine shop will be decommissioned. No further beryllium activities will occur at the facility and the permit is no longer

needed. [Petitioners question whether the beryllium has been cleaned up.]

1081-M1-R3 2/11/00 Technical Revision 1) limited Beryllium emissions based to  
Rev throughput instead of cutting / machining time; 2)  
replaced the one hour emission limit with a 24 hour  
emission limit from 40 CFR 61, subpart C, section

<u>Permit No.</u>	<u>Issue Date</u>	<u>Action Type</u>	<u>Description of Action (Changes)</u>
			61.32, i.e., 10 grams of Be per 24 hours; and 3) added a vacuum induction melt furnace operation for melting down classified shapes of machined Beryllium components. Supersedes many portions of 1081-M1 and 1081-M1-R1. [Petitioners question whether the beryllium has been cleaned up.]
634-M2	10/30/98	Modification	Modified permit for Be machining and foundry operations. Established maximum annual throughput of 10,000 lbs Be, facility-wide 24 hr and annual Be emission limits, Be Control requirements, and continuous stack monitoring for Be. Application received on September 23, 1997. This permit supersedes all portions of Permit 634-M1. [Petitioners question whether the beryllium has been cleaned up.]
1081-M1-R1	3/11/98	Revision	Required that emissions generated from weld cutting, dressing, and metallography operation be routed through H[E]PA filtration having 99.95% control efficiencies and specified the testing requirements based on accessibility to the HEPA filters. [Petitioners question whether the beryllium has been cleaned up.]
1081-M1	7/1/94	Modification	Allowed for the use of lubricant baths instead of kerosene baths in the cutting and grinding operations. The original permit only allowed for grinding to eliminate rough edges. Cutting will produce less fine particles, and therefore is both cleaner and easier to control. Supersedes all portions of 1081, except the portion requiring compliance testing. [Petitioners question whether the beryllium has been cleaned up.]
1081	11/25/92	New	Authorized beryllium machining operation in TA-

NSR 55, Building 4.

741 4/26/89 New NSR Permit to construct a beryllium processing facility within TA 3-35. Closed with 741-R1. [Petitioners question whether the beryllium has been cleaned up.]

<u>Permit No.</u>	<u>Issue Date</u>	<u>Action Type</u>	<u>Description of Action (Changes)</u>
634-M1	9/8/87	Modifi- cation	Maximum process rate is limited to 2.0 pph of beryllium and not to exceed the estimated emission rate specified in section 5 of the permit application. Supersedes permit 634. [Petitioners question whether the beryllium has been cleaned up.]
636	3/19/86	New NSR - Closed	Construction and operation of a beryllium machine shop in TA-3, building 102. LANL surrendered permit 636 on Feb. 20, 2004. Final beryllium activities were conducted at the facility in CY 2000.
635	3/19/86	New NSR - Closed	Modification of beryllium machine shop in TA-3, building 39. Closed with 635-R1.
634	3/19/86	New NSR	Construction and operation of a beryllium machine shop in TA-3, building 141.
632	12/26/85	New NSR	Construction and operation of a beryllium machine shop in TA-35, building 213.

Statement of Basis - Narrative, Title V Permit, Section 5 "History," pp. 3 - 9. An analysis of what facilities are already permitted would have to be done to pinpoint the facilities/sites that would require monitoring.

4. Request for Continuous Monitoring of Emissions from the Solar Evaporative Tanks at TA-52 and Mechanical Evaporative System at TA-50.

Similarly, emissions from the Solar Evaporative Tanks (SET) at TA-52 and the Mechanical Evaporative System (MES) at TA-50 have been determined by the Department to be "insignificant."

On September 20, 2010, the Department determined that no permit was required ("NPR") for the MES, or TA-50 Thermal Evaporation Unit. Permit No. 2195U. Id., p. 4.

The MES is described in an October 16, 2006 Administrative Review - NOE of Permit No. 2195R-27 as: "Added six, fifty thousand gallon wastewater storage tanks. These tanks store wastewater contaminated with radionuclides and potentially volatile organic compounds prior to treatment by the existing wastewater facility. Request received on Aug. 31, 2006."

On June 20, 2014 the Department determined NPR for the TA-52 SET. Permit No. 2195X. Id., p. 4.

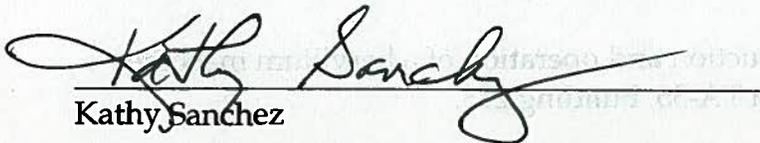
Similar to the requirements for monitoring the SVE, Petitioners respectfully request that **continuous** monitoring of emissions from the MES and the SET be permit requirements in order to verify that the emissions are, in fact, Insignificant Activity under 1.a and 1.b.

5. Request that Permittees be Required to Provide Petitioners with Reports to the Department.

Petitioners respectfully request that the Permittees provide the Petitioners with electronic copies of all reports submitted to the Department under the proposed continuous monitoring provisions. Thank you.

Respectfully submitted for the Petitioners by:

I affirm and attest to the truth of the information contained herein.



Kathy Sanchez

Kathy Sanchez, Environmental Health and Justice Program Manager and  
Gathering for Mother Earth

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**Air Quality Bureau**  
**TITLE V OPERATING PERMIT**  
Issued under 20.2.70 NMAC

Certified Mail No: 7013 0600 0001 8695 2527

Return Receipt Requested

<b>Operating Permit No:</b>	P100-R2
<b>Facility Name:</b>	Los Alamos National Laboratory
<b>Facility Owner:</b>	U.S. Department of Energy, National Nuclear Security Administration
<b>Permittee Operator Name:</b>	Los Alamos National Security, LLC
<b>Mailing Address:</b>	P.O. Box 1663, MS J978 Los Alamos, New Mexico 87545
<b>TEMPO/IDEA ID No:</b>	856-PRT20130004
<b>AIRS No:</b>	35-028-0001
<b>Permitting Action:</b>	Title V Renewal
<b>Source Classification:</b>	Title V Major
<b>Facility Location:</b>	35° 51' 29.6" N, 106° 17' 44.9" W
<b>County:</b>	Los Alamos
<b>Air Quality Bureau Contact:</b>	Daren K. Zigich
<b>Main AQB Phone No.</b>	(505) 476-4300
<b>TV Permit Expiration Date:</b>	<u>FEB 27 2020</u>
<b>TV Renewal Application Due:</b>	<u>FEB 27 2019</u>

Richard L. Goodyear, PE  
Bureau Chief  
Air Quality Bureau

FEB 27 2015  
Date

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**PART A FACILITY SPECIFIC REQUIREMENTS****A100 Introduction**

- A. Not Applicable

**A101 Permit Duration (expiration)**

- A. The term of this permit is five (5) years. It will expire five years from the date of issuance. Application for renewal of this permit is due twelve (12) months prior to the date of expiration. (20.2.70.300.B.2 and 302.B NMAC)
- B. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate beyond the expiration date, provided that a timely renewal application is submitted no later than twelve (12) months prior to the expiration date. (20.2.70.400.D NMAC)

**A102 Facility: Description**

- A. The Laboratory conducts research and development to fulfill the missions of ensuring the safety and reliability of the U.S. nuclear deterrent, reducing the global threat of weapons of mass destruction, and solving national problems in energy, environment, infrastructure and health security. Regulated air pollutant emissions from LANL are primarily associated with mission support sources, such as boilers for electricity and steam generation, asphalt production for road repair, and standby generators to provide emergency power. Miscellaneous chemical usage throughout the Laboratory results in emissions of volatile organic compounds and hazardous air pollutants.
- B. This Laboratory is located at UTM Zone 13, UTMH 380.790 km, UTMV 3970.800 km, in and adjacent to Los Alamos, New Mexico in Los Alamos County. These coordinates are in north central New Mexico, approximately 60 miles north of Albuquerque and 25 miles northwest of Santa Fe. The facility borders the community of Los Alamos to the north and the community of White Rock toward the southeast. The surrounding land is largely undeveloped, with large tracts of land being held by Santa Fe National Forest, Bureau of Land Management, Bandelier National Monument, and San Ildefonso Pueblo.
- C. [Table 102.A](#) and [Table 102.B](#) show the total potential emissions from this facility for information only, not an enforceable condition, excluding insignificant or trivial activities.

**Table 102.A: Total Potential Pollutant Emissions from Entire Facility**

Pollutant	Emissions (tons per year)
Nitrogen Oxides (NO <sub>x</sub> )	245.0
Carbon Monoxide (CO)	225.0
Volatile Organic Compounds (VOC)	200.0
Sulfur Dioxide (SO <sub>2</sub> )	150.0
Total Particulate Matter (TSP)	120.0
Particulate Matter less than 10 microns (PM <sub>10</sub> )	120.0
Particulate Matter less than 2.5 microns (PM <sub>2.5</sub> )	120.0
Greenhouse Gas (GHG) (CO <sub>2</sub> e)	>75,000

**Table 102.B: Total Potential \*HAPs that exceed 1.0 tons per year**

Pollutant	Emissions (tons per year)
Individual HAP	8.0
Total HAPs	24.0

**A103 Facility: Applicable Regulations and Non-Applicable Regulations**

- A. The permittee shall comply with all applicable sections of the requirements listed in Table 103.A.

**Table 103.A: Applicable Requirements**

Applicable Requirements	Federally Enforceable	Unit No.
NSR Permit Nos: 632, 634-M2, 1081-M1, 1081-M1-R1, 1081-M1-R3, 1081-M1-R5, 1081-M1-R6, 2195B-M2, 2195F-R4, GCP-3-2195G, 2195H, 2195N-R2 and 2195P-R2	X	As referenced in this permit.
20.2.7 NMAC Excess Emissions	X	Entire Facility
20.2.11 NMAC Asphalt Process Equipment	X	TA-60-BDM
20.2.33 NMAC Gas Burning Equipment – Nitrogen Dioxide	X	TA-3-22-1, TA-3-22-2, TA3-22-3
20.2.34 NMAC Oil Burning Equipment – Nitrogen Dioxide	X	TA-3-22-1, TA-3-22-2, TA3-22-3
20.2.60 NMAC Open Burning	X	Entire Facility
20.2.61 NMAC Smoke and Visible Emissions	X	All stationary combustion sources (except TA-60-BDM)
20.2.65 NMAC Smoke Management	X	Entire Facility

<b>Applicable Requirements</b>	<b>Federally Enforceable</b>	<b>Unit No.</b>
20.2.70 NMAC Operating Permits	X	Entire Facility
20.2.71 NMAC Operating Permit Emission Fees	X	Entire Facility
20.2.72 NMAC Construction Permits	X	As referenced in NSR Permit Nos. 632, 634-M2, 1081-M1, 1081-M1-R1, 1081-M1-R3, 1081-M1-R5, 1081-M1-R6, 2195B-M2, 2195F-R4, GCP-3-2195G, 2195H, 2195N, 2195N-R1, and 2195P-R2
20.2.73 NMAC Notice of Intent and Emissions Inventory Requirements	X	Entire Facility
20.2.77 NMAC New Source Performance Standards	X	Sources subject to 40 CFR 60
20.2.78 NMAC NESHAPs	X	Sources subject to 40 CFR 61
20.2.82 NMAC MACT Standards for Source Categories of HAPS	X	Sources subject to 40 CFR 63
40 CFR 50 National Ambient Air Quality Standards	X	Entire Facility
40 CFR 60, Subpart A, General Provisions	X	All sources subject to any NSPS Subpart
40 CFR 60, Subpart Dc, NSPS for Small Industrial-Commercial-Institutional Steam Generating Units	X	TA-55-6-BHW-1, TA-55-6-BHW-2, RLUOB-BHW-1 through RLUOB-BHW-4
40 CFR 60, Subpart I, NSPS for Hot Mix Asphalt Facilities	X	TA-60-BDM
40 CFR 60, Subpart GG, NSPS for Stationary Gas Turbines	X	TA-3-22 CT-1
40 CFR 60, Subpart III, NSPS for Stationary Compression Ignition Reciprocating Internal Combustion Engines	X	RLUOB-GEN-1 through RLUOB-GEN-3, TA-48-GEN-1, TA-55-GEN-1, TA-55-GEN-2 and TA-55-GEN-3
40 CFR 61, Subpart A, General Provisions	X	All sources subject to any NESHAPs Subpart
40 CFR 61, Subpart C, NESHAP for Beryllium	X	TA-3-141, TA-35-213, TA-55-PF4, TA-3-66

Applicable Requirements	Federally Enforceable	Unit No.
40 CFR 61, Subpart H, NESHAP for Radionuclides other than Radon from DOE Facilities	X	Entire Facility
40 CFR 61, Subpart M, NESHAP for Asbestos	X	Entire Facility
40 CFR 61, Subpart Q, NESHAP for Radon Emissions from DOE Facilities	X	Entire Facility
40 CFR 63, Subpart A, General Provisions	X	All sources subject to any MACT Subpart
40 CFR 63, Subpart T, MACT for Halogenated Solvent Cleaning	X	TA-55-DG-1
40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners (MVAC)	X	Entire Facility
40 CFR 82, Subpart F, Recycling and Emission Reduction	X	Entire Facility
40 CFR 82, Subpart H, Halon Emissions Reduction	X	Entire Facility
40 CFR 82, Subpart I, Ban on Refrigeration and Air Conditioning Appliances Containing HCFCs.	X	Entire Facility

- B. **Table 103.B** lists requirements that are not applicable to this facility. This table only includes those requirements cited in the application as applicable and determined by the Department to be not applicable, or the Department determined that the requirement does not impose any conditions on a regulated piece of equipment.

**Table 103.B: Non-Applicable Requirements**

Non-Applicable Requirements	(1)	(2)	Justification For Non-Applicability
20.2.75 NMAC Construction Permit Fees	X		

1. Not Applicable For This Facility: No existing or planned operation/activity at this facility triggers the applicability of these requirements.
2. No Requirements: Although these regulations may apply, they do not impose any specific requirements on the operation of the facility as described in this permit.

- C. Compliance with the terms and conditions of this permit regarding source emissions and operation that were included in NSR permits 632, 634, 1081, 2195B, 2195F, 2195H, 2195N, and 2195P demonstrate compliance with national ambient air quality standards specified at 40 CFR 50, which were applicable at the time air dispersion modeling was performed for those NSR Permits.

**A104 Facility: Regulated Sources**

- A. Source category specific Regulated Equipment Tables are included in sections A600 through A1400 under the Equipment Specific Requirements part of this permit. The

Regulated Equipment Tables list all of the process equipment authorized for this facility. Emission units that were identified as insignificant or trivial activities (as defined in 20.2.70.7 NMAC) and equipment not regulated pursuant to the Act are not included.

#### **A105 Facility: Control Equipment**

- A. Source category specific Control Equipment Tables are included in sections A601 through A1401 under the Equipment Specific Requirements part of this permit. The Control Equipment Tables list all the pollution control equipment required for this facility. Each emission point is identified by the same number that was assigned to it in the permit application.

#### **A106 Facility: Allowable Emissions**

- A. Source category specific Allowable Emissions are established in sections A602 through A1402 under the Equipment Specific Requirements part of this permit. Table 106.A below shows a summary of these emission limits, which are subject to permit fees. (40 CFR 50; Paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC and NSR Permit Nos. 632, 634-M2, 1081-M1, 1081-M1-R1, 1081-M1-R3, 1081-M1-R5, 1081-M1-R6, 2195B-M2, 2195F-R4, GCP-3-2195G, 2195H, 2195N-R2, and 2195P-R2).

**Table 106.A: Facility: Allowable Emissions per Source Category**

Source Category (Section No.)	<sup>1</sup> NO <sub>x</sub> tpy	CO tpy	VOC tpy	SO <sub>2</sub> tpy	TSP tpy	PM <sub>10</sub> tpy	PM <sub>2.5</sub> tpy
Asphalt Production (A600)	50.0 <sup>5</sup>	30.0 <sup>5</sup>	50.0 <sup>5</sup>	50.0	50.0 <sup>5</sup>	. <sup>2</sup>	-
Beryllium Activities (A700)	-	-	-	-	-	-	-
External Combustion (A800)	80.0	80.0	50.0	50.0	50.0	50.0	1.6 <sup>3</sup>
Chemical Usage (A900)	-	-	* <sup>4</sup>	-	-	-	-
Degreasers (A1000)	-	-	*	-	-	-	-
Internal Combustion (A1100)	20.85	16.8	0.5	2.66	-	-	-
Data Disintegrator (A1200)	-	-	-	-	9.9	9.9	-
Power Plant (A1300)	90.8	93.7	4.3	9.1	9.4	9.2	9.0
Open Burning (A1400)	-	-	-	-	-	-	-

1 Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO<sub>2</sub>

2 "-" indicates the application represented that emissions of this pollutant are not expected or that allowable emission limits have not been previously established for this pollutant and source category.

3 This PM<sub>2.5</sub> total represents the RLUOB boilers only; PM<sub>2.5</sub> emission limits have not been established for any other external combustion sources.

- 4 “\*” indicates the application represented that emissions of this pollutant are expected and are included in the facility-wide allowable emissions limit established in Condition A106.B. Annual VOC emission limits for these individual source categories have not been established.
- 5 These are voluntary emission limits that are less than the applicable limits in the Asphalt production permit, GCP-3-2195G. Limits are taken to reduce total emission in Table 106.A to below the facility-wide allowable emissions in Table 106.B

B. Facility-wide emissions for criteria pollutants, VOC, and HAPs from all emission units, combined, shall not exceed the limits in Table 106.B.

**Table 106.B: Facility-Wide Allowable Emissions<sup>1</sup>**

Facility-Wide	<sup>2</sup> NO <sub>x</sub> tpy	CO tpy	VOC tpy	SO <sub>2</sub> tpy	TSP tpy	PM <sub>10</sub> tpy	PM <sub>2.5</sub> tpy	Any Individual HAP	Total HAPs
Sum of emissions from all sources	245.0	225.0	200.0	150.0	120.0	120.0	120.0	8.0	24.0

- 1 Title V annual fee assessments are based on the allowable facility-wide emission limits in Table 106.B.
- 2 Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO<sub>2</sub>

C. The permittee shall maintain records of the Facility-Wide annual emissions totals for each pollutant listed in Table 106.B. The record shall include estimated actual emissions from all sources on a semiannual and calendar year basis.

**A107 Facility: Allowable Startup, Shutdown, & Maintenance and Malfunction Emissions**

- A. Separate allowable startup, shutdown, and maintenance (SSM) emission limits are not required for this facility since the SSM emissions are predicted to be less than the limits established in Table 106.A. The permittee shall maintain records in accordance with Condition B109.E.

**A108 Facility: Hours of Operation**

- A. The operating hours for this facility are established under each source category in sections A604 through A1404 under the Equipment Specific Requirements part of this permit. As applicable, monitoring, recordkeeping, and reporting provisions are specified to demonstrate compliance with allowable hours of operation that are also established under each source category in sections A604 through A1404.

**A109 Facility: Reporting Schedules**

- A. A Semi-Annual Report of monitoring activities is due within 45 days following the end of every 6-month reporting period. The six month reporting periods start on January 1<sup>st</sup> and July 1<sup>st</sup> of each year.
- B. A Semi-Annual Report of actual emissions from all permitted sources unless otherwise specified in this permit is due within 90 days following the end of every 6-

month reporting period as defined at Condition A109.A. Emission estimates of pollutants NO<sub>x</sub>, CO, SO<sub>2</sub>, VOC, TSP, PM<sub>10</sub>, and PM<sub>2.5</sub> shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. Emission estimates shall not include Insignificant or Trivial Activities, except that facility-wide emissions from all natural gas combustion sources shall be estimated. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits at Table 106.B.

- C. The Annual Compliance Certification Report is due within 30 days of the end of every 12-month reporting period. The 12-month reporting period starts on January 1<sup>st</sup> of each year.
- D. The permittee shall post start-up notifications required by 20.2.72.212(B) NMAC and 40 CFR Parts 60, 61 or 63, to the permittee's Electronic Public Reading Room at <http://epr.lanl.gov/oppie/service>.

**A110 Facility: Fuel Sulfur Requirements**

- A. Sulfur requirements are defined by source category, as applicable, in sections A605 through A1405 under the Equipment Specific Requirements part of this permit.

**A111 Facility: 20.2.61 NMAC Opacity**

- A. Opacity requirements are defined by source category, as applicable, in sections A606 through A1406 under the Equipment Specific Requirements part of this permit.

**A112 Alternative Operating Scenario - Not required**

**A113 Other Provisions  
(20.2.70.302.G.3 NMAC)**

- A. To verify Insignificant Activity 1.a and 1.b status of the TA-54 MDA L Soil Vapor Extraction System (SVE), the permittee shall perform the following actions.
  - (1) At least once every 3 months, the permittee shall calculate and record the tons of VOC and HAP emissions from both SVE units (east and west) using data collected from the SVE stack monitoring system and periodic sampling of the SVE stack gas. The record shall include both measured individual HAPs and total HAPs. These calculations and records shall begin upon startup of the SVE system and shall continue for a period of no less than 12-months to determine the actual ton per year emissions.

- (2) The permittee shall report the available tons of HAPs (individual and total) and total VOC emissions data in the Semi-Annual reports required in Condition A109.A.
- (3) Within 45 days of collecting 12 months of emissions data, the permittee shall submit the final ton per year VOC and HAPs emissions, the calculations, and the supporting data to AQB's Permit Programs Manager that verifies the Insignificant Activity status of TA-54 MDA L SVE. This submittal shall also cite the Title V Insignificant activity number that applies to the SVE units. Within 30 days of receipt of the submittal, the AQB will complete a review of the information and respond to the permittee in writing. Once AQB provides a written response of this Insignificant source verification, the monitoring, calculations, and reporting of the SVE system emissions no longer applies.

**A114 Reducing Facility Emissions - Not required**

**A115 Radionuclide NESHAP**

- A. The permittee shall comply with the requirements of 40 CFR 61, Subpart H – NESHAP for Radionuclides other than Radon from DOE Facilities.
- B. The permittee shall comply with the requirements of 40 CFR 61, Subpart Q – NESHAP for Radon Emissions from DOE Facilities.

**A116 Asbestos NESHAP**

- A. The permittee shall comply with the requirements of 40 CFR 61, Subpart M-NESHAP for Asbestos.

**A117 Stratospheric Ozone**

- A. The permittee shall comply with the standards for servicing of motor vehicle air conditioners pursuant to 40 CFR 82, Subpart B.
- B. The permittee shall comply with the standards for servicing and maintaining and disposing equipment containing refrigerants pursuant to 40 CFR, Subpart F.
- C. The permittee shall comply with the standards for servicing and maintaining equipment that contains halons pursuant to 40 CFR 82, Subpart H.
- D. The permittee shall comply with the standards on the ban on refrigeration and air-conditioning appliances containing HCFCs pursuant to 40 CFR 82, Subpart I.

**EQUIPMENT SPECIFIC REQUIREMENTS****A200 Oil and Gas Industry – Not Required****A300 Construction Industry – Not Required****A400 Power Generation Industry – Not Required****A500 Solid Waste Disposal (Landfills) Industry – Not Required****ASPHALT PRODUCTION****A600 Regulated Sources – Asphalt Production**

- A. Table 600.A lists all of the process equipment authorized for this source category. Emission units that were identified as insignificant or trivial activities (as defined in 20.2.70.7 NMAC) and equipment not regulated pursuant to the Act are not included.

**Table 600.A: Regulated Sources List**

Unit No.	Source Description/ Location	Make Model	Serial No.	Capacity	Manufacture Date
TA-60-BDM	Hot Mix Asphalt Plant, TA-60	BDM Engineering TM2000	unknown	60 tph	After 6/11/1973

**A601 Control Equipment – Asphalt Production**

- A. Table 601.A lists all of the pollution control equipment required for the applicable regulated equipment in this source category. Each emission point is identified by the same number that was assigned to it in the permit application.

**Table 601.A: Control Equipment List**

Control Equipment Unit No.	Control Description	Pollutant being controlled	Control for Unit No. <sup>1</sup>
TA-60-BDM	Drum Dryer Cyclone Baghouse 99.97% efficiency	TSP	TA-60-BDM

<sup>1</sup> Control for unit number refers to a unit number from the Regulated Sources List

**A602 Emission Limits – Asphalt Production**

- A. Table 602.A lists the emission units, and their allowable emission limits. (40 CFR 50; Paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC; 20.2.11 NMAC; 40 CFR 60, Subpart I; NSR Permit GCP-3-2195G)

**Table 602.A: Allowable Emissions**

Unit No.	NO <sub>x</sub> tpy	SO <sub>2</sub> tpy	PM	CO tpy	VOC tpy
TA-60-BDM (dryer stack only)	50.0 <sup>1</sup>	50.0	0.04 gr/dscf 33.8 lb/hr 50.0 <sup>1</sup> tpy	30.0 <sup>1</sup>	50.0 <sup>1</sup>

<sup>1</sup> Voluntary emission limits that are less than the applicable limits in GCP-3-2195G. Limits taken to reduce total emission in Table 106.A to below the facility-wide allowable emissions in Table 106.B

**A603 Applicable Requirements – Asphalt Production**

- A. The permittee shall comply with all applicable sections of the requirements listed in Table 603.A.

**Table 603.A: Applicable Requirements**

Applicable Requirements	Federally Enforceable	Unit No.
NSR Permit GCP-3-2195G	X	TA-60-BDM
20.2.11 NMAC Asphalt Process Equipment	X	TA-60-BDM
40 CFR 60, Subpart A	X	TA-60-BDM
40 CFR 60, Subpart I	X	TA-60-BDM

**A604 Operational Limitations – Asphalt Production**

- A. The permittee shall meet the requirements of NSR permit no. GCP-3-2195G, including the requirements in this permit.
- B. The equipment in this source category is authorized to operate during those daylight hours occurring between one-half hour after sunrise and through one-half hour before sunset each day of the year. Annual hours of operation are limited to 4380 hrs/y. This limitation on operating hours does not apply to the use of the hot oil heater or the loading and/or hauling of asphalt products or materials. Monitoring, recordkeeping, and reporting for operational hours shall be conducted according to NSR Permit GCP-3-2195G.

**A605 Fuel Requirements – Asphalt Production**

- A. Asphalt Plant Combustion Sources

<b>Requirement:</b> Combustion sources located at the asphalt plant shall combust only those fuels allowed under condition III.A.3 of the <b>NSR Permit GCP-3-2195G</b> .
<b>Monitoring:</b> N/A
<b>Recordkeeping:</b> The permittee shall meet the recordkeeping requirements of GCP-3 and maintain records in accordance with Section B109.
<b>Reporting:</b> The permittee shall submit reports described in Section A109 and in accordance with Section B110.

**A606 20.2.61 NMAC Opacity – Asphalt Production – Not Required**

**A607 Asphalt Production – Other**

**A. Asphalt Plant Baghouse – Differential Pressure**

<b>Requirement:</b> The baghouse shall be equipped with a device to continually measure the pressure drop across the baghouse.
<b>Monitoring:</b> The permittee shall monitor the differential pressure (inches of water) across the filters by the use of a differential pressure gauge. Pressure gauge readings and the time period the rotary dryer drum operates shall be recorded by a datalogger each time the rotary dryer drum is operating. The pressure data shall confirm whether the filter(s) are operating within the unit's specifications.
<b>Recordkeeping:</b> The permittee shall manually record the baghouse pressure drop readings at least once each day the rotary drum dryer operates and maintain records of all baghouse differential pressure readings in accordance with Section B109.
<b>Reporting:</b> The permittee shall submit reports described in Section A109 and in accordance with Section B110.

**B. Asphalt Plant Baghouse - Stack Height (Unit TA-60-BDM)**

<b>Requirement:</b> The rotary dryer/baghouse exhaust stack shall be no less than 10 meters in height.
<b>Monitoring:</b> N/A
<b>Recordkeeping:</b> The permittee shall maintain records in accordance with Section B109.
<b>Reporting:</b> The permittee shall submit reports described in Section A109 and in accordance with Section B110.

**C. Asphalt Plant Baghouse – Opacity**

<b>Requirement:</b> Visible emissions from the rotary dryer/baghouse exhaust stack shall not exhibit an opacity of 20% or greater averaged over a (6) minute period.
<b>Monitoring:</b> During periods of drum dryer operation, the permittee shall perform six (6) minute opacity readings on the rotary dryer/baghouse stack. Opacity readings shall be performed at least once per month during any month the drum dryer operates. The observations shall be conducted according to 40 CFR 60, Appendix A, Method 9.
<b>Recordkeeping:</b> The permittee shall maintain records of all opacity observations and in accordance with Section B109.
<b>Reporting:</b> The permittee shall submit reports described in Section A109 and in accordance

with Section B110.
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**D. Asphalt Plant Baghouse – Fines Cleanout**

<b>Requirement:</b> The permittee shall sequester or remove particulates collected by the control equipment to prevent wind-blown particulate emissions. Recycled baghouse fines shall be recycled into the drum mixer via a closed-loop system.
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<b>Monitoring:</b> N/A
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<b>Recordkeeping:</b> The permittee shall maintain records in accordance with Section B109.
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<b>Reporting:</b> The permittee shall submit reports described in Section A109 and in accordance with Section B110.
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**E. Asphalt Plant Production Rate (Unit TA-60-BDM)**

<b>Requirement:</b> To avoid Compliance Assurance Monitoring (CAM) requirements under 40 CFR 64, the asphalt plant shall limit uncontrolled potential PM emissions by limiting asphalt production to less than or equal to 6,000 tons per year.
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<b>Monitoring:</b> The permittee shall monitor the total daily production rate.
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<b>Recordkeeping:</b> The permittee shall calculate a weekly rolling, 12-month total production rate and maintain records in accordance with Section B109.
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<b>Reporting:</b> The permittee shall submit reports described in Section A109 and in accordance with Section B110.
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**F. Asphalt Plant Operations – General**

<b>Requirement:</b> The permittee shall:
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- |   |
|---|
| <ol style="list-style-type: none"> <li>1) Install, operate, and maintain equipment in accordance with standard operating procedures, and</li> <li>2) equip and operate the asphalt processing equipment such as screens, conveyor belts, and conveyor transfer points with dust control systems to control particulate matter emissions, and</li> <li>3) operate the Plant in accordance with <b>NSR Permit GCP-3-2195G, Section III, A, B, C, D, E, F, and H.</b></li> <li>4) Ensure that no visible emissions from the facility are observed crossing the perimeter of the restricted area for no more than 5 minutes during any 2 consecutive hours during facility operations.</li> </ol> |
|---|

<b>Monitoring:</b> The permittee shall perform all monitoring required under <b>NSR Permit GCP-3-2195G.</b>
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<b>Recordkeeping:</b> The permittee shall maintain records of all standard operating procedures, records of all maintenance and/or replacement of dust control systems, and all records required under <b>NSR Permit GCP-3-2195G, Section IV.B,</b> and including records of actual hours of operation, records of all required monitoring, daily and weekly total asphalt production and the weekly rolling 12 month total production, number of haul truck trips daily including materials delivery and product, frequency of haul road sweeping, and copies of the applicant's proposed maintenance requirements and records demonstrating conformance with said requirements. The permittee shall maintain records of all compliance test results for total suspended particulates (TSP), particulate matter (PM10), nitrogen oxides, carbon monoxide, and records
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of all opacity/visible emissions observations performed.

**Reporting:** The permittee shall submit reports described in Section A109 and in accordance with Section B110.

#### G. Asphalt Plant Fugitive Dust

**Requirement:** Fugitive dust emissions from asphalt processing equipment, including the system used to recycle fabric filter fines, shall exhibit no more than five (5) minutes of visible emissions during any two consecutive hours. This condition does not apply to fugitive dust emissions from other support operations such as storage piles, front end loaders, or materials handling around the asphalt process equipment.

**Monitoring:** The permittee shall perform a Method 22 test at least once per month on all screens, conveyor drop points, and hoppers during the months the asphalt plant operates. The duration of the test shall be a minimum of ten (10) minutes. If visible emissions are observed for more than two (2) minutes, the Method 22 test shall continue for two (2) hours or until scheduled operation of the plant ends.

**Recordkeeping:** The permittee shall maintain records of all equipment standard operating procedures, records of all maintenance and/or replacement of dust control systems, results of all visible emissions observations, and all records required under **NSR Permit GCP-3-2195G**.

**Reporting:** The permittee shall submit reports described in Section A109 and in accordance with Section B110.

### **BERYLLIUM ACTIVITIES**

#### **A700 Regulated Sources – Beryllium Activities**

- A. Table 700.A lists all of the process equipment authorized for this source category. Emission units that were identified as insignificant or trivial activities (as defined in 20.2.70.7 NMAC) and equipment not regulated pursuant to the Act are not included.

**Table 700.A: Regulated Sources List**

Unit No.	Location/ Building	Process Description
TA-3-66	TA-3-66	Sigma Facility - Electroplating and Chemical Milling; Metallographic Operations; and Machining and Arc Melting/Casting
TA-3-141	TA-3-141	Beryllium Technology Facility
TA-35-213	TA-35-213	Target Fabrication Facility
TA-55-PF4	TA-55-PF4	Plutonium Facility

#### **A701 Control Equipment – Beryllium Activities**

- A. Table 701.A lists all of the pollution control equipment required for the applicable regulated equipment in this source category. Each emission point is identified by the same number that was assigned to it in the permit application.

**Table 701.A: Control Equipment List**

Control Equipment Unit No. <sup>1</sup>	Location/ Building	Process Description	Pollutant being controlled	Type of Control
TA-3-66	TA-3-66	Sigma Facility Electroplating and Chemical Milling and Metallographic Operations	Beryllium Particulate Matter	Aqueous Solution or Lubricant Bath
		Sigma Facility Machining and Arc Melting/Casting	Beryllium Particulate Matter	HEPA Filter 99.95% Efficiency
TA-3-141	TA-3-141	Beryllium Technology Facility	Beryllium Particulate Matter	Lubricating Bath/Cartridge Filtration System/HEPA Filter 99.95% Efficiency
TA-35-213	TA-35-213	Target Fabrication Facility	Beryllium Particulate Matter	Pre-Filter 48% Efficiency, HEPA Filter 99.95% Efficiency
TA-55-PF4	TA-55-PF4	Plutonium Facility	Beryllium and Aluminum Particulate Matter	4-Stage HEPA Filter 99.95% Efficiency

<sup>1</sup> Control for unit number refers to a unit number from the Regulated Sources List

#### **A702 Emission Limits – Beryllium Activities**

- A. Table 702.A lists the emission units, and their allowable emission limits. (40 CFR 61, Subpart C; NSR Permits 632; 634-M2; 1081-M1, 1081M1-R1, 1081-M1-R3, 1081-M1-R5, and 1081-M1-R6)

**Table 702.A: Allowable Emissions**

Source	Beryllium Particulate Matter	Aluminum Particulate Matter
Sigma Facility TA-3-66	10 gm <sup>1</sup> /24 hr	N/A
Beryllium Technology Facility TA-3-141	0.35 gm/24 hr 3.5 gm/yr	N/A
Target Fabrication Facility TA-35-213	1.8 x 10 <sup>-04</sup> gm/hr 0.36 gm/yr	N/A
Plutonium Facility TA-55-PF-4 Machining Operation	0.12 gm/24 hr 2.99 gm/yr	0.12 gm/24 hr 2.99 gm/y

Source	Beryllium Particulate Matter	Aluminum Particulate Matter
Plutonium Facility TA-55-PF-4 Foundry Operation	3.49 x 10 <sup>-05</sup> gm/24 hr 8.73 x 10 <sup>-04</sup> gm/yr	3.49 x 10 <sup>-05</sup> gm/24 hr 8.73 x 10 <sup>-04</sup> gm/y

1 gm = gram

### A703 Applicable Requirements – Beryllium Activities

- A. The permittee shall comply with all applicable sections of the requirements listed in Table 703.A.

**Table 703.A: Applicable Requirements**

Applicable Requirements	Federally Enforceable	Unit No.
NSR Permits 632; 634-M2; 1081-M1, 1081M1-R1, 1081-M1-R3, 1081-M1-R5, and 1081-M1-R6	X	All Beryllium Sources Listed in Table 700.A per applicable permit
40 CFR 61, Subpart C	X	All Beryllium Sources Listed in Table 700.A

### A704 Operational Limitations – Beryllium Activities

- A. The equipment/operations in this source category are authorized to operate any time during the year. No monitoring, recordkeeping, or reporting requirements are required to demonstrate compliance with its hours of operation.

### A705 Fuel Sulfur Requirements – Beryllium Activities – Not Required

### A706 20.2.61 NMAC Opacity – Beryllium Activities – Not Required

### A707 Other – Beryllium Activities

- A. Operational Requirements – Beryllium Activities

Source	Operating Requirements	Process Limits	Control Equipment Requirements
Sigma Facility TA-3-66	Beryllium operations will consist of registered metallographic operations, electroplating /chemical milling, and relocated machining, and arc	None	Metallographic operations and electroplating /chemical milling operations shall be conducted in aqueous solution or lubricant bath.  Emissions from machining and arc melting/casting operations shall be exhausted through a HEPA filtration system prior to entering the atmosphere.

	melting/casting sources.		
Beryllium Technology Facility TA-3-141	The continuous emission monitor will be maintained in accordance with the Laboratory's quality program.	Beryllium processed by the facility will not exceed 10,000 pounds per calendar year. Beryllium processed by the facility will not exceed 1000 pounds per day.	All processes shall be exhausted through a HEPA filtration system prior to entering the atmosphere.  Powder operations, other than closed glovebox operations, and machining operations, other than the processes used in metallographic preparation shall be exhausted through a cartridge filtration system then through the HEPA filtration system.  Metallographic preparation activities shall be conducted in lubricating baths or equivalent. <b>(NSR permit 634-M2)</b>
Target Fabrication Facility TA-35-213	Beryllium operations will consist of only beryllium machining and associated cleanup activities.	None	All processes shall be exhausted through a HEPA filtration system prior to entering the atmosphere.
Plutonium Facility TA-55-PF4	Regulated beryllium activities will be ducted through the pollution control equipment and out the north or south stack of PF-4.  <b>(NSR Permit 1081-M1-R3, Specific Condition 1.b., partial, revised)</b>  The electric furnace shall be enclosed in a glove box, have a maximum operating temperature of 1600 degrees centigrade, and an inside volume space less than 1.1 cubic feet. <b>(NSR Permit 1081-M1-R6, Specific Condition 1.d.,</b>	44 pounds of beryllium (20 kg) in any 24 hour period;  1100 pounds/year (500 kg/year) using a rolling total.  <b>(NSR Permit 1081-M1-R3, Specific Condition 1.c.)</b>	Weld cutting, weld dressing, metallography, and electric furnace operations shall be controlled with 4 HEPA filters with a control efficiency of 99.95% each.  <b>(NSR Permit 1081-M1-R1, Condition 3, partial, revised)</b>  The non-accessible filters shall be replaced when the pressure drop across the filter either falls to levels indicating filter breakthrough or increases to levels indicative of excessive loading.  <b>(NSR Permit 1081-M1-R1, Condition 3, partial, revised)</b>

	partial, revised)		
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**B. Emissions Monitoring Requirements – Beryllium Activities**

Source	Monitoring Requirements
Sigma Facility TA-3-66	A log shall be maintained during operations, which shows the number of metallographic specimens used in the metallographic operation and the weight or volume of Be samples processed in the electroplating/chemical milling, machining, and arc melting/casting operations.
Beryllium Technology Facility TA-3-141	Facility exhaust stack will be equipped with a continuous emission monitor used to measure beryllium emissions.  Cartridge and HEPA filters shall be equipped with differential pressure gauges that measure the differential pressure across the cartridge and HEPA filters while the exhaust fans are in operation. (NSR permit 634-M2)
Target Fabrication Facility TA-35-213	Records of the stack emission test results (see Condition 2 of NSR Permit No. 632) and other data needed to determine total emissions shall be retained at the source and made available for inspection by the Department.
Plutonium Facility TA-55-PF4	The HEPA filtration systems shall be equipped with a differential pressure gauge that measures the differential pressure (inches of water) across the HEPA filters while the exhaust fans are in operation.  (NSR Permit 1081-M1-R3, Condition 11)  Control efficiency shall be verified by daily HEPA filter pressure drop tests and annual HEPA filter challenge tests of accessible filters.  (NSR Permit 1081-M1-R1, Condition 3, partial, revised)  The furnace temperature shall be continuously monitored and the flow rate from the glove box containing the furnace shall be measured once during each metal melt operation.  (NSR Permit 1081-M1-R6, Condition 11, revised)

**C. Recordkeeping Requirements – Beryllium Activities**

Source	Recordkeeping Requirements
Sigma Facility TA-3-66	Recordkeeping for this source is specified in Condition A707.B.
Beryllium Technology Facility TA-3-141	Generate and maintain beryllium inventory records to demonstrate compliance with the 10,000 pounds of beryllium per calendar year and the 1000 pounds of beryllium per day processing limit.  Record pressure drop across the cartridge and HEPA filters once per day that the exhaust

	<p>fans are in operation and the facility is occupied.                  Record control equipment maintenance and repair activities. (NSR permit 634-M2)</p>
<p>Target                  Fabrication                  Facility                  TA-35-213</p>	<p>Recordkeeping for this source is specified in Condition A707.B.</p>
<p>Plutonium                  Facility                  TA-55-PF4</p>	<p>Stack emission test results and facility operating parameters including a daily record of the pressure drop measured across each appropriate HEPA plenum filtration stage, when the exhaust fans are operating.</p> <p>(NSR Permit 1081-M1-R3, Condition 9, partial, revised)</p> <p>A copy of the annual HEPA test, a log of the daily pressure drop readings and a control equipment maintenance log shall be kept. This documentation shall be provided upon request.</p> <p>(NSR Permit 1081-M1-R1, Condition 3, partial, revised)</p> <p>A log of the filter replacement shall be kept and shall be made available to the Department personnel upon request.</p> <p>(NSR Permit 1081-M1-R1, Condition 3, partial, revised)</p> <p>The permittee shall keep records of the number and weight of classified parts processed during a 24-hour period and year using a rolling total. Records shall be made available to properly cleared Department personnel upon request.</p> <p>(NSR Permit 1081-M1-R3, Condition 9, partial, revised)</p> <p>The permittee shall for each use of the furnace record the following operating parameters: metal type, theoretical melting point of the metal, metal melt duration once melting is commenced, maximum furnace temperature and glove box flow rate.</p> <p>(NSR Permit 1081-M1-R6, Condition 9, partial, revised)</p> <p>A record of the furnace's internal volume shall be maintained at the facility.</p> <p>(NSR Permit 1081-M1-R6, Condition 9, partial, revised)</p>

**D. Reporting Requirements – Beryllium Activities**

Source	Reporting Requirements
<p>Sigma Facility                  TA-3-66</p>	<p>The permittee shall submit reports described in Section A109 and in accordance with Section B110.</p>
<p>Beryllium                  Technology                  Facility                  TA-3-141</p>	<p>Anticipated date of initial startup of each new or modified source not less than thirty (30) days prior to the date.</p> <p>Actual date of initial startup of each new or modified source within fifteen (15) days after the startup date.</p>

	<p>Provide the date when each new or modified emission source reaches the maximum production rate at which it will operate within fifteen (15) days after that date.</p> <p>Notify the Department within 60 days after each calendar quarter of the facility's compliance status with the permitted emission rate from the continuous monitoring system.</p> <p>Provide any data generated by activities described in the Quality Assurance Project Plan (QAPP) that will assist the Air Quality Bureau's Enforcement Section in determining the reliability of the methodology used for demonstrating compliance with the permitted emission rate within 45 days of such a request.</p> <p>The permittee shall submit reports described in Section A109 and in accordance with Section B110.</p>
Target Fabrication Facility TA-35-213	The permittee shall submit reports described in Section A109 and in accordance with Section B110.
Plutonium Facility TA-55-PF4	<p>Stack emission test results and facility operating parameters will be made available to Department personnel upon request.</p> <p>Reports may be required to be submitted to the Department if inspections of the source indicate noncompliance with this permit or as a means of determining compliance.</p> <p>The permittee shall submit reports described in Section A109 and in accordance with Section B110.</p>

### EXTERNAL COMBUSTION

#### A800 Regulated Sources – External Combustion

A. Table 800.A lists all of the process equipment authorized for this source category.

**Table 800.A: Regulated Sources List**

Emission Unit <sup>3</sup>	Location/ Building	Manufacturer/ Model/Serial Number	Date of Construction, Modification, or Reconstruction <sup>1</sup>	Maximum Heat Input (nameplate) <sup>2</sup> MMBtu/hr
TA-16-1484- BS-1	TA-16-1484	Sellers 183H.P.-SH-LN390 S/N 100848-B	1995	7.47
TA-16-1484- BS-2	TA-16-1484	Sellers 183H.P.-SH-LN390 S/N 100848-A	1995	7.47

Emission Unit <sup>3</sup>	Location/ Building	Manufacturer/ Model/Serial Number	Date of Construction, Modification, or Reconstruction <sup>1</sup>	Maximum Heat Input (nameplate) <sup>2</sup> MMBtu/hr
TA-53-365- BHW-1	TA-53-365	Sellers 15 Seniors-2-200-w S/N 99031-1	1988	8.37
TA-53-365- BHW-2	TA-53-365	Sellers 15 Seniors-2-200-w S/N 99031-2	1988	8.37
TA-55-6- BHW-1	TA-55-6	Sellers 350 H.P. W-LN490 S/N 101319-B	2001	14.6
TA-55-6- BHW-2	TA-55-6	Sellers 350 H.P. W-LN490 S/N 101319-A	1998	14.6
RLUOB- BHW-1	TA-55-440	Unilux ZF1100W SN A1874	2009	11.0
RLUOB- BHW-2	TA-55-440	Unilux ZF1100W SN A1875	2009	11.0
RLUOB- BHW-3	TA-55-440	Unilux ZF1100W SN A1876	2009	11.0
RLUOB- BHW-4	TA-55-440	TBD	TBD	11.0

1 Construction, Modification, or Reconstruction as defined according to 40 CFR 60.

2 Emission estimates from these units shall be based on the maximum heat input rating, derated for altitude.

3 Emission Units in this table are all boilers.

#### **A801 Control Equipment – External Combustion**

- A. Table 801.A lists all of the pollution control equipment required for the applicable regulated equipment in this source category. Each emission point is identified by the same number that was assigned to it in the permit application.

**Table 801.A: Control Equipment List**

Control Equipment Unit No. <sup>1</sup>	Location/Building	Control Description	Pollutant being controlled
TA-16-1484-BS-1	TA-16-1484	Low-NOx Burner	NOx
TA-16-1484-BS-2	TA-16-1484	Low-NOx Burner	NOx
TA-53-365-BHW-1	TA-53-365	none	none
TA-53-365-BHW-2	TA-53-365	none	none
TA-55-6-BHW-1	TA-55-6	Low-NOx Burner	NOx
TA-55-6-BHW-2	TA-55-6	Low-NOx Burner	NOx

RLUOB-BHW-1	TA-55-440	Low-NOx Burner <sup>2</sup>	NOx
RLUOB-BHW-2	TA-55-440	Low-NOx Burner	NOx
RLUOB-BHW-3	TA-55-440	Low-NOx Burner	NOx
RLUOB-BHW-4	TA-55-440	Low-NOx Burner	NOx

1 Control for unit number refers to a unit number from the Regulated Sources List

2 Low-NOx burners are required for Units RLUOB-BHW-1 through -4 by NSR Permit 2195N-R2, Specific Condition 1.f.

### A802 Emission Limits – External Combustion

A. Table 802.A lists specific emission units and their allowable emission limits. (40 CFR 50; Paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC; 40 CFR 60, Subpart Dc).

**Table 802.A: Allowable Emissions**

Unit No.	<sup>1</sup> NO <sub>x</sub> tpy	CO tpy	VOC tpy	SO <sub>2</sub> tpy	TSP tpy	PM <sub>10</sub> tpy
Combined annual emissions for all units listed in Table 800.A <sup>2</sup>	80.0	80.0	50.0	50.0	50.0	50.0

1 Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO<sub>2</sub>

2 Excludes TA-3-22 Power Plant addressed in Section A1300.

B. Table 802.B lists specific emission units and their allowable emission limits. (40 CFR 50; Paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC; 40 CFR 60, Subpart Dc; NSR Permit 2195N-R2)

**Table 802.B: Allowable Emissions**

Unit No.	<sup>1</sup> NO <sub>x</sub> pph	NO <sub>x</sub> tpy	CO pph	CO tpy	VOC pph	VOC tpy	SO <sub>2</sub> pph	SO <sub>2</sub> tpy	TSP pph	TSP tpy	PM <sub>10</sub> pph	PM <sub>10</sub> tpy	PM <sub>2.5</sub> pph	PM <sub>2.5</sub> tpy
RLUOB-BHW-1 (GAS)	0.7	2.9	1.1	4.8	-- <sup>2</sup>	--	0.1	0.3	0.1	0.4	0.1	0.4	0.1	0.4
RLUOB-BHW-1 (OIL)	1.6		0.5		--	--	5.8		0.3		0.2		0.2	
RLUOB-BHW-2 (GAS)	0.7	2.9	1.1	4.8	--	--	0.1	0.3	0.1	0.4	0.1	0.4	0.1	0.4
RLUOB-BHW-2 (OIL)	1.6		0.5		--	--	5.8		0.3		0.2		0.2	
RLUOB-BHW-3 (GAS)	0.7	2.9	1.1	4.8	--	--	0.1	0.3	0.1	0.4	0.1	0.4	0.1	0.4
RLUOB-BHW-3 (OIL)	1.6		0.5		--	--	5.8		0.3		0.2		0.2	

Unit No.	<sup>1</sup> NO <sub>x</sub> pph	NO <sub>x</sub> tpy	CO pph	CO tpy	VOC pph	VOC tpy	SO <sub>2</sub> pph	SO <sub>2</sub> tpy	TSP pph	TSP tpy	PM <sub>10</sub> pph	PM <sub>10</sub> tpy	PM <sub>2.5</sub> pph	PM <sub>2.5</sub> tpy
RLUOB-BHW-4 (GAS)	0.7	2.9	1.1	4.8	--	--	0.1	0.3	0.1	0.4	0.1	0.4	0.1	0.4
RLUOB-BHW-4 (OIL)	1.6		0.5		--	--	5.8		0.3		0.2		0.2	
All boilers - Oil <sup>4</sup>	N/A	2.9	N/A	0.9	--	--	N/A	10.4	N/A	0.5	N/A	0.3	N/A	0.3
Combined Total <sup>3</sup>		14.5		20.1		--		11.6		2.1		1.9		1.9

1 Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO<sub>2</sub>

2 The "--" symbol indicates a value that was considered negligible and not permitted under NSR 2195N-R2.

3 The annual tpy combined emission totals represent enforceable emission limit caps for all 4 boilers combined, fired with any combination of allowed fuel types.

4 Tpy emission cap for any combination of oil fired boilers.

C. Units RLUOB-BHW-1 through - 4 shall not emit oxides of nitrogen in excess of 30 ppmv, corrected to 3% oxygen on a dry basis. This emissions limitation applies to natural gas fuel only. (NSR Permit 2195N-R2, Specific Condition 1.f., partial, revised)

#### **A803 Applicable Requirements – External Combustion**

A. The permittee shall comply with all applicable sections of the requirements listed in Table 803.A.

**Table 803.A: Applicable Requirements**

Applicable Requirements	Federally Enforceable	Unit No.
NSR Permit 2195N-R2	X	RLUOB-BHW-1 through -4
20.2.61 NMAC Smoke and Visible Emissions	X	All combustion sources
40 CFR 60, Subpart Dc	X	TA-55-6-BHW-1, TA-55-6-BHW-2, RLUOB-BHW-1 through -4

#### **A804 Operational Limitations – External Combustion**

A. All external combustion equipment except Units RLUOB-BHW-1 through -4 when operating with fuel oil is authorized to operate any time during the year. No monitoring, recordkeeping, or reporting requirements are required to demonstrate compliance with its hours of operation.

- B. Units RLUOB-BHW-1 through -4 shall be operated on fuel oil for no more than 48 hours per year per boiler for non-emergency maintenance and readiness testing. This condition establishes exemption from **40 CFR 63, Subpart JJJJJ**.
- C. Total annual fuel oil consumption for Units RLUOB-BHW-1 through -4 shall not exceed 289,100 gallons on a rolling 365-day total basis.

#### **A805 Fuel Sulfur Requirements – External Combustion**

##### **A. All Boilers and Heaters (except Units RLUOB-BHW-1 through -4)**

**Requirement:** All boilers and heaters, **except** Units RLUOB-BHW-1 through -4 and the Power Plant addressed in Section A1300 shall combust only natural gas containing no more than 2 grains of total sulfur per 100 dry standard cubic feet.

**Monitoring:** None.

**Recordkeeping:** The permittee shall demonstrate compliance with the natural gas limit on total sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, or fuel gas analysis, specifying the allowable limit or less. If fuel gas analysis is used, the analysis shall not be older than one year.

**Reporting:** The permittee shall submit reports described in Section A109 and in accordance with Section B110.

##### **B. Units RLUOB-BHW-1 through -4**

**Requirement:** Units RLUOB-BHW-1 through -4 shall combust either natural gas containing no more than 2.0 grains of total sulfur per 100 dry standard cubic feet or No. 2 fuel oil containing no more than 0.5 wt% total sulfur. (**NSR Permit 2195N-R2, Specific Condition 1.c.**)

**Monitoring:** None.

**Recordkeeping:** The permittee shall demonstrate compliance with the natural gas limit and/or fuel oil limit on total sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract for the gaseous or liquid fuel, or fuel analysis, specifying the allowable limit or less. If a fuel analysis is used, the analysis shall not be older than one year. (**NSR Permit 2195N-R2, Specific Condition 3.c., revised**) Alternatively, compliance may be demonstrated by keeping a receipt or invoice from a commercial fuel supplier with each fuel delivery, which shall include the delivery date, the fuel type delivered, and amount of fuel delivered, and the maximum sulfur content of the fuel.

**Reporting:** The permittee shall submit reports described in Section A109 and in accordance with Section B110.

#### **A806 20.2.61 NMAC Opacity – External Combustion**

##### **A. All Boilers and Heaters (except Units RLUOB-BHW-1 through -4)**

**Requirement:** Exhaust emissions from these external combustion sources shall not exceed 20% opacity averaged over a 10-minute period.

**Monitoring:** Use of natural gas fuel meeting the requirement at Condition A805.A constitutes

compliance with 20.2.61 NMAC unless opacity exceeds 20% averaged over a 10-minute period. When any visible emissions are observed during steady state operation and are determined to be not due to condensed water vapor only, opacity shall be measured over a 10-minute period, in accordance with the procedures at 40 CFR 60, Appendix A, Method 9 as required by 20.2.61.114 NMAC.

**Recordkeeping:** The permittee shall record dates of any opacity measurements and the corresponding opacity readings.

**Reporting:** The permittee shall report dates of any opacity measurements and the corresponding opacity readings. The permittee shall submit reports described in Section A109 and in accordance with Section B110.

**B. Units RLUOB-BHW-1 through -4: Natural Gas-Fired**

**Requirement:** Exhaust emissions from these external combustion sources shall not exceed 20% opacity averaged over a 10-minute period.

**Monitoring:** Use of natural gas fuel meeting the requirement at Condition A805.A constitutes compliance with 20.2.61 NMAC unless opacity exceeds 20% averaged over a 10-minute period. When any visible emissions are observed during steady state operation and are determined to be not due to condensed water vapor only, opacity shall be measured over a 10-minute period, in accordance with the procedures at 40 CFR 60, Appendix A, Method 9 as required by 20.2.61.114 NMAC.

**Recordkeeping:** The permittee shall record dates of any opacity measurements and the corresponding opacity readings.

**Reporting:** The permittee shall report dates of any opacity measurements and the corresponding opacity readings. The permittee shall submit reports described in Section A109 and in accordance with Section B110.

**C. Units RLUOB-BHW-1 through -4: Fuel Oil-Fired**

**Requirement:** Exhaust emissions from these external combustion sources shall not exceed 20% opacity averaged over a 10-minute period.

**Monitoring:** The permittee shall perform a least one (1) opacity observation each day that fuel oil is used to fire any of Units RLUOB-BHW-1 through -4. Opacity shall be measured over a 10-minute period, in accordance with the procedures at 40 CFR 60, Appendix A, Method 9 as required by 20.2.61.114 NMAC. (NSR Permit 2195N-R2, Specific Condition 3.d., revised)

**Recordkeeping:** The permittee shall record dates of any opacity measurements and the corresponding opacity readings. (NSR Permit 2195N-R2, Specific Condition 4.b., revised)

**Reporting:** The permittee shall report dates of any opacity measurements and the corresponding opacity readings. The permittee shall submit reports described in Section A109 and in accordance with Section B110.

**A807 Other – External Combustion**

**A. Natural Gas Fuel Usage (Sources listed in Table 800.A except RLUOB-BHW-1 through -4)**

**Requirement:** The combined natural gas fuel usage shall be limited to 870 MMscf/y. This

limitation shall apply to all boilers and heaters listed in Table 800.A <b>except</b> Units RLUOB-BHW-1 through -4, but including all other boilers and heaters at the Facility that qualify as Title V Insignificant Activities.
<b>Monitoring:</b> The permittee shall monitor the monthly total volumetric flow of natural gas to Units TA-55-6-BHW-1 and TA-55-6-BHW-2 through use of a totalizing flow meter.
<b>Recordkeeping:</b> The permittee shall: <ol style="list-style-type: none"> <li>1) Calculate the monthly rolling 12-month total natural gas fuel usage for the emission units listed in Table 800.A <b>except</b> Units RLUOB-BHW-1 through -4.</li> <li>2) Calculate the actual emissions rate for the emission units listed in Table 800.A <b>except</b> Units RLUOB-BHW-1 through -4. The calculation shall be based on the actual fuel usage of Units equipped with individual flow meters and the Facility-Wide metered or estimated natural gas usage.</li> <li>3) Calculate the semiannual and annual total emissions rate (tons/year) for this source category and compare them to the emission limits in Table 802.A. The permittee shall maintain records in accordance with Section B109.</li> </ol>
<b>Reporting:</b> The permittee shall submit reports described in Section A109 and in accordance with Section B110.

B. Natural Gas and Fuel Oil Usage (Units RLUOB-BHW-1 through -4)

<b>Requirement:</b> The permittee shall comply with the emission limits in Table 802.B for each fuel type.
<b>Monitoring:</b> The permittee shall: <ol style="list-style-type: none"> <li>1) Monitor the monthly total volumetric flow of natural gas to Units RLUOB-BHW-1 through -4 using a totalizing flow meter. (NSR Permit 2195N-R2, Specific Condition 3.a., partial, revised)</li> <li>2) Monitor the daily fuel oil consumption during which any of the 4 RLUOB boilers are fired with this fuel type. (NSR Permit 2195N-R2, Specific Condition 3.a, partial, revised)</li> <li>3) Monitor the hours of operation for each boiler when fired on fuel oil and during non-emergency maintenance and readiness testing.</li> </ol>
<b>Recordkeeping:</b> The permittee shall: <ol style="list-style-type: none"> <li>1) Calculate and record the annual fuel oil usage for Units RLUOB-BHW-1 through -4 as a daily rolling 365-day total.</li> <li>2) Calculate and record the semiannual and calendar year total emissions rate (tons/year) for each fuel type and for the combination of both fuels compare to the emission limits in Table 802.B.</li> <li>3) Record the annual hours of operation of each boiler when fired on fuel oil during non-emergency maintenance and readiness testing and compare to the limitation at Condition A804.B.</li> <li>4) The permittee shall maintain records in accordance with Section B109.</li> </ol>
<b>Reporting:</b> The permittee shall submit reports described in Section A109 and in accordance with Section B110.

C. 40 CFR 60, Subpart Dc (Units TA-55-6-BHW-1, TA-55-6-BHW-2, RLUOB-BHW-1 through -3)

**Requirement:** The units are subject to 40 CFR 60, Subpart Dc and the permittee shall comply with the following applicable requirements:

1. When combusting oil in the affected boilers, meet the 0.5 weight percent fuel sulfur standard in 40 CFR 60.42c(d). This standard applies at all times per §60.42c(i). The permittee shall demonstrate compliance per the requirements of §60.42c(h).

**Monitoring:** The permittee shall comply with the fuel supplier certification requirements in 40 CFR 60.46c(e). The permittee shall monitor fuel usage to meet the recordkeeping requirements of 40 CFR 60.48c(g).

**Recordkeeping:** The permittee shall comply with the recordkeeping requirements of 40 CFR 60.48c(c), (f) and (g) 40 CFR 60.7(b) and (f) and maintain the records according to §60.48c(i) except when records are required to be maintained for a longer time period in accordance with Section B109.

**Reporting:** The permittee shall comply with the initial notification requirements of 40 CFR 60.48c(a) and 40 CFR 60.7(a)(1), (a)(4) and (g) and the periodic reporting requirements of 40 CFR 60.48c(b), (d), (e)(11) and (f). Reports shall be submitted according to §60.48c(j). The reporting period may be modified to coincide with the Semi-Annual reporting period in Section A109. The permittee shall report in accordance with Section B110.

D. 40 CFR 60, Subpart Dc (New Unit RLUOB-BHW-4)

**Requirement:** This unit is subject to 40 CFR 60, Subpart Dc and the permittee shall comply with the following applicable requirements:

1. When combusting oil in the affected boilers, meet the 0.5 weight percent fuel sulfur standard in 40 CFR 60.42c(d), and (g). This standard applies at all times per §60.42c(i). The permittee shall demonstrate compliance per the requirements of §60.42c(h).
2. For new boiler RLUOB-BHW-4, the permittee shall demonstrate initial compliance with the SO<sub>2</sub> standard through a certification from the fuel supplier per 40 CFR 60.44c(h).

**Monitoring:** The permittee shall comply with the fuel supplier certification requirements in 40 CFR 60.46c(e). The permittee shall monitor fuel usage to meet the recordkeeping requirements of 40 CFR 60.48c(g).

**Recordkeeping:** The permittee shall comply with the recordkeeping requirements of 40 CFR 60.48c(c), (f) and (g) and 40 CFR 60.7(b) and (f) and maintain the records according to §60.48c(i) except when records are required to be maintained for a longer time period in accordance with Section B109.

**Reporting:** The permittee shall comply with the initial notification requirements of 40 CFR 60.48c(a) and 40 CFR 60.7(a)(1), (a)(3) and (g) and the periodic reporting requirements of 40 CFR 60.48c(b), (d), (e)(11) and (f). Reports shall be submitted according to §60.48c(j). The reporting period may be modified to coincide with the Semi-Annual reporting period in Section A109.

E. Initial Compliance Testing (Units RLUOB-BHW-4)

**Requirement:** Initial compliance tests are required for boiler, Unit RLUOB-BHW-4. The tests

shall be conducted for NO <sub>x</sub> and CO while burning natural gas fuel only. This condition applies only if boiler Unit RLUOB-BHW-4 is not an identical make and model to boiler units RLUOB-BHW-1 through -3. (NSR Permit 2195N-R2, Specific Condition 6.a., revised)
<b>Monitoring:</b> The permittee shall conduct EPA Method tests for CO and NO <sub>x</sub> within six (6) months of any new boiler start up. Method 19 may be used for determining stack flow rates. This requirement supersedes Condition B111.A(2). Initial compliance testing shall be conducted in accordance with Section B111.
<b>Recordkeeping:</b> The permittee shall maintain records in accordance with Section B109.
<b>Reporting:</b> The permittee shall report in accordance with Section B110 and Section B111.

F. Operational Inspection (Sources listed in Table 800.A)

<b>Requirement:</b> Compliance with the allowable emission limits in Table 802.A shall be demonstrated by performing periodic inspections to ensure proper operations.
<b>Monitoring:</b> The permittee shall conduct annual operational inspections to determine that the boilers are operating properly. The operational inspections shall include operational checks for indications of insufficient excess air, or too much excess combustion air. These operational checks shall include observation of common physical indications of improper combustion, including indications specified by the boiler manufacturer, and indications based on operational experience with these units.
<b>Recordkeeping:</b> The permittee shall maintain records of operational inspections, describing the results of all operational inspections noting chronologically any adjustments needed to bring the boilers into compliance. The permittee shall maintain records in accordance with Section B109.
<b>Reporting:</b> The permittee shall report in accordance with Section B110.
Within ninety (90) days of permit issuance, the permittee shall submit for Department approval a procedure which the permittee will use to carry out the operational inspections. The permittee may at any time submit revisions for Department approval.

**CHEMICAL USAGE**

**A900 Regulated Sources – Chemical Usage**

A. Table 900.A lists all of the process equipment authorized for this source category.

**Table 900.A: Regulated Sources List**

Unit No.	Source Description/Location	Emission Type
LANL-FW-CHEM	Chemical Usage, Facility-wide (except RLUOB)	VOC, HAPs, TAPs
RLUOB-CHEM	Chemical Usage, Bldg. TA-55-400 (the laboratory portion only of this RLUOB building)	VOC, HAPs, TAPs

**A901 Control Equipment – Chemical Usage – Not Required****A902 Emission Limits – Chemical Usage**

- A. Table 902.A lists the emission units, and their allowable emission limits. (40 CFR 50; Paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC, NSR Permit 2195N-R2).

**Table 902.A: Allowable Emissions**

Unit No.	VOC/HAPs tpy
LANL-FW-CHEM	-- <sup>1</sup>
RLUOB-CHEM	3.75 <sup>1</sup>

- <sup>1</sup> The VOC emissions from this source category are included in the facility-wide allowable emissions limit established in Table 106.B: 200 tpy VOC, 8.0 tpy per individual HAP, and 24.0 tpy of combined total HAPs. Any VHAPs that are also defined as a VOC shall be included in the VOC total.

**A903 Applicable Requirements – Chemical Usage**

- A. The permittee shall comply with all applicable sections of the requirements listed in Table 903.A.

**Table 903.A: Applicable Requirements**

Applicable Requirements	Federally Enforceable	Unit No.
NSR Permit 2195N-R2	X	RLUOB-CHEM

**A904 Operational Limitations – Chemical Usage**

- A. The Chemical Usage source category is authorized for continuous operation. No monitoring, recordkeeping, or reporting requirements are required to demonstrate compliance with continuous hours of operation.
- B. For Unit RLUOB-CHEM, the permittee shall obtain a NSR permit revision prior to the use of any TAP that is expected to be emitted in excess of the stack-height-corrected screening levels at 20.2.72.502 NMAC. (NSR Permit 2195N-R2, Specific Condition 1.i, revised)

**A905 Fuel Sulfur Requirements – Chemical Usage – Not Required****A906 20.2.61 NMAC Opacity – Chemical Usage – Not Required****A907 Other – Chemical Usage**

- A. Emission calculations (Unit LANL-FW-CHEM)

<b>Requirement:</b> The permittee shall comply with the facility-wide VOC and HAP emission limits at Table 106.B.
<b>Monitoring:</b> The permittee shall monitor facility-wide chemical purchasing and site location using an electronic chemical tracking system. The quantity of chemicals that are vented to the atmosphere shall be estimated on a semi-annual basis, and categorized as VOC, HAP, or a combination of these categories.
<b>Recordkeeping:</b> The permittee shall record the quantity of total VOC emitted and the quantity of each individual and total HAPs on a semi-annual basis. These records shall be maintained in accordance with Section B109.
<b>Reporting:</b> The permittee shall submit reports described in Section A109 and in accordance with Section B110. With respect to individual HAPs, reports shall include any HAP emitted in a quantity greater than 0.5 tons per year.

B. Emission calculations (Unit RLUOB-CHEM)

<b>Requirement:</b> The permittee shall comply with the source-specific VOC emission limit at Table 902.A and the facility-wide VOC and HAP emission limits at Table 106.B. (NSR Permit 2195N-R2, Specific Condition 2.a., revised)
<b>Monitoring:</b> The permittee shall monitor chemical purchasing for the RLUOB-CHEM facility using an electronic chemical tracking system. The quantity of chemicals that are vented to the atmosphere shall be estimated on a monthly basis, and categorized as VOC, HAP, TAP, or a combination of these categories. (NSR Permit 2195N-R2, Specific Condition 4.c., revised)
<b>Recordkeeping:</b> The permittee shall record the quantity of total VOC and TAP, each individual HAP, and the total HAPs emitted on a monthly rolling, 12-month total basis. These records shall be maintained in accordance with Section B109. (NSR Permit 2195N-R2, Specific Condition 4.c., revised)
<b>Reporting:</b> The permittee shall submit reports described in Section A109 and in accordance with Section B110. With respect to individual HAPs, reports shall include any HAP emitted in a quantity greater than 0.5 tons per year.

**DEGREASERS**

**A1000 Regulated Sources – Degreasers**

A. Table 1000.A lists all of the process equipment authorized for this source category.

**Table 1000.A: Regulated Sources List**

Unit No.	Source Description/Location	Emissions Type
TA-55-DG-1	Ultrasonic Cold Batch	VOCs, HAPs

**A1001 Control Equipment – Degreasers – Not Required****A1002 Emission Limits –Degreasers**

- A. Table 1002.A lists the emission units, and their allowable emission limits. (40 CFR 50; Paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC).

**Table 1002.A: Allowable Emissions**

Unit No.	VOC/HAPs tpy
TA-55-DG-1	-- <sup>1</sup>

- <sup>1</sup> The VOC emissions from this source category are included in the facility-wide allowable emissions limit established in Table 106.B: 200 tpy VOC, 8.0 tpy per individual HAP, and 24.0 tpy of combined total HAPs. Any VHAPs that are also defined as a VOC shall be included in the VOC total.

**A1003 Applicable Requirements – Degreasers**

- A. The permittee shall comply with all applicable sections of the requirements listed in Table 1003.A.

**Table 1003.A: Applicable Requirements**

Applicable Requirements	Federally Enforceable	Unit No.
40 CFR 63, Subpart T National Emission Standards for Halogenated Solvent Cleaning	X	TA-55-DG-1

**A1004 Operational Limitations – Degreasers**

- A. The Degreasers source category is authorized for continuous operation. No monitoring, recordkeeping, or reporting requirements are required to demonstrate compliance with continuous hours of operation.

**A1005 Fuel Sulfur Requirements – Degreasers – Not Required****A1006 20.2.61 NMAC Opacity – Degreasers – Not Required****A1007 Other – Degreasers**

- A. Operational Requirements (Degreasers)

**Requirement:** The permittee shall comply with the applicable requirements according to 40 CFR 63, Subpart T, including, but not limited to:

- 1) Ensure the degreaser is closed with a tight fitting cover whenever not in use, and
- 2) Maintain a freeboard ratio of 0.75 or greater, and
- 3) Collect and store all waste solvent and wipe rags in closed containers, and

<p>4) Perform flushing within the freeboard area only, and</p> <p>5) Allow cleaned parts to drip for 15 seconds or until dripping stops, and</p> <p>6) Do not exceed the fill line on the solvent level, and</p> <p>7) Wipe up spills immediately, and</p> <p>8) Do not create observable splashing with agitation device, and</p> <p>9) Ensure that the degreaser is not exposed to drafts greater than 40 meters/min, and</p> <p>10) Do not clean sponges, fabric, wood, or paper.</p>
<p><b>Monitoring:</b> The permittee shall monitor and record the amount of solvent added to the degreaser.</p>
<p><b>Recordkeeping:</b> The permittee shall:</p> <p>1) Calculate the actual emissions rate (pounds/month) of VOC and HAPs based on the quantity of solvent lost to evaporation on a monthly basis.</p> <p>2) Calculate the semi-annual emissions rate (tons/year) for this source category and add to the facility-wide emission rates in Table 106.B.</p> <p>3) Maintain records of the degreaser solvent content and quantity added and work practice checklists.</p> <p>4) The permittee shall maintain records in accordance with Section B109.</p>
<p><b>Reporting:</b> The permittee shall submit reports described in Section A109 and in accordance with Section B110.</p>

### INTERNAL COMBUSTION

#### A1100 Regulated Sources – Internal Combustion

A. Table 1100.A lists all of the process equipment authorized for this source category.

**Table 1100.A: Regulated Sources List**

Unit No.	Source Location	Source Type <sup>1</sup>	Generator Make/Model	Generator Serial No.	Capacity	Engine Make/Model	Engine Serial No.	Manufacture Date
TA-33-G-1P	TA-33	CI-RICE, Portable Generator	Cummins/DFHD	H01027694 1	1490 hp	Cummins/QS T30-G5-NR1	37199764	2001
TA-33-G-2	TA-33, TA-36 and TA-39	CI-RICE, Portable Generator	Kohler/20EORZ	2025460	36 hp	YANMAR 4TNE84T-EKRW	52993	2003
TA-33-G-3	TA-33, TA-36 and TA-39	CI-RICE, Portable Generator	Kohler/20EORZ	2025461	36 hp	YANMAR 4TNE84T-EKRW	52992	2003
TA-33-G-4	TA-33, TA-36 and TA-39	CI-RICE, Portable Generator	Caterpillar/SR4B	6PK01065	316 hp	Caterpillar/3306	8JJ00615	1999
RLUOB-GEN-1	TA-55-00585 (RLUOB)	CI-RICE Stationary Generator	Cummins/DFLE-5754172	I06970810	2220 hp	Cummins/KT A50G9	25314401	9/06

Unit No.	Source Location	Source Type <sup>1</sup>	Generator Make/Model	Generator Serial No.	Capacity	Engine Make/Model	Engine Serial No.	Manufacture Date
RLUOB-GEN-2	TA-55-0584 (RLUOB)	CI-RICE Stationary Generator	Cummins/DFLE-5754172	I06970811	2220 hp	Cummins/KT A50G9	25314399	9/06
RLUOB-GEN-3	TA-55-0583 (RLUOB)	CI-RICE Stationary Generator	Cummins/DFLE-5754172	I06970812	2220 hp	Cummins/KT A50G9	33165566	9/06
TA-48-GEN-1	TA-48-1	CI-RICE Stationary Generator	Cummins/150DSGAC	L100178636	250 hp	QSB7-G3 NR3	73176927	2010
TA-55-GEN-1	TA-55-PF10	CI-RICE Stationary Generator	Whisper Watt/DCA 25SSiU4F DF-027012	7150008	40.2 hp	ISUZU Model: BZ-4LE2T	4LE2-298868	2014
TA-55-GEN-2	TA-55-PF11	CI-RICE Stationary Generator	Whisper Watt/DCA 25SSiU4F DF-027012	7150066	40.2 hp	ISUZU Model: BZ-4LE2T	4LE2-299432	2014
TA-55-GEN-3	TA-55-371	CI-RICE Stationary Generator	Caterpillar/SR4B-6D	G5C03702	1335 hp	Caterpillar/C32	SYCO5263	2009

1. Portable units are subject to NSPS or NESHAP requirements if they fail to meet the definition of a Nonroad engine as defined in 40 CFR 1068.30.

### **A1101 Control Equipment – Internal Combustion – Not Required**

### **A1102 Emission Limits – Internal Combustion**

A. Table 1102.A lists the emission units, and their allowable emission limits. (40 CFR 50; Paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC; NSR permit 2195F-R4 and 2195P)

**Table 1102.A: Allowable Emissions**

Unit No.	NO <sub>x</sub> pph	NO <sub>x</sub> tpy	CO pph	CO tpy	VOC pph	VOC tpy	SO <sub>2</sub> pph	SO <sub>2</sub> tpy	TSP pph	TSP tpy	PM <sub>10</sub> pph	PM <sub>10</sub> tpy
TA-33-G-1P	40.3	18.1	33.7	15.2	0.7	0.3	5.5	2.5	1.4	0.6	1.4	0.6
TA-33-G-2	0.83	0.21	0.2	0.1	0.1	-- <sup>1</sup>	--	--	--	--	--	--
TA-33-G-3	0.83	0.21	0.2	0.1	0.1	-- <sup>1</sup>	--	--	--	--	--	--
TA-33-G-4	9.33	2.33	5.7	1.4	0.75	0.2	0.6	0.16	--	--	--	--

1 The VOC emissions from this source category are included in the facility-wide allowable emissions limit established in condition A106.B: 200 tpy VOC, 8.0 tpy per individual HAP, and 24.0 tpy of combined HAPs.

**A1103 Applicable Requirements – Internal Combustion**

- A. The permittee shall comply with all applicable sections of the requirements listed in Table 1103.A.

**Table 1103.A: Applicable Requirements**

Applicable Requirements	Federally Enforceable	Unit No.
NSR Permit 2195F-R4	X	TA-33-G-1P
NSR Permit 2195P and 2195-P3, 2195P-R1 and 2195P-R3	X	TA-33-G-2 through -4
NSR Permit 2195N-R1 (Admin NOE)	X	RLUOB-GEN-1 through -3
20.2.61 NMAC Smoke and Visible Emissions	X	All Internal Combustion Sources
20.2.77 New Source Performance Standards	X	Applicable to RLUOB-GEN-1 through -3, TA-48-GEN-1, TA-55-GEN-1 TA-55-GEN-2 and TA-55-GEN-3
40 CFR 60, Subpart A, General Provisions	X	Applicable to RLUOB-GEN-1 through -3, TA-48-GEN-1, TA-48-GEN-1, TA-55-GEN-1 TA-55-GEN-2 and TA-55-GEN-3
40 CFR 60 Subpart III, Stationary CI-RICE	X	
40 CFR 89, Control of Emissions from New and In-Use Nonroad Compression Ignition Engines	X	TA-33-G-2 through -4

**A1104 Operational Limitations – Internal Combustion**

- A. Hours of Operation and Emission Limits for Unit TA-33-G-1P

<p><b>Requirements:</b></p> <ol style="list-style-type: none"> <li>Unit TA-33-G-1P is limited to eight (8) hours of daily operation at full capacity. Operation shall occur between the hours of 7:00 AM and 5:00 PM. (NSR Permit 2195F-R4, Condition A1104.A)</li> <li>Unit TA-33-G-1P is limited to the emissions limits stated in Table 1102.A. (NSR Permit 2195F-R4, Condition A1104.A)</li> </ol>
<p><b>Monitoring:</b> The permittee shall monitor the time(s) of operation each day, and the daily and monthly rolling 12-month total hours of operation for Unit TA-33-G-1P using a non-resettable hour meter. Hours that do not represent hours the unit is operated at the TA-33 site may be monitored separately for subsequent subtraction from the daily and monthly rolling 12-month totals</p>
<p><b>Recordkeeping:</b> The permittee shall maintain the following records and in accordance with Section B109:</p> <ol style="list-style-type: none"> <li>The permittee shall keep records of the time(s) of operation each day, and the daily, monthly, and the monthly rolling 12-month total hours of operation of the genset listed</li> </ol>

<p>above, as indicated on the non-resettable hour meter. The permittee may record and subtract hours of operation that do not represent operating hours at the TA-33 site.</p> <p>2) The permittee shall calculate the annual emissions of all criteria and hazardous air pollutants from Unit TA-33-G-1P. The permittee may subtract emissions that are not the result of operations at TA-33.</p>
<p><b>Reporting:</b> The permittee shall submit reports in accordance with Section B110.</p>

**B. Hours of Operation and Emission Limits for Units TA-33-G-2 through -4**

<p><b>Requirements:</b></p> <p>1) Units TA-33-G-2 through -4 are authorized to operate 500 hours per generator per calendar year. (NSR Permit 2195P, Specific Condition 1.b.)</p> <p>2) Units TA-33-G-2 through -4 shall each be certified to be in compliance with applicable non-road emission standards in 40 CFR 89. (NSR Permit 2195P, Specific Condition 1.c.)</p>
<p><b>Monitoring:</b> The permittee shall monitor the total hours of operation for each genset, Units TA-33-G-2 through -4, using a non-resettable hour meter.</p>
<p><b>Recordkeeping:</b> The permittee shall:</p> <p>1) Record the total hours operation of the gensets listed above, as indicated on the non-resettable hour meter. (NSR Permit 2195P, Specific Condition 4.a., revised)</p> <p>2) Calculate and record the semi-annual emissions of criteria and hazardous air pollutants from each genset, Units TA-33-G-2 through -4.</p> <p>3) Maintain a copy of the engine certification to the applicable non road emission standards in 40 CFR 89. (NSR Permit 2195P, Specific Condition 4.c.)</p>
<p><b>Reporting:</b> The permittee shall submit reports described in Section A109 and in accordance with Section B110.</p>

**A1105 Fuel Sulfur Requirements – Internal Combustion**

**A. Fuel Sulfur Requirement for Unit TA-33-G-1P**

<p><b>Requirement:</b> Unit TA-33-G-1P while in use at TA-33 shall combust only diesel fuel containing no more than 500 ppmw total sulfur.</p>
<p><b>Monitoring:</b> None.</p>
<p><b>Recordkeeping:</b> The permittee shall demonstrate compliance with the limit on total fuel sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract for the fuel, or fuel analysis, specifying the fuel grade and certification or allowable sulfur limit. If fuel analysis is used, the analysis shall not be older than one year. Alternatively, compliance may be demonstrated by keeping a receipt or invoice from a commercial fuel supplier with each fuel delivery, which shall include the delivery date, the fuel type delivered, and amount of fuel delivered, and the maximum sulfur content of the fuel.</p>
<p><b>Reporting:</b> The permittee shall submit reports described in Section A109 and in accordance with Section B110.</p>

**A1106 20.2.61 NMAC Opacity – Internal Combustion**

- A. CI-RICE - TA-33-G-1P, TA-33-G-2, TA-33-G-3, TA-33-G-4, RLUOB-GEN-1, RLUOB-GEN-2, RLUOB-GEN-3, TA-48-GEN-1, TA-55-GEN-1 TA-55-GEN-2 and TA-55-GEN-3

<b>Requirement:</b> Visible emissions from the stacks of the above listed sources shall not equal or exceed an opacity of 20 percent.
<b>Monitoring:</b> During steady state operation, opacity shall be measured over a 10-minute period in accordance with the procedures at 40 CFR 60, Appendix A, Method 9 as required by 20.2.61.114 NMAC. Opacity measurements shall be conducted on a quarterly basis per calendar year as qualified by the Section B108.D monitoring provisions. This requirement excludes Insignificant and Trivial Activities.
<b>Recordkeeping:</b> The permittee shall maintain records of all Method 9 observations, and in accordance with Section B109.
<b>Reporting:</b> The permittee shall report date, time, and results of all Method 9 observations. The permittee shall submit reports described in Section A109 and in accordance with Section B110.

**A1107 Other – Internal Combustion**

- A. 40 CFR 60, Subpart III (Emergency Generators Units RLUOB-GEN-1 through -3)

<b>Requirement:</b> The units are subject to 40 CFR 60, Subpart III and the permittee shall comply with the applicable emissions standards and fuel requirements in §60.4205(a), §60.4206 and §60.4207(b) and Table 1102.B. In addition the permittee shall follow the compliance requirements stated in §60.4211(a, b, and f) and the general provisions of 40 CFR 60 Subpart A as required in §60.4218.
<b>Monitoring:</b> None
<b>Recordkeeping:</b> The permittee shall maintain records in accordance with Section B109.
<b>Reporting:</b> The permittee shall comply with all applicable reporting requirements of 40 CFR 60, Subpart A as required in §60.4218 and in accordance with Section B110.

- B. 40 CFR 60, Subpart III (Emergency Generators Unit TA-48-GEN-1, TA-55-GEN-1 TA-55-GEN-2 and TA-55-GEN-3)

<b>Requirement:</b> The units are subject to 40 CFR 60, Subpart III and the permittee shall comply with the applicable emissions standards and fuel requirements in §60.4205(b), §60.4202(a)(2), §60.4206 and §60.4207(b) and Table 1102.B. In addition the permittee shall follow the compliance requirements stated in §60.4211(a, c and f) and the general provisions of 40 CFR 60 Subpart A as required in §60.4218.
<b>Monitoring:</b> None
<b>Recordkeeping:</b> The permittee shall maintain records in accordance with Section B109.
<b>Reporting:</b> The permittee shall comply with all applicable reporting requirements of 40 CFR 60, Subpart A as required in §60.4218 and in accordance with Section B110.

**DATA DISINTEGRATOR****A1200 Regulated Sources – Data Disintegrator**

A. Table 1200.A lists all of the process equipment authorized for this source category.

**Table 1200.A: Regulated Sources List**

Unit No.	Source Description	Manufacturer	Model No./ Serial No.	Manufacture Date	Capacity
TA-52-11	Data Disintegrator/ Industrial Shredder	Security Engineered Machinery	1424/11892	9/2002	1200 lb/hr

**A1201 Control Equipment – Data Disintegrator**

A. Table 1201.A lists all of the pollution control equipment required for the applicable regulated equipment in this source category. Each emission point is identified by the same number that was assigned to it in the permit application.

**Table 1201.A: Control Equipment List**

Control Equipment Unit No./Location <sup>1</sup>	Control Description	Efficiency	Pollutant being controlled
TA-52-11	Cyclone and cloth tube filters	98.75%	TSP/PM10

<sup>1</sup> Control for unit number refers to a unit number from the Regulated Sources List

**A1202 Emission Limits – Data Disintegrator**

A. Table 1202.A lists the emission units, and their allowable emission limits. (40 CFR 50; Paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC; NSR Permit 2195H).

**Table 1202.A: Allowable Emissions**

Unit No.	TSP pph	TSP tpy	PM10 pph	PM10 tpy
TA-52-11	2.3	9.9	2.3	9.9

<sup>1</sup> PM10 and TSP emissions limits are after controls.

**A1203 Applicable Requirements – Data Disintegrator**

A. The permittee shall comply with all applicable sections of the requirements listed in Table 1203.A.

**Table 1203.A: Applicable Requirements**

Applicable Requirements	Federally Enforceable	Unit No.
NSR Permit No: 2195H	X	TA-52-11

#### **A1204 Operational Limitations – Data Disintegrator**

##### **A. Operational Throughput Limitation (Unit Data Disintegrator)**

**Requirement:** The Unit Data Disintegrator is limited processing no more than 25,000 boxes or 565 tons per year media. To avoid Compliance Assurance Monitoring (CAM) requirements under 40 CFR 64, the Data Disintegrator shall limit uncontrolled potential PM emissions by limiting media processing no more than 25,000 boxes or 565 tons per year.

**Monitoring:** The permittee shall perform the monitoring required in Condition A1207.A.

**Recordkeeping:** The permittee shall perform the recordkeeping required in Condition A1207.A.

**Reporting:** The permittee shall perform the reporting required in Condition A1207.A.

#### **A1205 Fuel Sulfur Requirements – Data Disintegrator – Not Required**

#### **A1206 20.2.61 NMAC Opacity – Data Disintegrator – Not Required**

#### **A1207 Other – Data Disintegrator**

##### **A. Emission calculations (Data Disintegrator)**

**Requirement:** The permittee shall calculate Data Disintegrator emissions based on the records of the number of boxes of media that are destroyed.

**Monitoring:** The permittee shall monitor the quantity of media destroyed on a monthly basis. The total weight shall be based on a previously determined average box weight. This average weight determination shall be maintained as part of the records for this facility.

**Recordkeeping:** The permittee shall calculate the actual emissions rate (tons per reporting period) for the emission units listed in Table 1200.A on a semi-annual basis. The emission rate in tons per year shall be calculated by summing the emissions from the previous reporting period with the current period. Records shall be maintained in accordance with Section B109.

**Reporting:** The permittee shall submit reports described in Section A109 and in accordance with Section B110.

##### **B. Cyclone/Cloth Tube Filters (Data Disintegrator)**

**Requirement:** The permittee shall perform regular maintenance and repair on the cyclone and cloth tube filter(s) per manufacturer's recommendations. (NSR Permit 2195H, Specific Condition 1.d.)

**Monitoring:** N/A

**Recordkeeping:** The permittee shall maintain adequate records on site to demonstrate compliance with manufacturer's recommended repair and maintenance schedules for the cyclone and the cloth tube filter(s). (NSR Permit 2195H, Specific Condition 4.a.) Records

shall be maintained in accordance with Section B109.

**Reporting:** The permittee shall submit reports described in Section A109 and in accordance with Section B110.

**C. Compliance Testing (Data Disintegrator)**

**Requirement:** If upon notification by the Department, compliance testing is required, it shall be conducted in accordance with EPA Reference Methods 1 through 4, Method 5 for TSP, and conducted in accordance with 450 CFR 60, Appendix A. For combined TSP and PM10, testing shall be in accordance with 40 CFR 51, Appendix M, Method 201. Alternative test method(s) may be used if the Department approves the change. (NSR Permit 2195H, Specific Condition 6.b., revised)

**Monitoring:** N/A

**Recordkeeping:** The permittee shall maintain records in accordance with Section B109.

**Reporting:** The permittee shall submit reports described in Section A109 and in accordance with Section B110.

**TA-3 POWER PLANT**

**A1300 Regulated Sources – TA-3 Power Plant**

A. Table 1300.A lists all of the process equipment authorized for this source category.

**Table 1300.A: Regulated Sources List**

Unit No.	Source Description	Manufacturer	Model No./ Serial No.	Year of Manufacture	Capacity
TA-3-22-1	Boiler	Edgemoor Iron Works	4008	1950	178.5 MMBtu/hr
TA-3-22-2	Boiler	Edgemoor Iron Works	4009	1950	178.5 MMBtu/hr
TA-3-22-3	Boiler	Union Iron Works	11804	1952	178.5 MMBtu/hr
TA-3-22-CT-1	Combustion Turbine	Rolls Royce	RB211-6761DLE/	2003	27 MW

**A1301 Control Equipment – TA-3 Power Plant**

A. Table 1301.A lists all the pollution control equipment required for this source category. Each emission point is identified by the same number that was assigned to it in the permit application.

**Table 1301.A: Control Equipment List:**

Control Equipment Unit No.	Control Description	Manufacturer	Year of Manufacture	Pollutant being controlled	Control for Unit No. <sup>1</sup>
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Control Equipment Unit No.	Control Description	Manufacturer	Year of Manufacture	Pollutant being controlled	Control for Unit No. <sup>1</sup>
F-1	Flue Gas Recirculation Fan, 1800 rpm	Robinson Industries	2001	NO <sub>x</sub>	TA-3-22-1
F-2	Flue Gas Recirculation Fan, 1800 rpm	Robinson Industries	2001	NO <sub>x</sub>	TA-3-22-2
F-3	Flue Gas Recirculation Fan, 1800 rpm	Robinson Industries	2001	NO <sub>x</sub>	TA-3-22-3
TA-3-22-CT-1	Rolls-Royce DLE System	Rolls-Royce	2003	NO <sub>x</sub>	TA-3-22-CT-1

<sup>1</sup> Control for unit number refers to a unit number from the Regulated Equipment List

### **A1302 Emission Limits – TA-3 Power Plant**

- A. Table 1302.A lists the emission units, and their allowable emission limits. (40 CFR 50; Paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC; 40 CFR 60, Subparts A and GG; NSR Permit 2195B-M2).

**Table 1302.A: Allowable Emissions**

Unit No.	NO <sub>x</sub> <sup>1</sup>		CO		VOC		SO <sub>x</sub>		TSP		PM <sub>10</sub>		PM <sub>2.5</sub>	
	Gas	Oil	Gas	Oil	Gas	Oil	Gas	Oil	Gas	Oil	Gas	Oil	Gas	Oil
TA-3-22-1 (lb/hr)	10.2	11.3	7.0	6.5	1.0	0.3	1.1	9.6	1.3	4.3	1.3	3.0	1.3	2.0
TA-3-22-2 (lb/hr)	10.2	11.3	7.0	6.5	1.0	0.3	1.1	9.6	1.3	4.3	1.3	3.0	1.3	2.0
TA-3-22-3 (lb/hr)	10.2	11.3	7.0	6.5	1.0	0.3	1.1	9.6	1.3	4.3	1.3	3.0	1.3	2.0
Boilers Combined (tpy)	31.5		21.5		2.8		4.9		4.7		4.4		4.2	
TA-3-22-CT-1 (lb/hr)	23.8		29.0		0.6		1.7		1.9		1.9		1.9	
TA-3-22-CT-1 (tpy)	59.4		72.3		1.5		4.2		4.8		4.8		4.8	
TA-3-22-CT-1 (ppm)	25 ppmvd @ 15% O <sub>2</sub>		N/A		N/A		N/A		N/A		N/A		N/A	

<sup>1</sup> Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO<sub>2</sub>.

- B. NO<sub>x</sub> emissions (all oxides of nitrogen expressed as NO<sub>2</sub>) from the boilers (Units TA-3-22-1 through -3) shall not exceed 0.3 lb/MMBtu of heat input when burning natural gas or oil as required by 20.2.33 and 20.2.34 NMAC. (NSR Permit 2195B-M2, Specific Condition A106.B)

- C. For the Combustion Turbine (Unit TA-3-22-CT-1), the permittee shall comply with the NSPS Subpart GG NO<sub>x</sub> emissions limitation of 110.4 ppmv at 15% O<sub>2</sub>, dry basis (40 CFR 63.332(a)(1) and NSR Permit 2195B-M2, Specific Condition A106.C)
- D. For the Combustion Turbine (Unit TA-3-22-CT-1), the permittee shall comply with the NSPS Subpart GG SO<sub>2</sub> emissions limitation of 0.015% by volume at 15% O<sub>2</sub> dry basis or through use of any fuel not exceeding 8000 ppmw total sulfur. (40 CFR 60.333 and NSR Permit 2195B-M2, Specific Condition A106.D)

#### **A1303 Applicable Requirements – TA-3 Power Plant**

- A. The permittee shall comply with all applicable sections of the requirements listed in Table 1303.A.

**Table 1303.A: Applicable Requirements**

<b>Applicable Requirements</b>	<b>Federally Enforceable</b>	<b>Unit No.</b>
20.2.33 NMAC Gas Burning Equipment – Nitrogen Dioxide	X	TA-3-22-1 through -3
20.2.34 NMAC Oil Burning Equipment – Nitrogen Dioxide	X	TA-3-22-1 through -3
20.2.61 Smoke and Visible Emissions	X	All combustion sources
40 CFR 60, Subpart A	X	TA-3-22-CT-1
40 CFR 60, Subpart GG	X	TA-3-22-CT-1
NSR Permit No: 2195B-M2	X	All Power Plant sources

#### **A1304 Operational Limitations – TA-3 Power Plant**

- A. This source category is authorized to operate at any time of the day or night on any day of the year. No monitoring, recordkeeping, or reporting requirements are required to demonstrate compliance with continuous hours of operation.
- B. Units TA-3-22-1 through -3 shall be operated on fuel oil for no more than 48 hours per year per boiler for non-emergency maintenance and readiness testing. This condition establishes exemption from 40 CFR 63, Subpart JJJJJ

#### **A1305 Fuel Sulfur Requirements – TA-3 Power Plant**

- A. Boilers (Units TA-3-22-1 through -3)

**Requirement:** External combustion sources at the TA-3 Power Plant shall combust only natural gas containing no more than 2 gr/100 scf total sulfur or No. 2 fuel oil containing no more than 0.05 wt% total sulfur. (NSR Permit 2195B-M2, Specific Condition A110.A)

**Monitoring:** N/A

**Recordkeeping:** The permittee shall demonstrate compliance with the limit on total fuel sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract for the gaseous or liquid fuel, or fuel analysis, specifying the fuel grade and certification or allowable sulfur limit. If fuel analysis is used, the analysis shall not be older than one year. Alternatively, compliance may be demonstrated by keeping a receipt or invoice from a commercial fuel supplier with each fuel delivery, which shall include the delivery date, the fuel type delivered, and amount of fuel delivered, and the maximum sulfur content of the fuel.

**Reporting:** The permittee shall submit reports described in Section A109 and in accordance with Section B110.

**B. Combustion Turbine (Unit TA-3-22-CT-1)**

**Requirement:** The combustion turbine at the TA-3 Power Plant shall combust only natural gas containing no greater than 2 gr/100 scf total sulfur. (NSR Permit 2195B-M2, Specific Condition A110.B)

**Monitoring:** N/A

**Recordkeeping:** The permittee shall demonstrate compliance with the limit on total fuel sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, or fuel analysis, specifying the fuel grade and certification or allowable sulfur limit. If fuel analysis is used, the analysis shall not be older than one year. (NSR Permit 2195B-M2, Specific Condition A110.B and 40 CFR 60.334(h))

**Reporting:** The permittee shall submit reports described in Section A109 and in accordance with Section B110.

**A1306 20.2.61 NMAC Opacity – TA-3 Power Plant**

**A. Sources Combusting Natural Gas**

**Requirement:** All combustion units shall not exceed 20% opacity. (NSR Permit 2195B-M2, Specific Condition A111.A)

**Monitoring:** Use of natural gas fuel meeting the requirement at Condition A1305.A or B constitutes compliance with 20.2.61 NMAC unless opacity exceeds 20% averaged over a 10-minute period. When any visible emissions are observed during steady state operation and are determined to be not due to condensed water vapor only, opacity shall be measured over a 10-minute period, in accordance with the procedures at 40 CFR 60, Appendix A, Method 9 as required by 20.2.61.114 NMAC.

**Recordkeeping:** The permittee shall record dates of any opacity measures and the corresponding opacity readings.

**Reporting:** The permittee shall report dates of any opacity measures and the corresponding opacity readings. The permittee shall submit reports described in Section A109 and in accordance with Section B110.

**B. Boilers Combusting No. 2 Fuel Oil**

**Requirement:** All combustion units shall not exceed 20% opacity. (NSR Permit 2195B-M2, Specific Condition A111.B)

**Monitoring:** During steady state operation, opacity shall be measured over a 10-minute period in accordance with the procedures at 40 CFR 60, Appendix A, Method 9 as required by 20.2.61.114 NMAC. Opacity measurements shall be conducted on a quarterly basis per calendar year whenever the boiler(s) are operational during the monitoring period. This requirement is subject to the monitoring provisions of Condition B108.D.

**Recordkeeping:** The permittee shall maintain records of all Method 9 observations, and in accordance with Section B109.

**Reporting:** The permittee shall report date, time, and results of all Method 9 observations. The permittee shall submit reports described in Section A109 and in accordance with Section B110.

### **A1307 Other – TA-3 Power Plant**

#### **A. Emission calculations (TA-3 Power Plant)**

**Requirement:** The permittee shall comply with the hourly and annual emission limits at Table 1302.A. and Conditions A1302.B, C, and D for the combustion turbine and boilers. The boiler annual emission limit shall be expressed as the combined emissions from all 3 boilers. (NSR Permit 2195B-M2, Specific Condition A801.A)

**Monitoring:** The permittee shall perform the following calculations on a monthly basis:

- 1) Calculate the average hourly emissions rates (pph) for each emissions unit based on the monthly total fuel consumption and monthly actual hours of operation.
- 2) Calculate the actual annual emissions rates (tpy) for all emissions units based on the monthly rolling 12-month total fuel consumption and the monthly rolling 12-month total hours of operation.
- 3) All NO<sub>x</sub> emission rates for the boilers shall also be calculated in terms of lb/MMBtu heat input.

(NSR Permit 2195B-M2, Specific Condition A801.A)

**Recordkeeping:** The permittee shall maintain records in accordance with Section B109.

**Reporting:** The permittee shall submit reports described in Section A109 and in accordance with Section B110.

#### **B. Fuel Usage (Boilers, Units TA-3-22-1 through -3)**

**Requirement:** Combined boiler operation shall not consume more than 1000 MMscf of natural gas and no more than 500,000 gallons of No. 2 fuel oil in any 12-month period. Volumetric natural gas fuel flow shall be measured using gas flowmeters installed on the natural gas fuel inlet to each respective unit (3 separate gas flowmeters). Fuel oil usage shall be measured using a single inventory meter located at a storage tank that is dedicated for use by the TA-3 power plant boilers. (NSR Permit 2195B-M2, Specific Condition A803.A, revised)

**Monitoring:** The liquid fuel flow rate shall be continuously monitored whenever liquid fuel is combusted. The natural gas fuel flow rate for each boiler shall be continuously monitored whenever natural gas is combusted. The hours of operation of each boiler shall be continuously monitored. (NSR Permit 2195B-M2, Specific Condition A803.A, revised)

**Recordkeeping:** The permittee shall record the monthly total of liquid fuel (gallons) for all

boilers combined and gaseous fuel (scf) for each boiler on a monthly basis, to include a monthly total. Annual fuel usage shall be calculated and recorded on a monthly rolling 12-month total basis. The permittee shall record the hours of operation of each boiler on a monthly basis, to include a monthly total. The record shall include the monthly rolling 12-month total hours of operation for all 3 boilers combined. The permittee shall maintain records in accordance with Section B109. (NSR Permit 2195B-M2, Specific Condition A803.A, revised)

**Reporting:** The permittee shall submit reports described in Section A109 and in accordance with Section B110.

C. Fuel Usage (Combustion Turbine, Unit TA-2-22-CT-1)

**Requirement:** The combustion turbine shall not consume more than 1400 MMscf of natural gas in any 12-month period. Volumetric flow shall be measured using a gas fuel flowmeter installed on the fuel inlet of the combustion turbine. (NSR Permit 2195B-M2, Specific Condition A802.A)

**Monitoring:** The natural gas fuel flow rate for the combustion turbine shall be continuously monitored whenever natural gas is combusted. (NSR Permit 2195B-M2, Specific Condition A802.A)

**Recordkeeping:** The permittee shall record the daily total of gaseous fuel (scf) for the turbine on a monthly basis, to include a monthly total. Annual fuel usage shall be calculated and recorded on a monthly rolling 12-month total basis. The permittee shall record the daily hours of operation of the combustion turbine on a monthly basis, to include a monthly total. The record shall include the monthly total hours and monthly rolling 12-month total hours of operation. The permittee shall maintain records in accordance with Section B109. (NSR Permit 2195B-M2, Specific Condition A802.A)

**Reporting:** The permittee shall submit reports described in Section A109 and in accordance with Section B110.

D. Load Requirement (Combustion Turbine, Unit TA-3-22-CT-1)

**Requirement:** The combustion turbine shall be operated at no less than 80% and no greater than 100% load as determined by the manufacturer's supplied algorithm, except for minimal periods during startup and shutdown conditions. The permittee shall follow the manufacturer's recommended startup/shutdown procedures in order to minimize the duration of these events. (NSR Permit 2195B-M2, Specific Condition A802.B)

**Monitoring:** The operating load of the combustion turbine shall be monitored once daily during normal operations of that unit. (NSR Permit 2195B-M2, Specific Condition A802.B)

**Recordkeeping:** The permittee shall record the daily monitored operating load for the combustion turbine. The permittee shall maintain a record of the manufacturer's recommended startup/shutdown procedure and the manufacturer's criteria for the determination of turbine load. The permittee shall maintain a record for each startup/shutdown or malfunction event for the combustion turbine. The record shall include the date, the start/end time and duration for each event, which is defined as the length of time the combustion turbine is operating at less than 80% or greater than 100% load. For any malfunction event, the record shall also include the nature of the malfunction and any corrective action taken. The permittee shall maintain

records in accordance with Section B109. (NSR Permit 2195B-M2, Specific Condition A802.B)

**Reporting:** The permittee shall submit reports described in Section A109 and in accordance with Section B110.

E. Control Device Operation (Boilers, Units TA-3-22-1 through -3)

**Requirement:** Each boiler (Units TA-3-22-1 through -3) shall only be operated with a properly operating flue gas recirculation fan (Units F-1 through -3, respectively). Any malfunction of the flue gas recirculation system during boiler operation may be subject to the excess emissions requirements of 20.2.7 NMAC. (NSR Permit 2195B-M2, Specific Condition A803.B)

**Monitoring:** The flue gas recirculating fans shall be inspected for proper operation and maintenance once during each calendar month that the unit was operating. (NSR Permit 2195B-M2, Specific Condition A803.B)

**Recordkeeping:** The permittee shall record all inspections of the flue gas recirculating fans and any event during which a fan malfunctions. The record shall include the date, time, name of operator conducting the inspection, and any discrepancies noted. For malfunction events, the record shall also include the nature and duration of the malfunction, and any corrective action taken. The permittee shall maintain records in accordance with Section B109. (NSR Permit 2195B-M2, Specific Condition A803.B)

**Reporting:** The permittee shall submit reports described in Section A109 and in accordance with Section B110.

F. Control Device Operation (Combustion Turbine, Unit TA-3-22-CT-1)

**Requirement:** The combustion turbine shall be equipped with Rolls-Royce Dry Low Emissions (DLE) control technology (pre-mix, lean-burn series staged combustion system) to control NOx emissions. (NSR Permit 2195B-M2, Specific Condition A802.C)

**Monitoring:** N/A

**Recordkeeping:** The permittee shall maintain a record of the DLE system associated with the combustion turbine. The permittee shall maintain records in accordance with Section B109. (NSR Permit 2195B-M2, Specific Condition A802.C)

**Reporting:** The permittee shall submit reports described in Section A109 and in accordance with Section B110.

G. 40 CFR 60, Subparts A and GG (Combustion Turbine, Unit TA-3-22-CT-1)

**Requirement:** The combustion turbine is subject to 40 CFR 60, Subpart GG and the permittee shall comply with the applicable requirements of 40 CFR 60, Subpart A and Subpart GG. (NSR Permit 2195B-M2, Specific Condition A802.D)

**Monitoring:** The permittee shall comply with the monitoring and testing requirements of 40 CFR 60.334 and 60.335. (NSR Permit 2195B-M2, Specific Condition A802.D)

**Recordkeeping:** The permittee shall comply with the recordkeeping requirements of 40 CFR 60.334 and 40 CFR 60.7. (NSR Permit 2195B-M1-R2, Specific Condition A802.D)

**Reporting:** The permittee shall comply with the reporting requirements of 40 CFR 60.7. (NSR Permit 2195B-M1-R2, Specific Condition A802.D)

H. Periodic Emissions Tests (Combustion Turbine, Unit TA-3-22-CT-1)

**Requirement:** The permittee shall comply with the allowable emission limits at Table A1302.A, including the NO<sub>x</sub> ppmv limitation. (NSR Permit 2195B-M2, Specific Condition A802.E)

**Monitoring:** The permittee shall test using a portable analyzer or EPA Reference Methods subject to the requirements and limitations of Section B108, General Monitoring Requirements. For periodic testing of NO<sub>x</sub> and CO emissions tests shall be carried out as described below.

Test results that demonstrate compliance with the NO<sub>x</sub> and CO emission limits shall also be considered to demonstrate compliance with the VOC emission limits.

- (1) The test period shall be annually, based on a calendar year.
- (2) The tests shall continue based on the existing testing schedule.
- (3) All subsequent monitoring shall occur in each succeeding monitoring period. No two monitoring events shall occur closer together in time than 25% of a monitoring period.
- (4) The permittee shall follow the General Testing Procedures of Section B111.
- (5) Performance testing required by 40 CFR 60, Subpart GG or 40 CFR 60, Subpart KKKK may be used to satisfy these periodic testing requirements if they meet the requirements of this condition and are completed during the specified monitoring period.

**Recordkeeping:** The permittee shall maintain records in accordance with Section B109. The permittee shall also record the results of the periodic emissions tests, including the turbine's fuel flow rate and horsepower at the time of the test, and the type of fuel fired (natural gas, field gas, etc.).

If a combustion analyzer is used to measure excess air in the exhaust gas, records shall be kept of the make and model of the instrument and instrument calibration data. If an ORSAT apparatus or other gas absorption analyzer is used, the permittee shall record all calibration results.

The permittee shall also keep records of all raw data used to determine exhaust gas flow and of all calculations used to determine flow rates and mass emissions rates.

**Reporting:** The permittee shall report in accordance with Section B109, B110, and B111.

**OPEN BURNING**

**A1400 Regulated Sources – Open Burning**

A. Table 1400.A lists all of the process equipment authorized for this source category.

**Table 1400.A: Regulated Sources List**

Unit No./Location	Source Description
Facility-Wide Open Burning	All open lands within LANL property boundary

**A1401 Control Equipment – Open Burning – Not Required****A1402 Emission Limits – Open Burning**

- A. Table 1402.A lists the emission units, and their allowable emission limits. (40 CFR 50; Paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC; 20.2.60 NMAC; 20.2.65 NMAC).

**Table 1402.A: Allowable Emissions**

Unit No.	Individual HAP <sup>1</sup> (tpy)	Total HAPs <sup>1</sup> (tpy)
Facility-Wide Open Burning	8.0	24.0

<sup>1</sup> Individual and Total HAPs emitted by Open Burning are included in the facility-wide HAP emission limits at Table 106.B.

**A1403 Applicable Requirements – Open Burning**

- A. The permittee shall comply with all applicable sections of the requirements listed in Table 1403.A.

**Table 1403.A: Applicable Requirements**

Applicable Requirements	Federally Enforceable	Unit No.
20.2.60 NMAC Open Burning	X	Facility-Wide Open Burning
20.2.65 NMAC Smoke Management	X	Facility-Wide Open Burning

**A1404 Operational Limitations – Open Burning**

- A. This source category is authorized to operate at any time of the day or night on any day of the year. No monitoring, recordkeeping, or reporting requirements are required to demonstrate compliance with continuous hours of operation.

**A1405 Fuel Sulfur Requirements – Open Burning – Not Required****A1406 20.2.61 NMAC Opacity – Open Burning – Not Required****A1407 Other – Open Burning**

- A. Operational

<b>Requirement:</b> The permittee shall comply with the applicable requirements of 20.2.60 NMAC and 20.2.65 NMAC, including, but not limited to:
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- 1) Prior to initiating a burn consisting of vegetative material, the permittee shall submit to the Department a sampling and analysis plan and upon approval conduct representative sampling of the intended burn material and analyze samples for radionuclides, target analyte list (TAL) inorganic elements, polychlorinated biphenyls (PCBs), and high explosives (HE); and
- 2) The permittee shall submit to the Department a background concentration report for the contaminants listed in Condition A1407.A, Requirement (1). The report shall indicate locations where background concentrations were taken and compare sample results with background concentrations of the constituents; and
- 3) The permittee shall not burn vegetative material which includes any contaminant above the relevant background concentration; and
- 4) Upon receiving Department approval, the permittee shall conduct public notification in a display ad in at least four newspapers: Los Alamos Monitor, Rio Grande Sun, Santa Fe New Mexican, and the Albuquerque Journal, no less than 21 days in advance of a planned burn.

**Monitoring:** The permittee shall monitor all open burning as required by Department regulation or burn approval.

**Recordkeeping:** The permittee shall maintain records of all sampling and analysis plans and any representative sampling conducted. Records shall be kept in accordance with Section B109.

**Reporting:** The permittee shall submit reports as outlined in the Condition 1407.A Requirements, as described in Section A109, and in accordance with Section B110.

**PART B GENERAL CONDITIONS****B100 Introduction**

- A. Not Applicable

**B101 Legal**

- A. Permit Terms and Conditions (20.2.70 sections 7, 201.B, 300, 301.B, 302, 405 NMAC)
- (1) The permittee shall abide by all terms and conditions of this permit, except as allowed under Section 502(b)(10) of the Federal Act, and 20.2.70.302.H.1 NMAC. Any permit noncompliance is grounds for enforcement action, and significant or repetitious noncompliance may result in termination of this permit. Additionally, noncompliance with federally enforceable conditions of this permit constitutes a violation of the Federal Act. (20.2.70.302.A.2.a NMAC)
  - (2) Emissions trading within a facility (20.2.70.302.H.2 NMAC)
    - (a) The Department shall, if an applicant requests it, issue permits that contain terms and conditions allowing for the trading of emissions increases and decreases in the permitted facility solely for the purpose of complying with a federally enforceable emissions cap that is established in the permit in addition to any applicable requirements. Such terms and conditions shall include all terms and conditions required under 20.2.70.302 NMAC to determine compliance. If applicable requirements apply to the requested emissions trading, permit conditions shall be issued only to the extent that the applicable requirements provide for trading such increases and decreases without a case-by-case approval.
    - (b) The applicant shall include in the application proposed replicable procedures and permit terms that ensure the emissions trades are quantifiable and enforceable. The Department shall not include in the emissions trading provisions any emissions units for which emissions are not quantifiable or for which there are no replicable procedures to enforce the emissions trades. The permit shall require compliance with all applicable requirements.
  - (3) It shall not be a defense for the permittee in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (20.2.70.302.A.2.b NMAC)

- (4) If the Department determines that cause exists to modify, reopen and revise, revoke and reissue, or terminate this permit, this shall be done in accordance with 20.2.70.405 NMAC. (20.2.70.302.A.2.c NMAC)
- (5) The permittee shall furnish any information the Department requests in writing to determine if cause exists for reopening and revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. This information shall be furnished within the time period specified by the Department. Additionally, the permittee shall furnish, upon request by the Department, copies of records required by the permit to be maintained by the permittee. (20.2.70.302.A.2.f NMAC)
- (6) A request by the permittee that this permit be modified, revoked and reissued, or terminated, or a notification by the permittee of planned changes or anticipated noncompliance, shall not stay any conditions of this permit. (20.2.70.302.A.2.d NMAC)
- (7) This permit does not convey property rights of any sort, or any exclusive privilege. (20.2.70.302.A.2.e NMAC)
- (8) In the case where an applicant or permittee has submitted information to the Department under a claim of confidentiality, the Department may also require the applicant or permittee to submit a copy of such information directly to the Administrator of the EPA. (20.2.70.301.B NMAC)
- (9) The issuance of this permit, or the filing or approval of a compliance plan, does not relieve the permittee from civil or criminal liability for failure to comply with the state or Federal Acts, or any applicable state or federal regulation or law. (20.2.70.302.A.6 NMAC and the New Mexico Air Quality Control Act NMSA 1978, Chapter 74, Article 2)
- (10) If any part of this permit is challenged or held invalid, the remainder of the permit terms and conditions are not affected and the permittee shall continue to abide by them. (20.2.70.302.A.1.d NMAC)
- (11) A responsible official (as defined in 20.2.70.7.AE NMAC) shall certify the accuracy, truth and completeness of every report and compliance certification submitted to the Department as required by this permit. These certifications shall be part of each document. (20.2.70.300.E NMAC)
- (12) Revocation or termination of this permit by the Department terminates the permittee's right to operate this facility. (20.2.70.201.B NMAC)
- (13) The permittee shall continue to comply with all applicable requirements. For applicable requirements that will become effective during the term of the permit, the permittee shall meet such requirements on a timely basis. (Sections 300.D.10.c and 302.G.3 of 20.2.70 NMAC)

**B. Permit Shield (20.2.70.302.J NMAC)**

- (1) Compliance with the conditions of this permit shall be deemed to be compliance with any applicable requirements existing as of the date of permit issuance and identified in **Table 103.A**. The requirements in **Table 103.A** are applicable to this facility with specific requirements identified for individual emission units.
  - (2) The Department has determined that the requirements in **Table 103.B** as identified in the permit application are not applicable to this source, or they do not impose any conditions in this permit.
  - (3) This permit shield does not extend to administrative amendments (Subsection A of 20.2.70.404 NMAC), to minor permit modifications (Subsection B of 20.2.70.404 NMAC), to changes made under Section 502(b)(10), changes under Paragraph 1 of subsection H of 20.2.70.302 of the Federal Act, or to permit terms for which notice has been given to reopen or revoke all or part under 20.2.70.405 and 20.2.70.302J(6).
  - (4) This permit shall, for purposes of the permit shield, identify any requirement specifically identified in the permit application or significant permit modification that the department has determined is not applicable to the source, and state the basis for any such determination. (20.2.70.302.A.1.f NMAC)
- C. The owner or operator of a source having an excess emission shall, to the extent practicable, operate the source, including associated air pollution control equipment, in a manner consistent with good air pollutant control practices for minimizing emissions. (20.2.7.109 NMAC). The establishment of allowable malfunction emission limits does not supersede this requirement.

**B102 Authority**

- A. This permit is issued pursuant to the federal Clean Air Act ("Federal Act"), the New Mexico Air Quality Control Act ("State Act") and regulations adopted pursuant to the State and Federal Acts, including Title 20, New Mexico Administrative Code, Chapter 2, Part 70 (20.2.70 NMAC) - Operating Permits.
- B. This permit authorizes the operation of this facility. This permit is valid only for the named permittee, owner, and operator. A permit modification is required to change any of those entities.
- C. The Department specifies with this permit, terms and conditions upon the operation of this facility to assure compliance with all applicable requirements, as defined in 20.2.70 NMAC at the time this permit is issued. (20.2.70.302.A.1 NMAC)
- D. Pursuant to the New Mexico Air Quality Control Act NMSA 1978, Chapter 74, Article 2, all terms and conditions in this permit, including any provisions designed to limit this facility's potential to emit, are enforceable by the Department. All terms and conditions are enforceable by the Administrator of the United States Environmental Protection Agency ("EPA") and citizens under the Federal Act,

unless the term or condition is specifically designated in this permit as not being enforceable under the Federal Act. (20.2.70.302.A.5 NMAC)

- E. The Department is the Administrator for 40 CFR Parts 60, 61, and 63 pursuant to the Modification and Exceptions of Section 10 of 20.2.77 NMAC (NSPS), 20.2.78 NMAC (NESHAP), and 20.2.82 NMAC (MACT).

**B103 Annual Fee**

- A. The permittee shall pay Title V fees to the Department consistent with the fee schedule in 20.2.71 NMAC - Operating Permit Emission Fees. The fees will be assessed and invoiced separately from this permit. (20.2.70.302.A.1.e NMAC)

**B104 Appeal Procedures**  
(20.2.70.403.A NMAC)

- A. Any person who participated in a permitting action before the Department and who is adversely affected by such permitting action, may file a petition for a hearing before the Environmental Improvement Board ("board"). The petition shall be made in writing to the board within thirty (30) days from the date notice is given of the Department's action and shall specify the portions of the permitting action to which the petitioner objects, certify that a copy of the petition has been mailed or hand-delivered, and attach a copy of the permitting action for which review is sought. Unless a timely request for a hearing is made, the decision of the Department shall be final. The petition shall be copied simultaneously to the Department upon receipt of the appeal notice. If the petitioner is not the applicant or permittee, the petitioner shall mail or hand-deliver a copy of the petition to the applicant or permittee. The Department shall certify the administrative record to the board. Petitions for a hearing shall be sent to:

Secretary, New Mexico Environmental Improvement Board  
1190 St. Francis Drive, Runnels Bldg. Rm N2153  
Santa Fe, New Mexico 87502

**B105 Submittal of Reports and Certifications**

- A. Stack Test Protocols and Stack Test Reports shall be submitted electronically to [Stacktest.AOB@state.nm.us](mailto:Stacktest.AOB@state.nm.us) or as directed by the Department.
- B. Excess Emission Reports shall be submitted as directed by the Department. (20.2.7.110 NMAC)
- C. Compliance Certification Reports, Semi-Annual monitoring reports, compliance schedule progress reports, and any other compliance status information required by

this permit shall be certified by the responsible official and submitted to the mailing address below, or as directed by the Department:

Manager, Compliance and Enforcement Section  
New Mexico Environment Department  
Air Quality Bureau  
525 Camino de los Marquez Suite 1  
Santa Fe, NM 87505-1816

- D. Compliance Certification Reports shall also be submitted to the Administrator at the address below (20.2.70.302.E.3 NMAC):

Chief, Air Enforcement Section  
US EPA Region-6, 6EN-AA  
1445 Ross Avenue, Suite 1200  
Dallas, TX 75202-2733

**B106 NSPS and/or MACT Startup, Shutdown, and Malfunction Operations**

- A. If a facility is subject to a NSPS standard in 40 CFR 60, each owner or operator that installs and operates a continuous monitoring device required by a NSPS regulation shall comply with the excess emissions reporting requirements in accordance with 40 CFR 60.7(c).
- B. If a facility is subject to a NSPS standard in 40 CFR 60, then in accordance with 40 CFR 60.8(c), operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.
- C. If a facility is subject to a MACT standard in 40 CFR 63, then the facility is subject to the requirement for a Startup, Shutdown and Malfunction Plan (SSM) under 40 CFR 63.6(e)(3), unless specifically exempted in the applicable subpart. (20.2.70.302.A.1 and A.4 NMAC)

**B107 Startup, Shutdown, and Maintenance Operations**

- A. The establishment of permitted startup, shutdown, and maintenance (SSM) emission limits does not supersede the requirements of 20.2.7.14.A NMAC. Except for operations or equipment subject to Condition B106, the permittee shall establish and implement a plan to minimize emissions during routine or predictable start up, shut down, and scheduled maintenance (SSM work practice plan) and shall operate in accordance with the procedures set forth in the plan. (20.2.7.14.A NMAC)

**B108 General Monitoring Requirements**  
(20.2.70. 302.A and C NMAC)

- A. These requirements do not supersede or relax requirements of federal regulations.
- B. The following monitoring and/or testing requirements shall be used to determine compliance with applicable requirements and emission limits. Any sampling, whether by portable analyzer or EPA reference method, that measures an emission rate over the applicable averaging period greater than an emission limit in this permit constitutes noncompliance with this permit. The Department may require, at its discretion, additional tests pursuant to EPA Reference Methods at any time, including when sampling by portable analyzer measures an emission rate greater than an emission limit in this permit; but such requirement shall not be construed as a determination that the sampling by portable analyzer does not establish noncompliance with this permit and shall not stay enforcement of such noncompliance based on the sampling by portable analyzer.
- C. If the emission unit is shutdown at the time when periodic monitoring is due to be accomplished, the permittee is not required to restart the unit for the sole purpose of performing the monitoring. Using electronic or written mail, the permittee shall notify the Department's Enforcement Section of a delay in emission tests prior to the deadline for accomplishing the tests. Upon recommencing operation, the permittee shall submit any pertinent pre-test notification requirements set forth in the current version of the Department's Standard Operating Procedures For Use Of Portable Analyzers in Performance Test, and shall accomplish the monitoring.
- D. The requirement for monitoring during any monitoring period is based on the percentage of time that the unit has operated. However, to invoke monitoring period exemptions at B108.D(2), hours of operation shall be monitored and recorded.
  - (1) If the emission unit has operated for more than 25% of a monitoring period, then the permittee shall conduct monitoring during that period.
  - (2) If the emission unit has operated for 25% or less of a monitoring period then the monitoring is not required. After two successive periods without monitoring, the permittee shall conduct monitoring during the next period regardless of the time operated during that period, except that for any monitoring period in which a unit has operated for less than 10% of the monitoring period, the period will not be considered as one of the two successive periods.
  - (3) If invoking the monitoring period exemption in B108.D(2), the actual operating time of a unit shall not exceed the monitoring period required by this permit before the required monitoring is performed. For example, if the monitoring period is annual, the operating hours of the unit shall not exceed 8760 hours before monitoring is conducted. Regardless of the time that a unit actually operates, a minimum of one of each type of monitoring activity shall be conducted during the five year term of this permit.

- E. The permittee is not required to report a deviation for any monitoring or testing in a Specific Condition if the deviation was authorized in this General Condition B108.
- F. For all periodic monitoring events, except when a federal or state regulation is more stringent, three test runs shall be conducted at 90% or greater of the unit's capacity as stated in this permit, or in the permit application if not in the permit, and at additional loads when requested by the Department. If the 90% capacity cannot be achieved, the monitoring will be conducted at the maximum achievable load under prevailing operating conditions except when a federal or state regulation requires more restrictive test conditions. The load and the parameters used to calculate it shall be recorded to document operating conditions and shall be included with the monitoring report.
- G. When requested by the Department, the permittee shall provide schedules of testing and monitoring activities. Compliance tests from previous NSR and Title V permits may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions.
- H. If monitoring is new or is in addition to monitoring imposed by an existing applicable requirement, it shall become effective 120 days after the date of permit issuance. For emission units that have not commenced operation, the associated new or additional monitoring shall not apply until 120 days after the units commence operation. All pre-existing monitoring requirements incorporated in this permit shall continue to apply from the date of permit issuance. All monitoring periods, unless stated otherwise in the specific permit condition or federal requirement, shall commence at the beginning of the 12 month reporting period as defined at condition A109.B.

**B109 General Recordkeeping Requirements**  
(20.2.70.302.D NMAC)

- A. The permittee shall maintain records to assure and verify compliance with the terms and conditions of this permit and any applicable requirements that become effective during the term of this permit. The minimum information to be included in these records is (20.2.70.302.D.1 NMAC):
  - (1) equipment identification (include make, model and serial number for all tested equipment and emission controls);
  - (2) date(s) and time(s) of sampling or measurements;
  - (3) date(s) analyses were performed;
  - (4) the company or entity that performed the analyses;
  - (5) analytical or test methods used;

- (6) results of analyses or tests; and
  - (7) operating conditions existing at the time of sampling or measurement.
- B. The permittee shall keep records of all monitoring data, equipment calibration, maintenance, and inspections, Data Acquisition and Handling System (DAHS) if used, reports, and other supporting information required by this permit for at least five (5) years from the time the data was gathered or the reports written. Each record shall clearly identify the emissions unit and/or monitoring equipment, and the date the data was gathered. (20.2.70.302.D.2 NMAC)
- C. If the permittee has applied and received approval for an alternative operating scenario, then the permittee shall maintain a log at the facility, which documents, contemporaneously with any change from one operating scenario to another, the scenario under which the facility is operating. (20.2.70.302.A.3 NMAC)
- D. The permittee shall keep a record describing off permit changes made at this source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes. (20.2.70.302.I.2 NMAC)
- E. Unless otherwise indicated by Specific Conditions, the permittee shall keep the following records for malfunction emissions and routine and predictable emissions during startup, shutdown, and scheduled maintenance (SSM):
- (1) The owner or operator of a source subject to a permit, shall establish and implement a plan to minimize emissions during routine or predictable startup, shutdown, and scheduled maintenance through work practice standards and good air pollution control practices. This requirement shall not apply to any affected facility defined in and subject to an emissions standard and an equivalent plan under 40 CFR Part 60 (NSPS), 40 CFR Part 63 (MACT), or an equivalent plan under 20.2.72 NMAC - Construction Permits, 20.2.70 NMAC - Operating Permits, 20.2.74 NMAC - Permits - Prevention of Significant Deterioration (PSD), or 20.2.79 NMAC - Permits - Nonattainment Areas. (20.2.7.14.A NMAC) The permittee shall keep records of all sources subject to the plan to minimize emissions during routine or predictable SSM and shall record if the source is subject to an alternative plan and therefore, not subject to the plan requirements under 20.2.7.14.A NMAC.
  - (2) If the facility has allowable SSM emission limits in this permit, the permittee shall record all SSM events, including the date, the start time, the end time, a description of the event, and a description of the cause of the event. This record also shall include a copy of the manufacturer's, or equivalent, documentation showing that any maintenance qualified as scheduled. Scheduled maintenance is an activity that occurs at an established frequency pursuant to a written protocol published by the manufacturer or other reliable source. The authorization of

allowable SSM emissions does not supersede any applicable federal or state standard. The most stringent requirement applies.

- (3) If the facility has allowable malfunction emission limits in this permit, the permittee shall record all malfunction events to be applied against these limits. The permittee shall also include the date, the start time, the end time, and a description of the event. **Malfunction means** any sudden and unavoidable failure of air pollution control equipment or process equipment beyond the control of the owner or operator, including malfunction during startup or shutdown. A failure that is caused entirely or in part by poor maintenance, careless operation, or any other preventable equipment breakdown shall not be considered a malfunction. (20.2.7.7.E NMAC) The authorization of allowable malfunction emissions does not supersede any applicable federal or state standard. The most stringent requirement applies. This authorization only allows the permittee to avoid submitting reports under 20.2.7 NMAC for total annual emissions that are below the authorized malfunction emission limit.
- (4) The owner or operator of a source shall meet the operational plan defining the measures to be taken to mitigate source emissions during malfunction, startup or shutdown. (20.2.72.203.A(5) NMAC)

**B110 General Reporting Requirements**  
(20.2.70.302.E NMAC)

- A. Reports of required monitoring activities for this facility shall be submitted to the Department on the schedule in section A109. Monitoring and recordkeeping requirements that are not required by a NSPS or MACT shall be maintained on-site or (for unmanned sites) at the nearest company office, and summarized in the semi-annual reports, unless alternative reporting requirements are specified in the equipment specific requirements section of this permit.
- B. Reports shall clearly identify the subject equipment showing the emission unit ID number according to this operating permit. In addition, all instances of deviations from permit requirements, including those that occur during emergencies, shall be clearly identified in the reports required by section A109. (20.2.70.302.E.1 NMAC)
- C. The permittee shall submit reports of all deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. These reports shall be submitted as follows:
  - (1) Deviations resulting in excess emissions as defined in 20.2.7.7 NMAC (including those classified as emergencies as defined in section B114.A) shall be reported in accordance with the timelines specified by 20.2.7.110 NMAC and in the semi-annual reports required in section A109. (20.2.70.302.E.2 NMAC)

- (2) All other deviations shall be reported in the semi-annual reports required in section A109. (20.2.70.302.E.2 NMAC).
- D. The permittee shall submit reports of excess emissions in accordance with 20.2.7.110.A NMAC.
- E. Results of emission tests and monitoring for each pollutant (except opacity) shall be reported in pounds per hour (unless otherwise specified) and tons per year. Opacity shall be reported in percent. The number of significant figures corresponding to the full accuracy inherent in the testing instrument or Method test used to obtain the data shall be used to calculate and report test results in accordance with 20.2.1.116.B and C NMAC. Upon request by the Department, CEMS and other tabular data shall be submitted in editable, MS Excel format.
- F. At such time as new units are installed as authorized by the applicable NSR Permit, the permittee shall fulfill the notification requirements in the NSR permit.
- G. Periodic Emissions Test Reporting: The permittee shall report semi-annually a summary of the test results.
- H. The permittee shall submit an emissions inventory for this facility annually. The emissions inventory shall be submitted by the later of April 1 or within 90 days after the Department makes such request. (20.2.73 NMAC and 20.2.70.302.A.1 NMAC)
- I. Emissions trading within a facility (20.2.70.302.H.2 NMAC)
  - (1) For each such change, the permittee shall provide written notification to the department and the administrator at least seven (7) days in advance of the proposed changes. Such notification shall state when the change will occur and shall describe the changes in emissions that will result and how these increases and decreases in emissions will comply with the terms and conditions of the permit.
  - (2) The permittee and department shall attach each such notice to their copy of the relevant permit.

#### **B111 General Testing Requirements**

##### **A. Compliance Tests**

- (1) Compliance test requirements from previous permits (if any) are still in effect, unless the tests have been satisfactorily completed. Compliance tests may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions. (20.2.72 NMAC Sections 210.C and 213)

- (2) Compliance tests shall be conducted within sixty (60) days after the unit(s) achieve the maximum normal production rate. If the maximum normal production rate does not occur within one hundred twenty (120) days of source startup, then the tests must be conducted no later than one hundred eighty (180) days after initial startup of the source.
- (3) Unless otherwise indicated by Specific Conditions or regulatory requirements, the default time period for each test run shall be at least 60 minutes and each performance test shall consist of three separate runs using the applicable test method. For the purpose of determining compliance with an applicable emission limit, the arithmetic mean of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Department approval, be determined using the arithmetic mean of the results of the two other runs.
- (4) Testing of emissions shall be conducted with the emissions unit operating at 90 to 100 percent of the maximum operating rate allowed by the permit. If it is not possible to test at that rate, the source may test at a lower operating rate, subject to the approval of the Department.
- (5) Testing performed at less than 90 percent of permitted capacity will limit emission unit operation to 110 percent of the tested capacity until a new test is conducted.
- (6) If conditions change such that unit operation above 110 percent of tested capacity is possible, the source must submit a protocol to the Department within 30 days of such change to conduct a new emissions test.

#### B. EPA Reference Method Tests

- (1) All compliance tests required by this permit, unless otherwise specified by Specific Conditions of this permit, shall be conducted in accordance with the requirements of 40 CFR 60, Subpart A, General Provisions, and the following EPA Reference Methods as specified by 40 CFR 60, Appendix A:
  - (a) Methods 1 through 4 for stack gas flowrate
  - (b) Method 5 for TSP
  - (c) Method 6C and 19 for SO<sub>2</sub>
  - (d) Method 7E for NO<sub>x</sub> (test results shall be expressed as nitrogen dioxide (NO<sub>2</sub>) using a molecular weight of 46 lb/lb-mol in all calculations (each ppm of NO/NO<sub>2</sub> is equivalent to 1.194 x 10<sup>-7</sup> lb/SCF)
  - (e) Method 9 for opacity
  - (f) Method 10 for CO

- (g) Method 19 may be used in lieu of Methods 1-4 for stack gas flowrate upon approval of the Department. A justification for this proposal must be provided along with a contemporaneous fuel gas analysis (preferably on the day of the test) and a recent fuel flow meter calibration certificate (within the most recent quarter).
  - (h) Method 7E or 20 for Turbines per 60.335 or 60.4400
  - (i) Method 29 for Metals
  - (j) Method 201A for filterable PM<sub>10</sub> and PM<sub>2.5</sub>
  - (k) Method 202 for condensable PM
  - (l) Method 320 for organic Hazardous Air Pollutants (HAPs)
  - (m) Method 25A for VOC reduction efficiency
  - (n) Method 30B for Mercury
- (2) Alternative test method(s) may be used if the Department approves the change.

**C. Periodic Monitoring and Portable Analyzer Requirements**

- (1) Periodic emissions tests (periodic monitoring) may be conducted in accordance with EPA Reference Methods or by utilizing a portable analyzer. Periodic monitoring utilizing a portable analyzer shall be conducted in accordance with the requirements of ASTM D 6522-00. However, if a facility has met a previously approved Department criterion for portable analyzers, the analyzer may be operated in accordance with that criterion until it is replaced.
- (2) Unless otherwise indicated by Specific Conditions or regulatory requirements, the default time period for each test run shall be **at least 20 minutes**.  
Each performance test shall consist of three separate runs. The arithmetic mean of results of the three runs shall be used to determine compliance with the applicable emission limit.
- (3) Testing of emissions shall be conducted in accordance with the requirements at Section B108.F.
- (4) During emissions tests, pollutant, O<sub>2</sub> concentration and fuel flow rate shall be monitored and recorded. This information shall be included with the test report furnished to the Department.
- (5) Pollutant emission rate shall be calculated in accordance with 40 CFR 60, Appendix A, Method 19 utilizing fuel flow rate (scf) and fuel heating value (Btu/scf) obtained during the test.

**D. Test Procedures:**

- (1) The permittee shall notify the Department's Program Manager, Compliance and Enforcement Section at least thirty (30) days before the test to afford a

representative of the Department an opportunity to be present at the test. (40CFR 60.8(d))

- (2) Equipment shall be tested in the "as found" condition. Equipment may not be adjusted or tuned prior to any test for the purpose of lowering emissions, and then returned to previous settings or operating conditions after the test is complete.
- (3) Contents of test notifications, protocols and test reports shall conform to the format specified by the Department's Universal Test Notification, Protocol and Report Form and Instructions. Current forms and instructions are posted to NMED's Air Quality web site under Compliance and Enforcement Testing.
- (4) The permittee shall provide (a) sampling ports adequate for the test methods applicable to the facility, (b) safe sampling platforms, (c) safe access to sampling platforms and (d) utilities for sampling and testing equipment.
- (5) The stack shall be of sufficient height and diameter and the sample ports shall be located so that a representative test of the emissions can be performed in accordance with the requirements of EPA Method 1 or ASTM D 6522-00 as applicable.
- (6) Where necessary to prevent cyclonic flow in the stack, flow straighteners shall be installed
- (7) Unless otherwise indicated by Specific Conditions or regulatory requirements, test reports shall be submitted to the Department no later than 30 days after completion of the test.

#### **B112 Compliance**

- A. The Department shall be given the right to enter the facility at all reasonable times to verify the terms and conditions of this permit. Required records shall be organized by date and subject matter and shall at all times be readily available for inspection. The permittee, upon verbal or written request from an authorized representative of the Department who appears at the facility, shall immediately produce for inspection or copying any records required to be maintained at the facility. Upon written request at other times, the permittee shall deliver to the Department paper or electronic copies of any and all required records maintained on site or at an off-site location. Requested records shall be copied and delivered at the permittee's expense within three business days from receipt of request unless the Department allows additional time. Required records may include records required by permit and other information necessary to demonstrate compliance with terms and conditions of this permit. (NMSA 1978, Section 74-2-13)
- B. A copy of the most recent permit(s) issued by the Department shall be kept at the permitted facility or (for unmanned sites) at the nearest company office and shall be made available to Department personnel for inspection upon request. (20.2.70.302.G.3 NMAC)

- C. Emissions limits associated with the energy input of a Unit, i.e. lb/MMBtu, shall apply at all times unless stated otherwise in a Specific Condition of this permit. The averaging time for each emissions limit, including those based on energy input of a Unit (i.e. lb/MMBtu) is one (1) hour unless stated otherwise in a Specific Condition of this permit or in the applicable requirement that establishes the limit. (20.2.70.302.A.1 and G.3 NMAC)
- D. The permittee shall submit compliance certification reports certifying the compliance status of this facility with respect to all permit terms and conditions, including applicable requirements. These reports shall be made on the pre-populated Compliance Certification Report Form that is provided to the permittee by the Department, and shall be submitted to the Department and to EPA at least every 12 months. For the most current form, please contact the Compliance Reports Group at email:reportsgroup.aqb@state.nm.us. For additional reporting guidance see [http://www.nmenv.state.nm.us/aqb/enforce\\_compliance/TitleVReporting.htm](http://www.nmenv.state.nm.us/aqb/enforce_compliance/TitleVReporting.htm). (20.2.70.302.E.3 NMAC)
- E. The permittee shall allow representatives of the Department, upon presentation of credentials and other documents as may be required by law, to do the following (20.2.70.302.G.1 NMAC):
- (1) enter the permittee's premises where a source or emission unit is located, or where records that are required by this permit to be maintained are kept;
  - (2) have access to and copy, at reasonable times, any records that are required by this permit to be maintained;
  - (3) inspect any facilities, equipment (including monitoring and air pollution control equipment), work practices or operations regulated or required under this permit; and
  - (4) sample or monitor any substances or parameters for the purpose of assuring compliance with this permit or applicable requirements or as otherwise authorized by the Federal Act.

### **B113 Permit Reopening and Revocation**

- A. This permit will be reopened and revised when any one of the following conditions occurs, and may be revoked and reissued when A(3) or A(4) occurs. (20.2.70.405.A.1 NMAC)
- (1) Additional applicable requirements under the Federal Act become applicable to a major source three (3) or more years before the expiration date of this permit. If the effective date of the requirement is later than the expiration date of this permit, then the permit is not required to be reopened unless the original permit or any of its terms and conditions has been extended due to the Department's failure to take timely action on a request by the permittee to renew this permit.

- (2) Additional requirements, including excess emissions requirements, become applicable to this source under Title IV of the Federal Act (the acid rain program). Upon approval by the Administrator, excess emissions offset plans will be incorporated into this permit.
  - (3) The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the terms and conditions of the permit.
  - (4) The Department or the Administrator determines that the permit must be revised or revoked and reissued to assure compliance with an applicable requirement.
- B. Proceedings to reopen or revoke this permit shall affect only those parts of this permit for which cause to reopen or revoke exists. Emissions units for which permit conditions have been revoked shall not be operated until new permit conditions have been issued for them. (20.2.70.405.A.2 NMAC)

**B114 Emergencies**  
(20.2.70.304 NMAC)

- A. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the permittee, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, or careless or improper operation.
- B. An emergency constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations contained in this permit if the permittee has demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
- (1) An emergency occurred and that the permittee can identify the cause(s) of the emergency;
  - (2) This facility was at the time being properly operated;
  - (3) During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit; and
  - (4) The permittee submitted notice of the emergency to the Department within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirement of 20.2.70.302.E.2 NMAC. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

- C. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- D. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

**B115 Stratospheric Ozone**  
(20.2.70.302.A.1 NMAC)

- A. If this facility is subject to 40 CFR 82, Subpart F, the permittee shall comply with the following standards for recycling and emissions reductions:
  - (1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices, except for motor vehicle air conditioners (MVAC) and MVAC-like appliances. (40 CFR 82.156)
  - (2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment. (40 CFR 82.158)
  - (3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program. (40 CFR 82.161)

**B116 Acid Rain Sources**  
(20.2.70.302.A.9 NMAC)

- A. If this facility is subject to the federal acid rain program under 40 CFR 72, this section applies.
- B. Where an applicable requirement of the Federal Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Federal Act, both provisions are incorporated into this permit and are federally enforceable.
- C. Emissions exceeding any allowances held by the permittee under Title IV of the Federal Act or the regulations promulgated thereunder are prohibited.
- D. No modification of this permit is required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit modification under any other applicable requirement.
- E. The permittee may not use allowances as a defense to noncompliance with any other applicable requirement.
- F. No limit is placed on the number of allowances held by the acid rain source. Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Federal Act.

- G. The acid rain permit is an enclosure of this operating permit.

**B117 Risk Management Plan**  
(20.2.70.302.A.1 NMAC)

- A. If this facility is subject to the federal risk management program under 40 CFR 68, this section applies.
- B. The owner or operator shall certify annually that they have developed and implemented a RMP and are in compliance with 40 CFR 68.
- C. If the owner or operator of the facility has not developed and submitted a risk management plan according to 40 CFR 68.150, the owner or operator shall provide a compliance schedule for the development and implementation of the plan. The plan shall describe, in detail, procedures for assessing the accidental release hazard, preventing accidental releases, and developing an emergency response plan to an accidental release. The plan shall be submitted in a method and format to a central point as specified by EPA prior to the date specified in 40 CFR 68.150.b.

**PART C MISCELLANEOUS**

**C100 Supporting On-Line Documents**

- D. Copies of the following documents can be downloaded from NMED's web site under Compliance and Enforcement or requested from the Bureau.
- (1) Excess Emission Form (for reporting deviations and emergencies)
  - (2) Compliance Certification Report Form
  - (3) Universal Stack Test Notification, Protocol and Report Form and Instructions
  - (4) SOP for Use of Portable Analyzers in Performance Tests

**C101 Definitions**

- A. **"Daylight"** is defined as the time period between sunrise and sunset, as defined by the Astronomical Applications Department of the U.S. Naval Observatory. (Data for one day or a table of sunrise/sunset for an entire year can be obtained at <http://aa.usno.navy.mil/>. Alternatively, these times can be obtained from a Farmers Almanac or from <http://www.almanac.com/rise/>).
- B. **"Exempt Sources"** and **"Exempt Activities"** is defined as those sources or activities that are exempted in accordance with 20.2.72.202 NMAC. Note; exemptions are only valid for most 20.2.72 permitting action.

- C. **“Fugitive emission”** means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. (20.2.70.7M NMAC)
- D. **“Insignificant Activities”** means those activities which have been listed by the department and approved by the administrator as insignificant on the basis of size, emissions or production rate. (20.2.70.7Q NMAC)
- E. **“Malfunction”** for the requirements under 20.2.7 NMAC, means any sudden and unavoidable failure of air pollution control equipment or process equipment beyond the control of the owner or operator, including malfunction during startup or shutdown. A failure that is caused entirely or in part by poor maintenance, careless operation, or any other preventable equipment breakdown shall not be considered a malfunction.
- F. **“Natural Gas”** is defined as a naturally occurring fluid mixture of hydrocarbons that contains 20.0 grains or less of total sulfur per 100 standard cubic feet (SCF) and is either composed of at least 70% methane by volume or has a gross calorific value of between 950 and 1100 Btu per standard cubic foot. (40 CFR 60.331)
- G. **“Natural Gas Liquids”** means the hydrocarbons, such as ethane, propane, butane, and pentane, that are extracted from field gas. (40 CFR 60.631)
- H. **“National Ambient Air Quality Standards”** means the primary (health-based) and secondary (welfare-related) federal ambient air quality standards promulgated by the US EPA pursuant to Section 109 of the Federal Act. (20.2.72.7Q NMAC)
- I. **“NO<sub>2</sub>” or “Nitrogen dioxide”** means the chemical compound containing one atom of nitrogen and two atoms of oxygen, for the purposes of ambient determinations. The term **“nitrogen dioxide,”** for the purposes of stack emissions monitoring, shall include nitrogen dioxide (the chemical compound containing one atom of nitrogen and two atoms of oxygen), nitric oxide (the chemical compound containing one atom of nitrogen and one atom of oxygen), and other oxides of nitrogen which may test as nitrogen dioxide and is sometimes referred to as NO<sub>x</sub> or NO<sub>2</sub>. (20.2.2.7U NMAC)
- J. **“NO<sub>x</sub>”** see NO<sub>2</sub>
- K. **“Paved Road”** is a road with a permanent solid surface that can be swept essentially free of dust or other material to reduce air re-entrainment of particulate matter. To the extent these surfaces remain solid and contiguous they qualify as paved roads: concrete, asphalt, chip seal, recycled asphalt and other surfaces approved by the Department in writing.
- L. **“Potential Emission Rate”** means the emission rate of a source at its maximum capacity to emit a regulated air contaminant under its physical and operational

design, provided any physical or operational limitation on the capacity of the source to emit a regulated air contaminant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its physical and operational design only if the limitation or the effect it would have on emissions is enforceable by the department pursuant to the Air Quality Control Act or the Federal Act. (20.2.72.7Y NMAC)

- M. **"Restricted Area-Non Military"** is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with a steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.
- N. **"Shutdown"** for requirements under 20.2.72.7BB NMAC, means the cessation of operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing out of batch process units.
- O. **"SSM"** for requirements under 20.2.7 NMAC, means routine or predictable startup, shutdown, or scheduled maintenance.
  - (1) **"Shutdown"** for requirements under 20.2.7.7H NMAC, means the cessation of operation of any air pollution control equipment or process equipment.
  - (2) **"Startup"** for requirements under 20.2.7.7I NMAC, means the setting into operation of any air pollution control equipment or process equipment.
- P. **"Startup"** for requirements under 20.2.72.7DD NMAC, means the setting into operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing in of batch process units.

**C102 Acronyms**

2SLB .....	2-stroke lean burn
4SLB .....	4-stroke lean burn
4SRB .....	4-stroke rich burn
acfm.....	actual cubic feet per minute
AFR.....	air fuel ratio
AP-42 .....	EPA Air Pollutant Emission Factors
AQB .....	Air Quality Bureau
AQCR .....	Air Quality Control Region
ASTM .....	American Society for Testing & Materials
Btu.....	British thermal unit
CAA .....	Clean Air Act of 1970 and 1990 Amendments
CEM.....	continuous emissions monitoring
cfh .....	cubic feet per hour

cfm	.....	cubic feet per minute
CFR	.....	Code of Federal Regulation
CI	.....	compression ignition
CO	.....	carbon monoxide
COMS	.....	continuous opacity monitoring system
EIB	.....	Environmental Improvement Board
EPA	.....	United States Environmental Protection Agency
gr/100 cf	.....	grains per one hundred cubic feet
gr/dscf	.....	grains per dry standard cubic foot
GRI	.....	Gas Research Institute
H <sub>2</sub> S	.....	hydrogen sulfide
HAP	.....	hazardous air pollutant
hp	.....	horsepower
IC	.....	Internal Combustion
KW/hr	.....	kilowatts per hour
lb/hr	.....	pounds per hour
lb/MMBtu	.....	pounds per million British thermal unit
MACT	.....	Maximum Achievable Control Technology
MMcf/hr	.....	million cubic feet per hour
MMscf	.....	million standard cubic feet
N/A	.....	not applicable
NAAQS	.....	National Ambient Air Quality Standards
NESHAP	.....	National Emission Standards for Hazardous Air Pollutants
NG	.....	natural gas
NGL	.....	natural gas liquids
NMAAQs	.....	New Mexico Ambient Air Quality Standards
NMAC	.....	New Mexico Administrative Code
NMED	.....	New Mexico Environment Department
NMSA	.....	New Mexico Statues Annotated
NO <sub>x</sub>	.....	nitrogen oxides
NSCR	.....	non-selective Catalytic Reduction
NSPS	.....	New Source Performance Standard
NSR	.....	New Source Review
PEM	.....	parametric emissions monitoring
PM	.....	particulate matter (equivalent to TSP, total suspended particulate)
PM <sub>10</sub>	.....	particulate matter 10 microns and less in diameter
PM <sub>2.5</sub>	.....	particulate matter 2.5 microns and less in diameter
pph	.....	pounds per hour
ppmv	.....	parts per million by volume
PSD	.....	Prevention of Significant Deterioration
RATA	.....	relative accuracy test assessment
RICE	.....	reciprocating internal combustion engine
rpm	.....	revolutions per minute
scfm	.....	standard cubic feet per minute

SI .....	spark ignition
SO <sub>2</sub> .....	sulfur dioxide
SSM.....	Startup Shutdown Maintenance (see SSM definition)
TAP .....	Toxic Air Pollutant
TBD.....	to be determined
THC.....	total hydrocarbons
TSP.....	Total Suspended Particulates
tpy .....	tons per year
ULSD .....	ultra-low sulfur diesel
USEPA.....	United States Environmental Protection Agency
UTM.....	Universal Transverse Mercator Coordinate System
UTMH.....	Universal Transverse Mercator Horizontal
UTMV.....	Universal Transverse Mercator Vertical
VHAP.....	volatile hazardous air pollutant
VOC.....	volatile organic compounds