

EASTERN KERN AIR POLLUTION CONTROL DISTRICT



**MAJOR SOURCE
PERMIT TO OPERATE**

2700 "M" Street, Suite 302
Bakersfield, CA 93301-2370
Bakersfield: (661) 862-5250
Field Office: (661) 823-9264

Permittee: Edwards Air Force Base (AFB) – Air Force Research Laboratory (AFRL) – Stationary Source Group (SSG) 145, Rocket Test Operations

Location: Edwards Air Force Base
Air Force Research Laboratory (AFRL), Rocket Test Operations
120 N. Rosamond Boulevard, Suite A
Edwards Air Force Base CA 93524

Permit No: 9008-V-2022-1

Issuance Date: Month XX, 2022

Expiration Date: Month XX, 2027

Nature of Business: Edwards Air Force Base

This permit is issued pursuant to, and is conditioned upon, compliance with provisions of the Eastern Kern Air Pollution Control District (District) Rules and Regulations as authorized by the California Health and Safety Code (CH&SC), Section 39002. This permit is subject to accuracy of all information submitted relating to the permit application and to conditions appended hereto. It is valid from date of issuance until date of expiration unless renewed and shall be made readily available for inspection at any reasonable time to any and all persons who may request to see it.

Pursuant to the Clean Air Act Amendments of 1990 (CAAA), all conditions of this permit are federally enforceable by United States Environmental Protection Agency (EPA) and District. Those provisions which are not required by the CAAA are considered to be District provisions and are not federally enforceable by EPA.

By:

Glen Stephens, P.E.
Air Pollution Control Officer

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General Permit Conditions

In accordance with CH&SC, Sections 39002 and 42301.10 through 42301.12 and all applicable District Rules and Regulations, the conditions which are listed below are hereby contained in and made a part of this permit:

	Federally Enforceable Conditions	Reg/Rule
1.	<p><u>Inspections</u></p> <p>Inspections shall be made by the enforcement agency for the purpose of obtaining information necessary to determine whether air pollution sources are in compliance with applicable rules and regulations, including authority to require record keeping and to make inspections and conduct tests of air pollution sources.</p>	Reg. I, Rule 107
2.	<p><u>Stack Monitoring</u></p> <p>Upon the request of and as directed by the Control Officer, the owner shall provide, install, and operate continuous monitoring equipment on such operations as directed. The owner shall maintain, calibrate, and repair the equipment and shall keep the equipment operating at design capabilities.</p>	Reg. I, Rule 108
3.	<p><u>Source Sampling</u></p> <p>Upon the request of the Control Officer and as directed by him the owner of any source operation which emits or may emit air contaminants, for which emission limits have been established, shall provide the necessary and proper facilities for source sampling.</p> <p>The applicable test method, if not specified in the rule, shall be conducted in accordance with Title 40 CFR, Subpart 60, Appendix A - Reference Methods, except particulate matter (PM₁₀) for compliance with Rule 210.1 requirements shall be conducted in accordance with Title 40 CFR, Subpart 51, Appendix M, Method 201 or 201A. Where no test method exists in the preceding references for a source type source sampling shall be conducted in accordance with California Air Resources Board (CARB) approved methods.</p>	Reg. I, Rule 108.1

	Federally Enforceable Conditions	Reg/Rule
4.	<p><u>Severability</u></p> <p>If any provision, clause, sentence, paragraph, section or part of these Regulations or application thereof to any person or circumstance shall for any reason be adjudged by a court of competent jurisdiction to be unconstitutional or invalid, such judgment shall not affect or invalidate the remainder of this Regulation and the application of such provision to other persons or circumstances, but shall be confined in its operation to the provision, clause, sentence, paragraph, section or part thereof directly involved in the controversy in which such judgment shall have been rendered and to the person or circumstance involved, and it is hereby declared to be the intent of the Eastern Kern Air Pollution Control Board that these Regulations would have been issued in any case had such invalid provision or provisions not been included.</p>	Reg. I, Rule 114
5.	<p><u>Applicability of Federally Enforceable Conditions</u></p> <p>Federally Enforceable Conditions <u>shall apply</u> to Design Conditions, Operational Conditions, Special Conditions, Compliance Testing Requirements, and Emission Limits. Any District or State-only condition (not required by the EPA) does not apply.</p>	Reg. II, Rule 201.1
6.	<p><u>Compliance with Permit Conditions</u></p> <p>A. Edwards AFB shall comply with all permit conditions;</p> <p>B. Permit does not convey any property rights or any exclusive privilege;</p> <p>C. Non-compliance with any permit condition shall be grounds for permit termination, revocation and reissuance, modification, enforcement action or denial of permit renewal;</p> <p>D. Edwards AFB shall not use “need to halt or reduce a permitted activity in order to maintain compliance” as a defense for non-compliance with any permit condition;</p> <p>E. Pending permit action or notification of anticipated non-compliance does not stay any permit condition; and</p> <p>F. Within a reasonable time period, Edwards AFB shall furnish any information requested by the APCO, in writing, for purpose of determining: 1) compliance with the permit, or 2) whether or not cause exists for a permit or enforcement action.</p>	Reg. II, Rule 201.1
7.	<p><u>Permit Life</u></p> <p>The life of this permit shall be five years from the date of issuance.</p>	Reg. II, Rule 201.1

	Federally Enforceable Conditions	Reg/Rule
8.	<p><u>Administrative Permit Amendment and Minor Permit Modification</u></p> <p>Administrative Permit Amendment and Minor Permit Modification are those actions taken by the District as defined in Rule 201.1.</p>	Reg. II, Rule 201.1
9.	<p><u>Emergency Provisions</u></p> <p>A. Edwards AFB shall comply with the requirements and the emergency provisions contained in all permit streamlining requirements imposed in accordance with Subsection VI.J. all District-only rules which apply in accordance with Subsection VI.K.1. and all applicable federal requirements not subsumed by such permit streamlining requirement(s) or District-only rules;</p> <p>B. Within two weeks of an emergency event, an owner or operator of the source shall submit to the District a properly signed, contemporaneous log or other relevant evidence which demonstrates that:</p> <ol style="list-style-type: none"> 1) An emergency occurred; 2) The permittee can identify the cause(s) of the emergency; 3) The facility was being properly operated at the time of the emergency; 4) All steps were taken to minimize the emissions resulting from the emergency; and 5) Within two working days of the emergency event, the permittee provided the District with a description of the emergency and any mitigating or corrective actions taken; <p>C. In any enforcement proceeding, the permittee has the burden of proof for establishing that an emergency occurred.</p>	Reg. II, Rule 201.1
10.	<p><u>Record Keeping</u></p> <p>A. Recording of maintenance of all monitoring and support information associated with all permit streamlining requirements imposed in accordance with Rule 201.1, Subsection VI.J., all District-only rules which apply in accordance with Rule 201.1, Subsection VI.K.1., and all applicable federal requirements not submitted by such permit streamlining requirement(s) or District-only rules, including:</p> <ol style="list-style-type: none"> 1) Date, place, and time of sampling; 2) Operating conditions at time of sampling; 3) Date, place, and method of analysis; and 4) Results of analysis; 	Reg. II, Rule 201.1

	<u>Federally Enforceable Conditions</u>	Reg/Rule
10.	<p>B. Retention of records of all required monitoring data and support information for a period of at least five years from the date of sample collection, measurement, report, or application; and</p> <p>C. Any other record keeping deemed necessary by the APCO to ensure compliance with all permit streamlining requirements imposed in accordance with Rule 201.1, Subsection VI.J., all District-only rules which apply in accordance with Rule 201.1, Subsection VI.K.1., and all applicable federal requirements not subsumed by such permit streamlining requirement(s) or District-only rules.</p>	
11.	<p><u>Referencing of District and Applicable Requirements</u></p> <p>Pursuant to Rule 201.1.VI.C. District hereby references the following documents which are clearly identified and available to the District and to the public:</p> <p>Each reference shall include, at a minimum, title or document number, author and recipient if applicable, date, citation of relevant sections of the Rule or document, and identification of specific source activities or equipment for which the referencing applies.</p>	Reg. II, Rule 201.1
12.	<p><u>Reporting</u></p> <p>A. Any non-conformance with permit requirements, including any attributable to emergency conditions (as defined in Rule 201.1) shall be promptly reported to the APCO and in accordance with notification requirement set forth in the applicable federal regulation or District Rule;</p> <p>B. Monitoring report shall be submitted at least every six months identifying any non-conformance with permit requirements, including any previously reported to the APCO;</p> <p>C. All reports of non-conformance with permit requirements shall include probable cause of non-conformance and any preventative or corrective action taken;</p> <p>D. Progress report shall be made on a compliance schedule at least semi-annually and including:</p> <ol style="list-style-type: none"> 1) Date when compliance will be achieved, 2) Explanation of why compliance was not, or will not be achieved by the scheduled date, and 3) Log of any preventative or corrective action taken; and <p>E. Each monitoring report shall be accompanied by a written statement from the responsible official certifying the truth, accuracy, and completeness of the report.</p>	Reg. II, Rule 201.1

	<u>Federally Enforceable Conditions</u>	Reg/Rule
13.	<p><u>Right of Entry</u></p> <p>Edwards AFB shall allow entry of District, CARB, or U.S. EPA officials for purpose of inspection and sampling, including:</p> <ul style="list-style-type: none"> A. Inspection of the stationary source, including equipment, work practices, operations, and emission-related activity; B. Inspection and duplication of records required by the permit to operate; and C. Source sampling or other monitoring activities. 	Reg. II, Rule 201.1
14.	<p><u>Periodic Monitoring</u></p> <p><u>Non-Point</u></p> <p>Edwards AFB shall conduct testing semi-annually, in accordance with the methodology contained in EPA Method 22 for all active non-point sources where conditions allow for a valid Method 22. This testing will be the basis for determining compliance with the visible emission standard in District Rule 401. If no emissions are observed utilizing Method 22, the non-point source shall be deemed to be in compliance with the visible emission standard. If emissions are observed from any non-point source operating under normal operating conditions, Edwards AFB shall conduct testing on that non-point source within 24 hours of the Method 22 testing in accordance with EPA Method 9 to verify compliance with the visible emission standard.</p> <p>NOTE: This requirement does not apply to permitted emission sources such as the application of paint that is not sprayed or atomized, or to fugitive emissions resulting from activities not covered by a permit to operate, unless the source is subject to District Rule 210.1 (NSR) requirements. Additionally, this requirement does not apply to classified operations that do not have external venting to an unclassified area.</p> <p><u>Point</u></p> <p>Edwards AFB shall conduct testing semi-annually, in accordance with the methodology contained in EPA Method 22 for all active/in use point sources. This condition is only applicable to areas where a valid Method 22 or Method 9 can be performed. This testing will be the basis for determining compliance with the visible emission standard in District Rule 401. If no emissions are observed utilizing Method 22, the point source shall be deemed to be in compliance with the visible emission standard. If emissions are observed from any non-point source operating under normal operating conditions, Edwards AFB shall conduct testing on that point source:</p>	Reg. II, Rule 201.1

	Federally Enforceable Conditions	Reg/Rule
14.	<p>A. Within 24 hours of the Method 22 testing in accordance with EPA Method 9 to verify compliance with the visible emission standard. If compliance is not documented:</p> <p>B. Within 30 days of the Method 9 testing in accordance with EPA Method 5 or 5D to verify compliance with the requirements of District Rules 404.1, 405, 406 and/or 210.1.</p>	Reg. II, Rule 201.1
15.	<p><u>Additional Monitoring</u></p> <p>All control equipment shall be inspected annually for proper operation. Edwards AFB shall maintain all records of control equipment maintenance for a period of five years.</p> <p>Monitoring shall be the responsibility of the source; however, a visible emissions inspection or Method 9 conducted by a District inspector may be counted as meeting the requirement for the source to conduct same if the information and records generated by the inspector meets the requirements of the permit and a copy of the records are maintained by the source for a period of five years.</p> <p>Record keeping provisions associated with all monitoring requirements shall include the following information:</p> <p>A. Identification of stack or emission point being monitored;</p> <p>B. Operational conditions at the time of monitoring;</p> <p>C. Records of any monitoring conducted, including records of emission or operational parameter values and the date, place and time of sampling or measurement; and</p> <p>D. Where corrective action is triggered, description of the corrective action and the date, time and results of any corrective action.</p>	Reg. II, Rule 201.1
16.	<p><u>Conditional Approval</u></p> <p>The Control Officer shall issue an Authority to Construct or a Permit to Operate, subject to conditions to insure compliance of the operation of any article, machine, equipment or other contrivance within the standards of Rule 208 and 208.1, in which case the conditions shall be specified in writing. Commencing work under such Authority to Construct or operation under such Permit to Operate shall be deemed acceptance of all conditions so specified. The Control Officer shall issue an Authority to Construct or Permit to Operate with revised conditions upon receipt of a new application, if the applicant demonstrates the article, machine, equipment or other contrivance can be operated within the standards of Rule 208 and 208.1 under the revised conditions.</p>	Reg. II, Rule 209

	Federally Enforceable Conditions	Reg/Rule
17.	<p><u>Standards for Authority to Construct</u></p> <p>A. Edwards AFB may make a change to this permitted facility that is not addressed or prohibited by the federally enforceable conditions of this Part 70 permit without obtaining a Part 70 permit revision if:</p> <ol style="list-style-type: none"> 1) The Permittee has obtained all permits and approvals required by District Rules 201 and 210.1 (unless the change is exempt under District Rule 202); 2) The change is not subject to any requirements under Title IV of the Clean Air Act; 3) The change is not a Title I modification; and 4) The change does not violate an applicable requirement of the Clean Air Act or a federally enforceable term or condition of this permit. <p>B. For a change that qualified under this section, the Permittee shall provide contemporaneous written notice to the District and the U.S. EPA (except for a change that is exempt under District Rule 202). This written notice shall describe the change, including the date it was made, and shall contain other information as required to determine new applicable requirements of the Clean Air Act that apply as a result of the change;</p> <p>C. Upon satisfying the requirements of paragraph B above, the Permittee may make the proposed change;</p> <p>D. Changes that qualify under this section are not subject to the requirements for Part 70 revisions;</p> <p>E. The Permittee shall include each off-permit change made under this section in the application for renewal of this Part 70 permit; and</p> <p>F. The permit shield(s) provided in this permit do not apply to off-permit changes made under this section.</p>	Reg. II, Rule 201.1
18.	<p><u>Prevention of Significant Deterioration (PSD)</u></p> <p>Edwards AFB may be subject to District Rule 210.4, Prevention of Significant Deterioration (PSD) if it undergoes major modification(s).</p>	Reg. II, Rule 210.4

	<u>Federally Enforceable Conditions</u>	Reg/Rule
22.	<p><u>Particulate Matter Concentration - Desert Basin</u></p> <p>A person shall not discharge into the atmosphere from any single source operation, the construction or modification of which commenced after the adoption of this Rule, particulate matter in excess of 0.1 grains per cubic foot of gas at standard conditions.</p> <p>This condition does not apply to rocket engine testing meeting the requirements of Rule 431, fires set in accordance with Rule 416, or boilers, steam generators, water or process heaters that combust only CARB certified or PUC regulated liquid or gaseous fuel.</p>	Reg. IV, Rule 404.1
23.	<p><u>Particulate Matter - Emission Rate</u></p> <p>A person shall not discharge into the atmosphere from any source operation, particulate matter in excess of the limits set forth in the allowable particle emissions based on process weight rate table included in Rule 405.</p>	Reg. IV, Rule 405
24.	<p><u>Sulfur Compounds</u></p> <p>A person shall not discharge into the atmosphere sulfur compounds, which would exist as a liquid or gas at standard conditions, exceeding in concentration at the point of discharge: 0.2 percent by volume calculated as sulfur dioxide (SO₂).</p>	Reg. IV, Rule 407
25.	<p><u>Fuel Burning Equipment - Combustion Contaminants</u></p> <p>A. Fuel burning equipment, the construction or modification of which is commenced after August 17, 1971, shall not discharge into the atmosphere particulate matter, sulfur dioxide or nitrogen oxides in excess of the Environmental Protection Agency Standard of Performance.</p> <p>B. A person shall not discharge into the atmosphere combustion contaminants exceeding in concentration at the point of discharge: 0.1 grain per cubic foot of gas calculated to 12 percent of carbon dioxide (CO₂) at standard conditions.</p>	Reg. IV, Rule 409
26.	<p><u>Organic Solvents</u></p> <p>A person shall not discharge into the atmosphere more organic materials in any one day from any article, machine, equipment or other contrivance in which any organic solvent or any material containing organic solvent is utilized unless the emissions are controlled or reduced as outlined in the organic solvent rule (Rule 410).</p>	Reg. IV, Rule 410

	Federally Enforceable Conditions	Reg/Rule
27.	<p><u>Disposal and Evaporation of Solvents</u></p> <p>A person shall not during any one day disposed of a total of more than 1½ gallons of any photochemically reactive solvent as defined in Rule 410.X, or of any material containing more than 1½ gallons of any such photochemically reactive solvent into the atmosphere.</p>	Reg. IV, Rule 410.2
28.	<p><u>Organic Solvent Degreasing Operation</u></p> <p>A person shall not operate any organic solvent degreasing operation unless the equipment utilized complies with all applicable requirements of Rule 410.3. Organic solvent degreasing operations as defined in Rule 410.3 shall maintain adequate records demonstrating compliance or any exemption to the requirements of Rule 410.3.</p>	Reg. IV, Rule 410.3
29.	<p><u>Storage of Organic Liquids</u></p> <p>A person shall not use equipment to store organic liquids and petroleum distillates with a true vapor pressure greater than 1.5 psia unless provisions are made for controlling organic vapors. A portable temporary tank with capacity of 21,000 gallons or less, left on site for six months or less, may be exempt from vapor control requirements provided pressure relief device is set within 10 percent of maximum allowable working pressure of container.</p>	Reg. IV, Rule 411
30.	<p><u>Open Burning</u></p> <p><u>Applicability</u></p> <p>This Rule shall apply to all burning activities not confined to an incinerator which meets requirements of Rule 418 (Incinerators), but shall not apply to combustion of fuels in a device designed to produce useful energy and which meets all applicable parts of Regulation IV. Wildland vegetation management, forest management, or range improvement burning as defined in Rule 417, and in compliance with applicable provisions of Rule 417 shall not be subject to this requirement. Rule 417.</p> <p><u>Prohibition</u></p> <p>No person shall burn any refuse or other material in an open outdoor fire within the boundaries of the District, unless any of the exceptions in Rule 416 apply. Burning of Federal facility materials must comply with applicable requirements of Section V of Rule 416.</p>	Reg. IV, Rule 416

	Federally Enforceable Conditions	Reg/Rule
31.	<p><u>Nuisance</u></p> <p>A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property.</p>	Reg. IV, Rule 419
32.	<p><u>Federal New Source Performance Standards (NSPS)</u></p> <p>Provisions of Part 60, Chapter 1, Title 40, Code of Federal Regulations, in effect September 5, 1996, are hereby adopted by reference and made a part hereof. All new and modified sources shall comply with applicable standards, criteria and requirements set forth therein.</p> <p>All applicable requirements of 40 CFR Part 60, Subpart A (General Requirements), apply to this facility.</p>	Reg. IV, Rule 422
33.	<p><u>National Emission Standards for Hazardous Air Pollutants and Source Categories (NESHAPS)</u></p> <p>Provisions of Title 40, Chapter 1, Parts 61 and 63, Code of Federal Regulations, in effect November 7, 2002, are hereby adopted by reference and made a part hereof. All sources of hazardous air pollution shall comply with applicable standards, criteria and requirements set forth herein.</p> <p>All applicable requirements of 40 CFR Part 61, Subpart M (Asbestos); and 40 CFR Part 63, Subpart A (General Provisions), apply to this facility.</p> <p>Asbestos EAFB shall comply with the applicable requirements of Sections 61.145 through 61.147 of the National Emission Standard for Asbestos for all demolition and renovation projects.</p>	Reg. IV, Rule 423
34.	<p><u>Propellant Combustion and Rocket Testing</u></p> <p>Edwards AFB shall comply with all applicable requirements of Rule 431 for open-air rocket propellant combustion operations conducted on rocket test stands. The provisions of Rule 431 do not apply to emergency destruction/disposal of propellant by qualified bomb squad or explosive ordinance groups or jet engine testing. Propellant Combustion and Rocket Testing detonation operations shall maintain adequate records demonstrating compliance and / or any exemption to the requirements of Rule 431.</p>	Reg. IV, Rule 431

	Federally Enforceable Conditions	Reg/Rule
35.	<p><u>Risk Management Plan</u></p> <p>Should this stationary source, as defined in 40 CFR section 68.3, become subject to the accidental release prevention regulations in part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in section 68.10 and shall certify compliance with the requirements of part 68 as part of the annual compliance certification as required by 40 CFR part 70 or 71.</p>	40 CFR 68
36.	<p><u>Compliance Certification</u></p> <p>The owner/operator shall comply with the following procedures for compliance certification:</p> <ul style="list-style-type: none"> A. Submittal of a compliance certification by the owner or operator to the U.S. EPA and copy to the APCO within 90 days after end of compliance certification period; B. Compliance certification period shall begin 1 March of each year and end the last day of February of the following year; C. The Annual Compliance Certification also satisfies the second semi-annual Monitoring Report requirement; D. Such compliance certification shall identify the basis for each permit term or condition, e.g., specify the emissions limitation, standard or work practice, and a means of monitoring compliance with the term or condition; E. Such compliance certification shall include compliance status and method(s) used to determine compliance for the current time period and over entire reporting period; and F. Such compliance certification shall include any additional inspection, monitoring or entry requirement promulgated pursuant to Sections 114(a) and 504(b) of the CAA. <p>Any application form, report, or compliance certification submitted pursuant to these regulations shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this part shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.</p> <p>U.S. EPA's Mailing Address: Director, Air Division 75 Hawthorne Street AIR-3 San Francisco, CA 94105</p>	40 CFR 70.5d

	Federally Enforceable Conditions	Reg/Rule
37.	<p><u>Protection of Stratospheric Ozone</u></p> <p>Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR §82.156.</p> <p>Equipment used during maintenance, service, repair, or disposal of appliances must meet the standards for recycling and recovery equipment in accordance with 40 CFR §82.158.</p> <p>Persons performing maintenance, service, repair or disposal of appliances must be certified by a certified technician pursuant to 40 CFR §82.161.</p>	40 CFR 82

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List of Insignificant Air Pollutant Emitting Equipment

Air Conditioning Equipment Used for Comfort
Architectural Surface Coatings
Boilers, Steam Generators & Heaters < 5 MM Btu/hr
Brazing, Soldering, Welding Equipment
Bunsen Burners
Cooling Towers
Small Degreasing Operations
Electric Baking Oven
Electric Fired Kiln
Emissions Unit Emitting < 2 lbs in any 24 hr Period
Emissions Unit Tempory Operations
Fugitive Emission Sources
Inductively Coupled Plasma
Laboratory Hood
Loading Racks and Equipment, (Heavy Oil)
Motor Vehicles as Defined in the CH&SC
Portable Engines, (California Registered)
Printing and Reproduction Equipment
Sources emitting less 10lbs/day or 180lbs/year of NOx and VOC; uncontrolled
Small IC Engines < 50 bhp
Small Turbine Engine Test Stand
Space Heating Equipment
Spectrophotometer
Steam Cleaners, Natural Gas < 5 MM Btu/hr
Storage Vessels
Surface Coating and Cleaning Operations (Small)
Unvented Pressure Vessels Excluding PV vent
Wastewater Separator, (Nuisance Applies)
Wet Scrubber, (Control Equipment is Not Exempt)

Emission Unit 0145023 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0145023	Rocket Test Stand 1-A

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Rocket Test Stand 1-A, including following equipment:

- A. Test stand for rocket motor testing using liquid oxygen/hydrogen or liquid oxygen/kerosene fuels; and
- B. Propane-assisted flare.

OPERATIONAL CONDITIONS:

- 1. Particulate emission shall be no more than 0.1 gr/scf calculated to 12% CO₂. (Rule 404.1)
- 2. Visible emissions shall not be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
- 3. Modification of equipment or usage shall require application for Authority to Construct. (Rule 209)
- 4. Records including dates and duration of usage shall be kept and made available to District upon request. (Rule 209)

Emission Unit 0145024 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0145024	Rocket Test Stand 2-A

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Rocket Test Stand 2-A, including following equipment:

- A. Test stand for rocket motor testing using liquid oxygen/hydrogen or liquid oxygen/kerosene fuels; and
- B. Propane-assisted flare.

OPERATIONAL CONDITIONS:

- 1. Particulate emission shall be no more than 0.1 gr/scf calculated to 12% CO₂. (Rule 404.1)
- 2. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
- 3. Modification of equipment or usage shall require application for Authority to Construct. (Rule 209)
- 4. Records including dates and duration of usage shall be kept and made available to District upon request. (Rule 209)

Emission Unit 0145025 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0145025	Rocket Test Stand 1-B

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Rocket Test Stand 1-B, including following equipment:

Test stand for rocket motor testing using liquid oxygen/hydrogen or oxygen/kerosene fuels.

OPERATIONAL CONDITIONS:

1. Particulate emission shall be no more than 0.1 gr/scf calculated to 12% CO₂. (Rule 404.1)
2. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
3. Modification of equipment or usage shall require application for Authority to Construct. (Rule 209)
4. Records including dates and duration of usage shall be kept and made available to District upon request. (Rule 209)

Emission Unit 0145026 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0145026	Rocket Test Stand 1-C

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Rocket Test Stand 1-C, including following equipment:

- A. Test stand for rocket motor testing using solid rocket propellant, liquid oxygen/hydrogen, or liquid oxygen/kerosene fuels; and
- B. Propane-assisted flare.

OPERATIONAL CONDITIONS:

- 1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
- 2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
- 3. Modification of equipment or usage shall require application for Authority to Construct. (Rule 210.1)
- 4. Records including dates and duration of usage shall be kept and made available to District upon request. (Rule 209)

Emission Unit 0145027 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0145027	Rocket Test Stand 1-D

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Rocket Test Stand 1-D, including following equipment:

- A. Test stand for rocket motor testing using solid rocket propellant, liquid oxygen/hydrogen, or liquid oxygen/kerosene fuels; and
- B. Propane-assisted flare.

OPERATIONAL CONDITIONS:

- 1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
- 2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
- 3. Modification of equipment or usage shall require application for Authority to Construct. (Rule 209)
- 4. Records including dates and duration of usage shall be kept and made available to District upon request. (Rule 209)

Emission Unit 0145028 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0145028	Rocket Test Stand 1-E

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Rocket Test Stand 1-E, including following equipment:

Building is used for studying small space vehicle flight characteristics. Vehicles have liquid rocket engines fueled by hydrazine/MMH and nitrogen tetroxide or solid propellants. Test stand also used for testing liquid hydrogen/oxygen, oxygen/kerosene rocket engines, and BATES motors.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Modification of equipment or usage shall require application for Authority to Construct. (Rule 209)
4. Records including dates and duration of usage shall be kept and made available to District upon request. (Rule 209)

Emission Unit 0145029 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0145029	Satellite Propulsion Complex

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Satellite Propulsion Complex, including following equipment:

- A. A - E cells;
- B. Scrubber; and
- C. Flare.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

Emission Unit 0145030 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0145030	Propellant Laboratory

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Propellant Laboratory, including following equipment:

- A. 20 laboratory hood;
- B. One canopy hood;
- C. 8 Plastic Laboratory Hoods with Telescope Arms;
- D. One strand burner;
- E. Test Pad 44;
- F. Dip Tank; and
- G. Test Pad X.

OPERATIONAL CONDITIONS:

- 1. Particulate matter emissions from any single source operation except solid rocket testing shall be no more than 0.1 gr/scf. (Rule 404.1)
- 2. Visible emissions from cyclone collector shall not exceed 20% opacity. (Rule 401)
- 3. If solvent flow is utilized, only continuous fluid stream (not fine, atomized, or shower type spray) shall be used at pressure that does not cause liquid solvent to splash outside of solvent container. (Rule 410.3)
- 4. No porous or absorbent materials such as cloth, leather, wood, or rope shall be cleaned. (Rule 410.3)
- 5. No solvent shall be stored or disposed, including waste solvent and solvent residues, in such manner to cause or allow its evaporation into atmosphere. (Rule 210.1)
- 6. Waste solvent and waste solvent residues shall be managed in compliance with California and Federal requirements applicable to solid wastes, hazardous wastes, or recyclable materials. (Rule 410.3)
- 7. Solvent agitation, where necessary, shall be achieved only by pump circulation, mixer, or ultrasonic. Air agitation shall not be used. (Rule 410.3)
- 8. Equipment shall be maintained according to manufacturer's specifications. (Rules 210.1 and 209)
- 9. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
- 10. Emission from use of this equipment shall not cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rule 210.1)

Emission Unit 0145031 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0145031	Solid Propellant Component Complex

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Solid Propellant Component Complex, including following equipment:

- A. Test pads 1-5; and
- B. Machine Shop (Bldg. 8910).

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

Emission Unit 0145032 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0145032	Space Environment Propulsion Complex

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Space Environment Propulsion Complex, including following equipment:

- A. Test cells A-E;
- B. Two LPG vaporizers (permit exempt); and
- C. Scrubber.

OPERATIONAL CONDITIONS:

- 1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
- 2. Particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
- 3. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

Emission Unit 0145033 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0145033	Chemical Handling & Disposal Research Facility

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Chemical Handling & Disposal Research Facility, including following equipment:

Test stands A-C.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

Emission Unit 0145034 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0145034	Propulsion Sciences Laboratory

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Propulsion Sciences Laboratory, including following equipment:

- A. Nineteen furnace/ovens;
- B. Sixty-one exhaust lab hoods;
- C. Two fluorine source capture systems; and
- D. Five small scale explosive test cells.

OPERATIONAL CONDITIONS:

- 1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
- 2. Particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
- 3. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec. 41700)

Emission Unit 0145035 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0145035	Carbon Research Laboratory

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Carbon Research Laboratory, including following equipment:

- A. Six (6) exhaust lab hoods;
- B. National Appliance Co., Model 5831, vacuum oven;
- C. Precision Scientific model 19 vacuum oven;
- D. Precision Scientific model 29 vacuum oven;
- E. Ten (10) Lindberg tube furnaces;
- F. Three (3) Applied Test Systems Model 3210 tube furnaces;
- G. One Applied Test Systems Model 3320 tube furnaces;
- H. Lepel model T-10-3-DF4-TL, 10-kW induction furnace;
- I. Two graphite furnaces;
- J. Ashing furnace;
- K. Thermolyne 120 V Model 21100 tube furnace;
- L. Airbrasive micro sandblaster;
- M. Low pressure plasma spray booth; and
- N. Donaldson Torit cartridge fabric collector serving plasma spray booth with shaker cleaning mechanism, and fan with 2-hp motor.

OPERATIONAL CONDITIONS:

- 1. All ovens shall be electrically powered. (Rule 210.1)
- 2. Visible emissions from dust collector shall not exceed 5% opacity. (Rule 210.1)
- 3. Dust collector volumetric flow rate shall not exceed 1250 scfm. (Rule 210.1)
- 4. Dust collector shall be in operation with associated equipment is operated. (Rule 210.1)
- 5. Operating hours shall not exceed 10 hours/day and 52 weeks/year without prior District approval. (Rule 210.1)
- 6. All piping, ducting, and connections shall be leak-tight and shall have no visible emissions. (Rule 210.1)
- 7. Material collected in dust collector shall be disposed of or recycled in manner preventing entrainment in atmosphere. (Rule 210.1)
- 8. Equipment shall be maintained according to manufacturer's specifications. (Rules 210.1 and 209)
- 9. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
- 10. Emission from use of this equipment shall not cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

Emission Unit 0145036 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0145036	PL Area 1-100 Open Burn/Open Detonation (OB/OD) Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: PL Area 1-100 Open Burn/Open Detonation (OB/OD) Operation, including following equipment:

One 200 ft. dia. cleared dirt surface, 600 ft. northeast of Bldg. 8955.

OPERATIONAL CONDITIONS:

1. Open burn/open detonation (OB/OD) operation to treat unwanted materials may not be conducted without prior approval from Control Officer through approval of OB/OD burn plan. Burn plan approval shall not be valid for more than one year, but may be renewed annually by Control Officer. (Rule 416)
2. Open burning/open detonation shall not be conducted on "no burn" days as specified by CARB or when such burning is prohibited by Control Officer for public health reasons. (Rule 416)
 - a. Before OB/OD operation takes place, a plan shall be submitted by Base Commanding Officer or by his designated representative to Control Officer and any other designated agencies having jurisdiction over proposed OB/OD operations. This plan shall:
 - 1.) Specify methods to be used to achieve detonation or combustion;
 - 2.) Limit category and amount of waste propellants, explosives, munitions, and pyrotechnics to be disposed of each year to an amount with projected lifetime toxic cancer risk less than one-in-one million and limit daily disposal amounts to that level not causing an impact above acute toxic thresholds. Toxic risks shall be demonstrated with modeling approved by Control Officer;
 - 3.) Limit open burn/open detonation operations or provide for mitigation when meteorological conditions could cause emissions to result in or contribute to exceedance of any state or federal ambient air quality standard or cause public nuisance;
 - 4.) Require waste propellants, explosives, munitions, and pyrotechnics (PEMP) treated to be free of non-PEMP materials, except for those materials necessary to safely store, handle, or treat PEMP or intimately-related materials also requiring treatment;
 - 5.) Require waste propellants, explosives, munitions, and pyrotechnics to be in condition facilitating combustion, assuring safe operation, and minimizing amount of emissions emitted during treatment;
 - 6.) Include following information:
 - a.) Location of proposed treatment operation;
 - b.) Category and amount of waste propellants, explosives, munitions, and pyrotechnics to be treated;
 - c.) Directions and distances to nearby receptor areas;
 - d.) Air quality impact analysis showing expected impacts with respect to state and federal ambient air quality standards;
 - e.) Risk assessment for acute and chronic health effects;
 - f.) Meteorological criteria developed for project;
 - g.) Projected schedule or frequency of OB/OD events;
 - h.) Specifications for monitoring and recording of critical project parameters; and

- i.) Specifications for reporting and disseminating project information.
 - 7.) Material to be treated shall be limited to PEMP generated from operations at federal facility where OB/OD operation is to take place;
 - 8.) Open burn/open detonation operations shall be allowed on normal business days for District, or on such other days as District may approve;
 - 9.) All open burn/open detonation operations shall conform to applicable jurisdictional fire codes; and
 - 10.) Open burn/open detonation operations shall not be initiated if emissions may drift into populated area or create public nuisance.
3. Total amount of material treated in any one day may be limited by District, taking into consideration potential for creation of threat to public health. (Rule 416)
 4. Records shall be maintained for type and amount of PEMP for each open burn/open detonation operation and shall be submitted to District no more than sixty days prior to end of burn plan approval period. Records shall be maintained for five years. (Rule 416)
 5. District staff shall be permitted, when accompanied by appropriate personnel: (Rule 416)
 - a. To enter premises where OB/OD site is located or in which any records are required to be kept under requirements of the plan; and
 - b. To inspect any equipment, operation, or method required by burn plan. District shall also have authority to require collection and analysis of emission samples from source.
 6. Summary of data required to determine compliance with applicable provisions of Rule 416 shall be submitted to, and as prescribed by, Control Officer. (Rule 416)

NOTE:

All conditions are from District Rule 416, Section V (Treatment of Federal Facility Materials).

Emission Unit 0145037 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0145037	Rocket Nozzle Construction Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Rocket Nozzle Construction Operation, including following equipment:

- A. No more than 8 pieces of cutting equipment/tools including lathes, milling machines, drill presses, band saws, and floor sweeps not to exceed 50-hp collectively; and
- B. Torit Downflow dust collector, Model No. DFT2-8 w/ 7.5-hp motor.

OPERATIONAL CONDITIONS:

- 1. Visible Emissions form dust collector shall not exceed 10% opacity. (Rule 210.1)
- 2. Dust collector volumetric exhaust flow rate shall not exceed 6,300 cfm. (Rule 210.1)
- 3. Dust collector shall be in operation when associated equipment is operated. (Rule 210.1)
- 4. All piping, ducting, and connections shall be leak-tight and shall have no visible emissions. (Rule 210.1)
- 5. Material collected in dust collector dust collector shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
- 6. Equipment shall be maintained according to manufacturer's specifications. (Rules 210.1 and 209)
- 7. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
- 8. Emission from use of this equipment shall not cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with dust collector emission limitations shall be verified, within 60 days of District's request. (Rule 108.1)

EMISSION LIMITS:

Emission rate of each air contaminant from this emissions unit shall not exceed the following emissions limitations:

Particulate Matter:

- 0.001 gr/scf BACT Requirement
- 0.65 lb/day (of PM10)
- 0.12 tons/year (of PM10)

Edwards AFB AFRL SSG 145

Emission Unit 0145037 Permit Conditions

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0145038 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0145038	Rocket Motor Behavior Complex

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Rocket Motor Behavior Complex, including following equipment:

- A. Test Pad A (horizontal test stand); and
- B. Test Pad B (vertical test stand).

OPERATIONAL CONDITIONS:

- 1. Particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
- 2. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
- 3. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

Emission Unit 0145039 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0145039	Rocket Propellant Preparation Laboratory

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Rocket Propellant Preparation Laboratory, including following equipment:

- A. Three propellant cutting rooms;
- B. 1-hp lathe;
- C. 1¼-hp milling machine;
- D. 5-hp band saw;
- E. One 1-hp gang saw;
- F. Wood's Sons Company 20-inch diameter, Model H160863, 1.5-hp table saw;
- G. Wet cyclone serving lathe, milling machine, band saw, and table saw (Bldg. 8582); and
- H. Two Missimers ovens, Stock No. 6685L0421072805.

OPERATIONAL CONDITIONS:

- 1. Particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
- 2. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
- 3. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

Emission Unit 0145040 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0145040	Rocket Propellant Storability Complex

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Rocket Propellant Storability Complex, including following equipment:

- A. Test Pads A-D;
- B. Air scrubber system; and
- C. Flare.

OPERATIONAL CONDITIONS:

- 1. Particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
- 2. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
- 3. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

Emission Unit 0145042 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0145042	Rocket Engine Testing Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Rocket Engine Testing Operation, including following equipment:

Rocket Engine Test Stand 1D with test pad including engine mounts, scrubber system, and remote data link-up.

OPERATIONAL CONDITIONS:

1. Visible emissions from test engine exhaust shall not equal or exceed 20% opacity or Ringelmann No. 1 for more than 3 minutes in any one hour. (Rule 401)
2. Fuels and oxidizers utilized for this rocket testing operations shall be limited to hypergolic fuels including: Monomethylhydrazine (MMH), Nitrous Oxide (N₂O), Ammonia (NH₃), Unsymmetrical dimethylhydrazine (UDMH), and Hydrazine . (Rule 210.1)
3. Total number of rocket engine tests, per calendar year, shall not exceed 60 without prior District approval. (Rule 210.1)
4. For each test, applicant shall maintain record of each engine tested, rated thrust of each engine, amount of fuel and oxidizer used, and duration of each test. (Rule 210.1)
5. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 210.1)
6. Fuel and Oxidizer Scrubbers systems shall be in operation when the equipment is in use. (Rule 210.1)
7. Minimum efficiency of fuel and oxidizer scrubbers shall be 90-percent. (Rule 210.1 BACT Requirement)
8. Any defective component of the fuel or oxidizer systems resulting in the release of fuel or oxidizer emissions shall be immediately repaired, replaced, or adjusted as necessary in a reasonable, safe, and timely manner. (Rule 210.1)
9. Modification of equipment or usage shall require application for Authority to Construct. (Rule 210.1)
10. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
11. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with test engine emission limitations shall be verified, within 60 days of District request. (Rule 108.1)

Emission Unit 0145042 Permit Conditions

EMISSION LIMITS:

Emissions rate of each air contaminant from this unit shall not exceed the following emissions limitations:

Loading/Unloading Operations

Oxides of Nitrogen (NO_x as NO₂):

82.97 lb/day
2.49 ton/yr

Volatile Organic Compounds (VOC):

(as defined in Rule 210.1)

44.67 lb/day
1.34 ton/yr

Ammonia (NH₃):

118.20 lb/day
7091.84 lb/yr

Hydrazine:

28.291 lb/day
1679.44 lb/yr

Rocket Engine Testing Operation:

Particulate Matter (PM₁₀):

45.00 lb/day
1.35 ton/yr

Carbon Monoxide:

2533.00 lb/day
75.99 ton/yr

Ammonia (NH₃):

2.00 lb/hr
120.00 lb/yr

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

**FEDERAL REGULATIONS
40 CFR 60 SUBPART A
General Provisions**

Applicable provisions of 40 CFR 60 Subpart A shall apply.

[40 FR 53346, Nov. 17, 1975, as amended at 55 FR 51382, Dec. 13, 1990; 59 FR 12427, Mar. 16, 1994; 62 FR 52641, Oct. 8, 1997]

Applicability

§60.1(a)	Except as provided in subparts B and C, the provisions of this part apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.
§60.1(b)	Any new or revised standard of performance promulgated pursuant to section 111(b) of the Act shall apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of such new or revised standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.
§60.1(c)	In addition to complying with the provisions of this part, the owner or operator of an affected facility may be required to obtain an operating permit issued to stationary sources by an authorized State air pollution control agency or by the Administrator of the U.S. Environmental Protection Agency (EPA) pursuant to Title V of the Clean Air Act (Act) as amended November 15, 1990 (42 U.S.C. 7661). For more information about obtaining an operating permit see part 70 of this chapter.
§60.1(a)(2)	Except for compliance with 40 CFR 60.49b(u), the site shall have the option of either complying directly with the requirements of this part, or reducing the site-wide emissions caps in accordance with the procedures set forth in a permit issued pursuant to 40 CFR 52.2454. If the site chooses the option of reducing the site-wide emissions caps in accordance with the procedures set forth in such permit, the requirements of such permit shall apply in lieu of the otherwise applicable requirements of this part.
§60.1(a)(3)	Notwithstanding the provisions of paragraph (d)(2) of this section, for any provisions of this part except for Subpart Kb, the owner/operator of the site shall comply with the applicable provisions of this part if the Administrator determines that compliance with the provisions of this part is necessary for achieving the objectives of the regulation and the Administrator notifies the site in accordance with the provisions of the permit issued pursuant to 40 CFR 52.2454.

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FEDERAL REGULATIONS
40 CFR 61 SUBPART M
National Emission Standard for Asbestos

Applicable provisions of 40 CFR 61 Subpart M shall apply.

[55 FR 48414, Nov. 20, 1990]

Applicability

§61.140	The provisions of this subpart are applicable to those sources specified in §§61.142 through 61.151, 61.154, and 61.155.
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Standard for Roadways

§61.143	<p>No person may construct or maintain a roadway with asbestos tailings or asbestos-containing waste material on that roadway, unless, for asbestos tailings.</p> <p>(a) It is a temporary roadway on an area of asbestos ore deposits (asbestos mine): or</p> <p>(b) It is a temporary roadway at an active asbestos mill site and is encapsulated with a resinous or bituminous binder. The encapsulated road surface must be maintained at a minimum frequency of once per year to prevent dust emissions; or</p> <p>(c) It is encapsulated in asphalt concrete meeting the specifications contained in section 401 of Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, FP-85, 1985, or their equivalent.</p>
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Standard for Demolition and Renovation

§61.145	<p>(a) To determine which requirements of paragraphs (a), (b), and (c) of this section apply to the owner or operator of a demolition or renovation activity and prior to the commencement of the demolition or renovation, thoroughly inspect the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II nonfriable ACM. The requirements of paragraphs (b) and (c) of this section apply to each owner or operator of a demolition or renovation activity, including the removal of RACM as follows:</p> <p>(1) In a facility being demolished, all the requirements of paragraphs (b) and (c) of this section apply, except as provided in paragraph (a)(3) of this section, if the combined amount of RACM is</p> <p>(i) At least 80 linear meters (260 linear feet) on pipes or at least 15 square meters (160 square feet) on other facility components, or</p> <p>(ii) At least 1 cubic meter (35 cubic feet) of facility components where the length or area could not be measured previously.</p>
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§61.145

(2) In a facility being demolished, only the notification requirements of paragraphs (b)(1), (2), (3)(i) and (iv), and (4)(i) through (vii) and (4)(ix) and (xvi) of this section apply, if the combined amount of RACM is

(i) Less than 80 linear meters (260 linear feet) on pipes and less than 15 square meters (160 square feet) on other facility components, and

(ii) Less than one cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously or there is no asbestos.

(3) If the facility is being demolished under an order of a State or local government agency, issued because the facility is structurally unsound and in danger of imminent collapse, only the requirements of paragraphs (b)(1), (b)(2), (b)(3)(iii), (b)(4) (except (b)(4)(viii)), (b)(5), and (c)(4) through (c)(9) of this section apply.

(4) In a facility being renovated, including any individual nonscheduled renovation operation, all the requirements of paragraphs (b) and (c) of this section apply if the combined amount of RACM to be stripped, removed, dislodged, cut, drilled, or similarly disturbed is

(i) At least 80 linear meters (260 linear feet) on pipes or at least 15 square meters (160 square feet) on other facility components, or

(ii) At least 1 cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously.

(iii) To determine whether paragraph (a)(4) of this section applies to planned renovation operations involving individual nonscheduled operations, predict the combined additive amount of RACM to be removed or stripped during a calendar year of January 1 through December 31.

(iv) To determine whether paragraph (a)(4) of this section applies to emergency renovation operations, estimate the combined amount of RACM to be removed or stripped as a result of the sudden, unexpected event that necessitated the renovation.

(5) Owners or operators of demolition and renovation operations are exempt from the requirements of §§61.05(a), 61.07, and 61.09.

Notification Requirements

(b)Each owner or operator of a demolition or renovation activity to which this section applies shall:

(1) Provide the Administrator with written notice of intention to demolish or renovate. Delivery of the notice by U.S. Postal Service, commercial delivery service, or hand delivery is acceptable.

(2) Update notice, as necessary, including when the amount of asbestos affected changes by at least 20 percent.

(3) Postmark or deliver the notice as follows:

(i) At least 10 working days before asbestos stripping or removal work or any other activity begins (such as site preparation that would break up, dislodge or similarly disturb asbestos material), if the operation is described in paragraphs (a) (1) and (4) (except (a)(4)(iii) and (a)(4)(iv)) of this section. If the operation is as described in paragraph (a)(2) of this section, notification is required 10 working days before demolition begins.

(ii) At least 10 working days before the end of the calendar year preceding the year for which notice is being given for renovations described in paragraph (a)(4)(iii) of this section.

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(iii) As early as possible before, but not later than, the following working day if the operation is a demolition ordered according to paragraph (a)(3) of this section or, if the operation is a renovation described in paragraph (a)(4)(iv) of this section.

(iv) For asbestos stripping or removal work in a demolition or renovation operation, described in paragraphs (a) (1) and (4) (except (a)(4)(iii) and (a)(4)(iv)) of this section, and for a demolition described in paragraph (a)(2) of this section, that will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Administrator as follows:

(A) When the asbestos stripping or removal operation or demolition operation covered by this paragraph will begin after the date contained in the notice,

(1) Notify the Administrator of the new start date by telephone as soon as possible before the original start date, and

(2) Provide the Administrator with a written notice of the new start date as soon as possible before, and no later than, the original start date. Delivery of the updated notice by the U.S. Postal Service, commercial delivery service, or hand delivery is acceptable.

(B) When the asbestos stripping or removal operation or demolition operation covered by this paragraph will begin on a date earlier than the original start date,

(1) Provide the Administrator with a written notice of the new start date at least 10 working days before asbestos stripping or removal work begins.

(2) For demolitions covered by paragraph (a)(2) of this section, provide the Administrator written notice of a new start date at least 10 working days before commencement of demolition. Delivery of updated notice by U.S. Postal Service, commercial delivery service, or hand delivery is acceptable.

(C) In no event shall an operation covered by this paragraph begin on a date other than the date contained in the written notice of the new start date.

(4) Include the following in the notice:

(i) An indication of whether the notice is the original or a revised notification.

(ii) Name, address, and telephone number of both the facility owner and operator and the asbestos removal contractor owner or operator.

(iii) Type of operation: demolition or renovation.

(iv) Description of the facility or affected part of the facility including the size (square meters [square feet] and number of floors), age, and present and prior use of the facility.

(v) Procedure, including analytical methods, employed to detect the presence of RACM and Category I and Category II nonfriable ACM.

(vi) Estimate of the approximate amount of RACM to be removed from the facility in terms of length of pipe in linear meters (linear feet), surface area in square meters (square feet) on other facility components, or volume in cubic meters (cubic feet) if off the facility components. Also, estimate the approximate amount of Category I and Category II nonfriable ACM in the affected part of the facility that will not be removed before demolition.

(vii) Location and street address (including building number or name and floor or room number, if appropriate), city, county, and state, of the facility being demolished or renovated.

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(viii) Scheduled starting and completion dates of asbestos removal work (or any other activity, such as site preparation that would break up, dislodge, or similarly disturb asbestos material) in a demolition or renovation; planned renovation operations involving individual nonscheduled operations shall only include the beginning and ending dates of the report period as described in paragraph (a)(4)(iii) of this section.

(ix) Scheduled starting and completion dates of demolition or renovation.

(x) Description of planned demolition or renovation work to be performed and method(s) to be employed, including demolition or renovation techniques to be used and description of affected facility components.

(xi) Description of work practices and engineering controls to be used to comply with the requirements of this subpart, including asbestos removal and waste-handling emission control procedures.

(xii) Name and location of the waste disposal site where the asbestos-containing waste material will be deposited.

(xiii) A certification that at least one person trained as required by paragraph (c)(8) of this section will supervise the stripping and removal described by this notification. This requirement shall become effective 1 year after promulgation of this regulation.

(xiv) For facilities described in paragraph (a)(3) of this section, the name, title, and authority of the State or local government representative who has ordered the demolition, the date that the order was issued, and the date on which the demolition was ordered to begin. A copy of the order shall be attached to the notification.

(xv) For emergency renovations described in paragraph (a)(4)(iv) of this section, the date and hour that the emergency occurred, a description of the sudden, unexpected event, and an explanation of how the event caused an unsafe condition, or would cause equipment damage or an unreasonable financial burden.

(xvi) Description of procedures to be followed in the event that unexpected RACM is found or Category II nonfriable ACM becomes crumbled, pulverized, or reduced to powder.

(xvii) Name, address, and telephone number of the waste transporter.

(5) The information required in paragraph (b)(4) of this section must be reported using a form similar to that shown in Figure 3.

Procedures for Asbestos Emission Control.

(c) Each owner or operator of a demolition or renovation activity to whom this paragraph applies, according to paragraph (a) of this section, shall comply with the following procedures:

(1) Remove all RACM from a facility being demolished or renovated before any activity begins that would break up, dislodge, or similarly disturb the material or preclude access to the material for subsequent removal. RACM need not be removed before demolition if:

(i) It is Category I nonfriable ACM that is not in poor condition and is not friable.

(ii) It is on a facility component that is encased in concrete or other similarly hard material and is adequately wet whenever exposed during demolition; or

(iii) It was not accessible for testing and was, therefore, not discovered until after demolition began and, as a result of the demolition, the material cannot be safely removed. If not removed for safety reasons, the exposed RACM and any asbestos-contaminated debris must be treated as asbestos-containing waste material and adequately wet at all times until disposed of.

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- (iv) They are Category II nonfriable ACM and the probability is low that the materials will become crumbled, pulverized, or reduced to powder during demolition.
- (2) When a facility component that contains, is covered with, or is coated with RACM is being taken out of the facility as a unit or in sections:
- (i) Adequately wet all RACM exposed during cutting or disjoining operations; and
 - (ii) Carefully lower each unit or section to the floor and to ground level, not dropping, throwing, sliding, or otherwise damaging or disturbing the RACM.
- (3) When RACM is stripped from a facility component while it remains in place in the facility, adequately wet the RACM during the stripping operation.
- (i) In renovation operations, wetting is not required if:
 - (A) The owner or operator has obtained prior written approval from the Administrator based on a written application that wetting to comply with this paragraph would unavoidably damage equipment or present a safety hazard; and
 - (B) The owner or operator uses of the following emission control methods:
 - (1) A local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the stripping and removal of the asbestos materials. The system must exhibit no visible emissions to the outside air or be designed and operated in accordance with the requirements in §61.152.
 - (2) A glove-bag system designed and operated to contain the particulate asbestos material produced by the stripping of the asbestos materials.
 - (3) Leak-tight wrapping to contain all RACM prior to dismantlement.
 - (ii) In renovation operations where wetting would result in equipment damage or a safety hazard, and the methods allowed in paragraph (c)(3)(i) of this section cannot be used, another method may be used after obtaining written approval from the Administrator based upon a determination that it is equivalent to wetting in controlling emissions or to the methods allowed in paragraph (c)(3)(i) of this section.
 - (iii) A copy of the Administrator's written approval shall be kept at the worksite and made available for inspection.
 - (4) After a facility component covered with, coated with, or containing RACM has been taken out of the facility as a unit or in sections pursuant to paragraph (c)(2) of this section, it shall be stripped or contained in leak-tight wrapping, except as described in paragraph (c)(5) of this section. If stripped, either:
 - (i) Adequately wet the RACM during stripping; or
 - (ii) Use a local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the stripping. The system must exhibit no visible emissions to the outside air or be designed and operated in accordance with the requirements in §61.152.
 - (5) For large facility components such as reactor vessels, large tanks, and steam generators, but not beams (which must be handled in accordance with paragraphs (c)(2), (3), and (4) of this section), the RACM is not required to be stripped if the following requirements are met:
 - (i) The component is removed, transported, stored, disposed of, or reused without disturbing or damaging the RACM.

<p>§61.145</p>	<p>(ii) The component is encased in a leak-tight wrapping.</p> <p>(iii) The leak-tight wrapping is labeled according to §61.149(d)(1)(i), (ii), and (iii) during all loading and unloading operations and during storage.</p> <p>(6) For all RACM, including material that has been removed or stripped:</p> <p>(i) Adequately wet the material and ensure that it remains wet until collected and contained or treated in preparation for disposal in accordance with §61.150; and</p> <p>(ii) Carefully lower the material to the ground and floor, not dropping, throwing, sliding, or otherwise damaging or disturbing the material.</p> <p>(iii) Transport the material to the ground via leak-tight chutes or containers if it has been removed or stripped more than 50 feet above ground level and was not removed as units or in sections.</p> <p>(iv) RACM contained in leak-tight wrapping that has been removed in accordance with paragraphs (c)(4) and (c)(3)(i)(B)(3) of this section need not be wetted.</p> <p>(7) When the temperature at the point of wetting is below 0 °C (32 °F):</p> <p>(i) The owner or operator need not comply with paragraph (c)(2)(i) and the wetting provisions of paragraph (c)(3) of this section.</p> <p>(ii) The owner or operator shall remove facility components containing, coated with, or covered with RACM as units or in sections to the maximum extent possible.</p> <p>(iii) During periods when wetting operations are suspended due to freezing temperatures, the owner or operator must record the temperature in the area containing the facility components at the beginning, middle, and end of each workday and keep daily temperature records available for inspection by the Administrator during normal business hours at the demolition or renovation site. The owner or operator shall retain the temperature records for at least 2 years.</p> <p>(8) Effective 1 year after promulgation of this regulation, no RACM shall be stripped, removed, or otherwise handled or disturbed at a facility regulated by this section unless at least one on-site representative, such as a foreman or management-level person or other authorized representative, trained in the provisions of this regulation and the means of complying with them, is present. Every 2 years, the trained on-site individual shall receive refresher training in the provisions of this regulation. The required training shall include as a minimum: applicability; notifications; material identification; control procedures for removals including, at least, wetting, local exhaust ventilation, negative pressure enclosures, glove-bag procedures, and High Efficiency Particulate Air (HEPA) filters; waste disposal work practices; reporting and recordkeeping; and asbestos hazards and worker protection. Evidence that the required training has been completed shall be posted and made available for inspection by the Administrator at the demolition or renovation site.</p> <p>(9) For facilities described in paragraph (a)(3) of this section, adequately wet the portion of the facility that contains RACM during the wrecking operation.</p> <p>(10) If a facility is demolished by intentional burning, all RACM including Category I and Category II nonfriable ACM must be removed in accordance with the NESHAP before burning.</p>
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Standard for Waste Disposal for Manufacturing, Fabricating, Demolition, Renovation, and Spraying Operations

<p>§61.150</p>	<p>Each owner or operator of any source covered under the provisions of §§61.144, 61.145, 61.146, and 61.147 shall comply with the following provisions:</p> <p>(a) Discharge no visible emissions to the outside air during the collection, processing (including incineration), packaging, or transporting of any asbestos-containing waste material generated by the source, or use one of the emission control and waste treatment methods specified in paragraphs (a) (1) through (4) of this section.</p> <p>(1) Adequately wet asbestos-containing waste material as follows:</p> <p>(i) Mix control device asbestos waste to form a slurry; adequately wet other asbestos-containing waste material; and</p> <p>(ii) Discharge no visible emissions to the outside air from collection, mixing, wetting, and handling operations, or use the methods specified by §61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air; and</p> <p>(iii) After wetting, seal all asbestos-containing waste material in leak-tight containers while wet; or, for materials that will not fit into containers without additional breaking, put materials into leak-tight wrapping; and</p> <p>(iv) Label the containers or wrapped materials specified in paragraph (a)(1)(iii) of this section using warning labels specified by Occupational Safety and Health Standards of the Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.1001(j)(4) or 1926.1101(k)(8). The labels shall be printed in letters of sufficient size and contrast so as to be readily visible and legible.</p> <p>(v) For asbestos-containing waste material to be transported off the facility site, label containers or wrapped materials with the name of the waste generator and the location at which the waste was generated.</p> <p>(2) Process asbestos-containing waste material into nonfriable forms as follows:</p> <p>(i) Form all asbestos-containing waste material into nonfriable pellets or other shapes;</p> <p>(ii) Discharge no visible emissions to the outside air from collection and processing operations, including incineration, or use the method specified by §61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.</p> <p>(3) For facilities demolished where the RACM is not removed prior to demolition according to §§61.145(c)(1) (i), (ii), (iii), and (iv) or for facilities demolished according to §61.145(c)(9), adequately wet asbestos-containing waste material at all times after demolition and keep wet during handling and loading for transport to a disposal site. Asbestos-containing waste materials covered by this paragraph do not have to be sealed in leak-tight containers or wrapping but may be transported and disposed of in bulk.</p> <p>(4) Use an alternative emission control and waste treatment method that has received prior approval by the Administrator according to the procedure described in §61.149(c)(2).</p> <p>(5) As applied to demolition and renovation, the requirements of paragraph (a) of this section do not apply to Category I nonfriable ACM waste and Category II nonfriable ACM waste that did not become crumbled, pulverized, or reduced to powder.</p> <p>(b) All asbestos-containing waste material shall be deposited as soon as is practical by the waste generator at:</p>
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<p>§61.150</p>	<p>(1) A waste disposal site operated in accordance with the provisions of §61.154, or</p> <p>(2) An EPA-approved site that converts RACM and asbestos-containing waste material into nonasbestos (asbestos-free) material according to the provisions of §61.155.</p> <p>(3) The requirements of paragraph (b) of this section do not apply to Category I nonfriable ACM that is not RACM.</p> <p>(c) Mark vehicles used to transport asbestos-containing waste material during the loading and unloading of waste so that the signs are visible. The markings must conform to the requirements of §§61.149(d)(1) (i), (ii), and (iii).</p> <p>(d) For all asbestos-containing waste material transported off the facility site:</p> <p>(1) Maintain waste shipment records, using a form similar to that shown in Figure 4, and include the following information:</p> <ul style="list-style-type: none">(i) The name, address, and telephone number of the waste generator.(ii) The name and address of the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program.(iii) The approximate quantity in cubic meters (cubic yards).(iv) The name and telephone number of the disposal site operator.(v) The name and physical site location of the disposal site.(vi) The date transported.(vii) The name, address, and telephone number of the transporter(s).(viii) A certification that the contents of this consignment are fully and accurately described by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations. <p>(2) Provide a copy of the waste shipment record, described in paragraph (d)(1) of this section, to the disposal site owners or operators at the same time as the asbestos-containing waste material is delivered to the disposal site.</p> <p>(3) For waste shipments where a copy of the waste shipment record, signed by the owner or operator of the designated disposal site, is not received by the waste generator within 35 days of the date the waste was accepted by the initial transporter, contact the transporter and/or the owner or operator of the designated disposal site to determine the status of the waste shipment.</p> <p>(4) Report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator if a copy of the waste shipment record, signed by the owner or operator of the designated waste disposal site, is not received by the waste generator within 45 days of the date the waste was accepted by the initial transporter. Include in the report the following information:</p> <ul style="list-style-type: none">(i) A copy of the waste shipment record for which a confirmation of delivery was not received, and(ii) A cover letter signed by the waste generator explaining the efforts taken to locate the asbestos waste shipment and the results of those efforts. <p>(5) Retain a copy of all waste shipment records, including a copy of the waste shipment record signed by the owner or operator of the designated waste disposal site, for at least 2 years.</p> <p>(e) Furnish upon request, and make available for inspection by the Administrator, all records required under this section.</p>
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Air Cleaning

<p>§61.152</p>	<p>(a) The owner or operator who uses air cleaning, as specified in §§61.142(a), 61.144(b)(2), 61.145(c)(3)(i)(B)(I), 61.145(c)(4)(ii), 61.145(c)(11)(i), 61.146(b)(2), 61.147(b)(2), 61.149(b), 61.149(c)(1)(ii), 61.150(a)(1)(ii), 61.150(a)(2)(ii), and 61.155(e) shall:</p> <p>(1) Use fabric filter collection devices, except as noted in paragraph (b) of this section, doing all of the following:</p> <p>(i) Ensuring that the airflow permeability, as determined by ASTM Method D737-75, does not exceed 9 m³/min/m² (30 ft³/min/ft²) for woven fabrics or 11³/min/m²(35 ft³/min/ft²) for felted fabrics, except that 12 m³/min/m² (40 ft³min/ft²) for woven and 14 m³/min/m² (45 ft³min/ft²) for felted fabrics is allowed for filtering air from asbestos ore dryers; and</p> <p>(ii) Ensuring that felted fabric weighs at least 475 grams per square meter (14 ounces per square yard) and is at least 1.6 millimeters (one-sixteenth inch) thick throughout; and</p> <p>(iii) Avoiding the use of synthetic fabrics that contain fill yarn other than that which is spun.</p> <p>(2) Properly install, use, operate, and maintain all air-cleaning equipment authorized by this section. Bypass devices may be used only during upset or emergency conditions and then only for so long as it takes to shut down the operation generating the particulate asbestos material.</p> <p>(3) For fabric filter collection devices installed after January 10, 1989, provide for easy inspection for faulty bags.</p> <p>(b) There are the following exceptions to paragraph (a)(1):</p> <p>(1) After January 10, 1989, if the use of fabric creates a fire or explosion hazard, or the Administrator determines that a fabric filter is not feasible, the Administrator may authorize as a substitute the use of wet collectors designed to operate with a unit contacting energy of at least 9.95 kilopascals (40 inches water gage pressure).</p> <p>(2) Use a HEPA filter that is certified to be at least 99.97 percent efficient for 0.3 micron particles.</p> <p>(3) The Administrator may authorize the use of filtering equipment other than described in paragraphs (a)(1) and (b)(1) and (2) of this section if the owner or operator demonstrates to the Administrator's satisfaction that it is equivalent to the described equipment in filtering particulate asbestos material.</p>
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Reporting

<p>§61.153</p>	<p>(a) Any new source to which this subpart applies (with the exception of sources subject to §§61.143, 61.145, 61.146, and 61.148), which has an initial startup date preceding the effective date of this revision, shall provide the following information to the Administrator postmarked or delivered within 90 days of the effective date. In the case of a new source that does not have an initial startup date preceding the effective date, the information shall be provided, postmarked or delivered, within 90 days of the initial startup date. Any owner or operator of an existing source shall provide the following information to the Administrator within 90 days of the effective date of this subpart unless the owner or operator of the existing source has previously provided this information to the Administrator. Any changes in the information provided by any existing source shall be provided to the Administrator, postmarked or delivered, within 30 days after the change.</p>
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§61.153	<p>(1) A description of the emission control equipment used for each process; and</p> <p>(i) If the fabric device uses a woven fabric, the airflow permeability in $\text{m}^3/\text{min}/\text{m}^2$ and; if the fabric is synthetic, whether the fill yarn is spun or not spun; and</p> <p>(ii) If the fabric filter device uses a felted fabric, the density in g/m^2, the minimum thickness in inches, and the airflow permeability in $\text{m}^3/\text{min}/\text{m}^2$.</p> <p>(2) If a fabric filter device is used to control emissions,</p> <p>(i) The airflow permeability in $\text{m}^3/\text{min}/\text{m}^2$ ($\text{ft}^3/\text{min}/\text{ft}^2$) if the fabric filter device uses a woven fabric, and, if the fabric is synthetic, whether the fill yarn is spun or not spun; and</p> <p>(ii) If the fabric filter device uses a felted fabric, the density in g/m^2 (oz/yd^2), the minimum thickness in millimeters (inches), and the airflow permeability in $\text{m}^3/\text{min}/\text{m}^2$ ($\text{ft}^3/\text{min}/\text{ft}^2$).</p> <p>(3) If a HEPA filter is used to control emissions, the certified efficiency.</p> <p>(4) For sources subject to §§61.149 and 61.150:</p> <p>(i) A brief description of each process that generates asbestos-containing waste material; and</p> <p>(ii) The average volume of asbestos-containing waste material disposed of, measured in m^3/day (yd^3/day); and</p> <p>(iii) The emission control methods used in all stages of waste disposal; and</p> <p>(iv) The type of disposal site or incineration site used for ultimate disposal, the name of the site operator, and the name and location of the disposal site.</p> <p>(5) For sources subject to §§61.151 and 61.154:</p> <p>(i) A brief description of the site; and</p> <p>(ii) The method or methods used to comply with the standard, or alternative procedures to be used.</p> <p>(b) The information required by paragraph (a) of this section must accompany the information required by §61.10. Active waste disposal sites subject to §61.154 shall also comply with this provision. Roadways, demolition and renovation, spraying, and insulating materials are exempted from the requirements of §61.10(a). The information described in this section must be reported using the format of appendix A of this part as a guide.</p>
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FEDERAL REGULATIONS
40 CFR 63 SUBPART A
General Provisions

Applicable provisions of 40 CFR 63 Subpart A shall apply.

[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16595, Apr. 5, 2002]

Applicability

§63.1	<p><i>(a) General.</i> (1) Terms used throughout this part are defined in §63.2 or in the Clean Air Act (Act) as amended in 1990, except that individual subparts of this part may include specific definitions in addition to or that supersede definitions in §63.2.</p> <p>(2) This part contains national emission standards for hazardous air pollutants (NESHAP) established pursuant to section 112 of the Act as amended November 15, 1990. These standards regulate specific categories of stationary sources that emit (or have the potential to emit) one or more hazardous air pollutants listed in this part pursuant to section 112(b) of the Act. This section explains the applicability of such standards to sources affected by them. The standards in this part are independent of NESHAP contained in 40 CFR part 61. The NESHAP in part 61 promulgated by signature of the Administrator before November 15, 1990 (i.e., the date of enactment of the Clean Air Act Amendments of 1990) remain in effect until they are amended, if appropriate, and added to this part.</p> <p>(3) No emission standard or other requirement established under this part shall be interpreted, construed, or applied to diminish or replace the requirements of a more stringent emission limitation or other applicable requirement established by the Administrator pursuant to other authority of the Act (section 111, part C or D or any other authority of this Act), or a standard issued under State authority. The Administrator may specify in a specific standard under this part that facilities subject to other provisions under the Act need only comply with the provisions of that standard.</p> <p>(4)(i) Each relevant standard in this part 63 must identify explicitly whether each provision in this subpart A is or is not included in such relevant standard.</p> <p>(ii) If a relevant part 63 standard incorporates the requirements of 40 CFR part 60, part 61 or other part 63 standards, the relevant part 63 standard must identify explicitly the applicability of each corresponding part 60, part 61, or other part 63 subpart A (General) provision.</p> <p>(iii) The General Provisions in this subpart A do not apply to regulations developed pursuant to section 112(r) of the amended Act, unless otherwise specified in those regulations.</p> <p>(5) [Reserved]</p> <p>(6) To obtain the most current list of categories of sources to be regulated under section 112 of the Act, or to obtain the most recent regulation promulgation schedule established pursuant to section 112(e) of the Act, contact the Office of the Director, Emission Standards Division, Office of Air Quality Planning and Standards, U.S. EPA (MD-13), Research Triangle Park, North Carolina 27711.</p> <p>(7)-(9) [Reserved]</p> <p>(10) For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word “calendar” is absent, unless otherwise specified in an applicable requirement.</p>
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(11) For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, test plan, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery agreed to by the permitting authority, is acceptable.

(12) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in §63.9(i).

(b) *Initial applicability determination for this part.* (1) The provisions of this part apply to the owner or operator of any stationary source that—

(i) Emits or has the potential to emit any hazardous air pollutant listed in or pursuant to section 112(b) of the Act; and

(ii) Is subject to any standard, limitation, prohibition, or other federally enforceable requirement established pursuant to this part.

(2) [Reserved]

(3) An owner or operator of a stationary source who is in the relevant source category and who determines that the source is not subject to a relevant standard or other requirement established under this part must keep a record as specified in §63.10(b)(3).

(c) *Applicability of this part after a relevant standard has been set under this part.* (1) If a relevant standard has been established under this part, the owner or operator of an affected source must comply with the provisions of that standard and of this subpart as provided in paragraph (a)(4) of this section.

(2) Except as provided in §63.10(b)(3), if a relevant standard has been established under this part, the owner or operator of an affected source may be required to obtain a title V permit from a permitting authority in the State in which the source is located. Emission standards promulgated in this part for area sources pursuant to section 112(c)(3) of the Act will specify whether—

(i) States will have the option to exclude area sources affected by that standard from the requirement to obtain a title V permit (i.e., the standard will exempt the category of area sources altogether from the permitting requirement);

(ii) States will have the option to defer permitting of area sources in that category until the Administrator takes rulemaking action to determine applicability of the permitting requirements; or

(iii) If a standard fails to specify what the permitting requirements will be for area sources affected by such a standard, then area sources that are subject to the standard will be subject to the requirement to obtain a title V permit without any deferral.

(3)-(4) [Reserved]

§63.1(c)	<p>(5) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source that is subject to the emission standard or other requirement, such source also shall be subject to the notification requirements of this subpart.</p> <p>(e) If the Administrator promulgates an emission standard under section 112(d) or (h) of the Act that is applicable to a source subject to an emission limitation by permit established under section 112(j) of the Act, and the requirements under the section 112(j) emission limitation are substantially as effective as the promulgated emission standard, the owner or operator may request the permitting authority to revise the source's title V permit to reflect that the emission limitation in the permit satisfies the requirements of the promulgated emission standard. The process by which the permitting authority determines whether the section 112(j) emission limitation is substantially as effective as the promulgated emission standard must include, consistent with part 70 or 71 of this chapter, the opportunity for full public, EPA, and affected State review (including the opportunity for EPA's objection) prior to the permit revision being finalized. A negative determination by the permitting authority constitutes final action for purposes of review and appeal under the applicable title V operating permit program.</p>
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Appendix A

SSG 145 Potential Emissions

Criteria Pollutant Emissions (tons per year)					
Pollutant:	PM ₁₀	SO _x	NO _x	VOC	CO
Potential Emissions ¹	2.53	0	13.00	0	100.74
Post-modification Emissions	2.53	0	13.00	0	100.74
Emissions Change ²	0	0	0	0	0

¹Potential to emit prior to project modifications.

²Difference between pre-modification emissions and potential emissions, excluding exempted.

Greenhouse Gas Emissions (tons per year)							
Pollutants:	CO ₂	CH ₄	N ₂ O	HFCs	PFCs	SF ₆	Total
Emissions (tpy):	27,735	146.7	0.001	N/A	N/A	N/A	
*GWP:	1	21	310	**	**	23,900	
CO ₂ e (tpy):	27,735	3,080.7	0.31	N/A	N/A	N/A	30,816

Greenhouse Gases:

Carbon dioxide (CO₂),

Nitrous oxide (N₂O),

Methane (CH₄),

Hydrofluorocarbons (HFCs),

Perfluorocarbons (PFCs), and

Sulfur Hexafluoride (SF₆).

GHGs in table above are Potential to Emit (PTE) for year 2019 and exclude exempt sources.

*Global Warming Potential (GWP): The capacity to heat the atmosphere, calculated as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram (kg) of a substance relative to that of 1 kg of CO₂. GWP shall be calculated according to the factors for a 100-year time horizon, as stated in 40 CFR Part 98 Subpart A Table A-1 (Global Warming Potentials).

** GWP varies based on each pollutant.