



State of Utah

SPENCER J. COX
Governor

DEIDRE HENDERSON
Lieutenant Governor

Department of
Environmental Quality

Kimberly D. Shelley
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQE-IN104020061-25

February 27, 2025

Blair Palmer
Northrop Grumman Systems Corporation
PO Box 707
Brigham City, UT 84302-0707
Allia.Abdallah@ngc.com

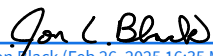
Dear Mr. Palmer:

Re: Intent to Approve: Modification to Approval Order to DAQE-AN104020060-24 to Update
Equipment List
Project Number: N104020061

The attached document is the Intent to Approve (ITA) for the above-referenced project. The ITA is subject to public review. Any comments received shall be considered before an Approval Order (AO) is issued. The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an AO. An invoice will follow upon issuance of the final AO.

Future correspondence on this ITA should include the engineer's name, **Tad Anderson**, as well as the DAQE number as shown on the upper right-hand corner of this letter. Tad Anderson, can be reached at (385) 306-6515 or tdanderson@utah.gov, if you have any questions.

Sincerely,


Jon Black (Feb 26, 2025 16:35 MST)

Jon L. Black, Manager
New Source Review Section

JLB:TA:jg

cc: Salt Lake County Health Department

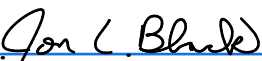
STATE OF UTAH
Department of Environmental Quality
Division of Air Quality

INTENT TO APPROVE
DAQE-IN104020061-25
Modification to Approval Order to DAQE-AN104020060-24
to Update Equipment List

Prepared By
Tad Anderson, Engineer
(385) 306-6515
tdanderson@utah.gov

Issued to
Northrop Grumman Systems Corporation - Bacchus Works - Plant 1 NIROP
Bacchus West

Issued On
February 27, 2025


Jon Black (Feb 26, 2025 16:35 MST)

New Source Review Section Manager
Jon L. Black

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GENERAL INFORMATION

CONTACT/LOCATION INFORMATION

Owner Name

Northrop Grumman Systems Corporation

Source NameNorthrop Grumman Systems Corporation -
Bacchus Works - Plant 1 NIROP Bacchus West**Mailing Address**PO Box 707
Brigham City, UT 84302-0707**Physical Address**5000 South 8400 West
West Valley City, UT 84044**Source Contact**Name: Allia Abdallah
Phone: (801) 251-2221
Email: Allia.Abdallah@ngc.com**UTM Coordinates**409,700 m Easting
4,502,100 m Northing
Datum NAD27
UTM Zone 12**SIC code** 3761 (Guided Missiles & Space Vehicles)

SOURCE INFORMATION

General Description

Northrop Grumman Systems Corporation (NGSC) operates the Bacchus site, an existing rocket propulsion plant in West Valley City, Salt Lake County. The NGSC Bacchus site manufactures solid fuel rocket motors for NASA and the Department of Defense. The manufacturing operations at this plant include rocket case preparation buildings, cyclotetramethylene-tetranitramine (HMX) grinding and drying processes for making solid rocket fuel, propellant sampling and machining, and an open burning ground for the routine burning of explosive and flammable wastes.

NSR Classification

Minor Modification at Minor Source

Source Classification

Located in Northern Wasatch Front O3 NAA, Salt Lake City UT PM_{2.5} NAA, Salt Lake County SO₂ NAA
Salt Lake County
Airs Source Size: SM

Applicable Federal Standards

NSPS (Part 60), A: General Provisions
NSPS (Part 60), IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
NSPS (Part 60), JJJJ: Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
MACT (Part 63), A: General Provisions

MACT (Part 63), ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

MACT (Part 63), CCCCCC: National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities

Project Description

NGSC has requested to update the Bacchus site, approval order, and equipment list by adding a 464-horsepower diesel-fired emergency generator engine in Building 50A and removing a pulse jet baghouse and two (2) spray booths. The emissions increase from this permit change is the result of the addition of the emergency generator, which is limited to 100 hours per year of operations for testing and maintenance. The addition of the emergency generator will not result in additional requirements in the permit since the most recent emergency generator requirements are already included in the existing permit. The emissions reduction from the removal of the baghouse and spray booths was not taken into consideration in this permit change.

SUMMARY OF EMISSIONS

The emissions listed below are an estimate of the total potential emissions from the source. Some rounding of emissions is possible.

Criteria Pollutant	Change (TPY)	Total (TPY)
CO ₂ Equivalent	27	32791.00
Carbon Monoxide	0.13	27.91
Nitrogen Oxides	0.15	49.79
Particulate Matter - PM ₁₀	0.01	51.33
Particulate Matter - PM _{2.5}	0.01	51.26
Sulfur Oxides	0.01	0.61
Volatile Organic Compounds	0.01	46.78

Hazardous Air Pollutant	Change (lbs/yr)	Total (lbs/yr)
1-Bromopropane (CAS #106945)	0	1500
2,4-Toluene Diisocyanate (CAS #584849)	0	1960
4,4-Methylenedianiline (CAS #101779)	0	500
Chlorine (CAS #7782505)	0	400
Chromium Compounds (CAS #CMJ500)	0	200
Ethyl Benzene (CAS #100414)	0	3000
Ethylene Dichloride (1,2-Dichloroethane) (CAS #107062)	0	500
Formaldehyde (CAS #50000)	0	200
Generic HAPs (CAS #GHAPS)	0	3980
Glycol Ethers (CAS #EDF109)	0	500
Hexamethylene-1,6-Diisocyanate (CAS #822060)	0	1900
Hexane (CAS #110543)	0	4600
Hydrochloric Acid (Hydrogen Chloride) (CAS #7647010)	0	7000
Maleic Anhydride (CAS #108316)	0	500
Methanol (CAS #67561)	0	2000
Methyl Chloroform (1,1,1-Trichloroethane) (CAS #71556)	0	2000
Methyl Isobutyl Ketone (Hexone) (CAS #108101)	0	2000

Methylene Chloride (Dichloromethane) (CAS #75092)	0	1000
Methylene Diphenyl Diisocyanate (MDI) (CAS #101688)	0	1160
Toluene (CAS #108883)	0	6000
Xylenes (Isomers And Mixture) (CAS #1330207)	0	8000
	Change (TPY)	Total (TPY)
Total HAPs	0	24.45

PUBLIC NOTICE STATEMENT

The NOI for the above-referenced project has been evaluated and has been found to be consistent with the requirements of UAC R307. Air pollution-producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an AO by the Director.

A 30-day public comment period will be held in accordance with UAC R307-401-7. A notification of the intent to approve will be published in the Salt Lake Tribune and Deseret News on March 2, 2025. During the public comment period, the proposal and the evaluation of its impact on air quality will be available for the public to review and provide comment. If anyone so requests a public hearing within 15 days of publication, it will be held in accordance with UAC R307-401-7. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated. The proposed conditions of the AO may be changed as a result of the comments received.

SECTION I: GENERAL PROVISIONS

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO.

I.1	The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]
I.2	Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]
I.3	All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Director or Director's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401-8]
I.4	At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]
I.5	The owner/operator shall comply with UAC R307-107. General Requirements: Breakdowns. [R307-107]

I.6	The owner/operator shall comply with UAC R307-150 Series. Emission Inventories. [R307-150]
I.7	The owner/operator shall submit documentation of the status of construction or modification to the Director within 18 months from the date of this AO. This AO may become invalid if construction is not commenced within 18 months from the date of this AO or if construction is discontinued for 18 months or more. To ensure proper credit when notifying the Director, send the documentation to the Director, attn.: NSR Section. [R307-401-18]
I.8	All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]

SECTION II: PERMITTED EQUIPMENT

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO.

II.A THE APPROVED EQUIPMENT

II.A.1	Bacchus Works: Plant 1/NIROP/Bacchus West Rocket propulsion plant in West Valley City
II.A.2	Building 8501 Powerhouse Boilers A. Nebraska natural gas-fired boiler - rated at 50,000 lb/hr (66 MMBtu/hr) B. Murray natural gas-fired boiler - rated at 50,000 lb/hr (66 MMBtu/hr)
II.A.3	Building 4B Ammonium Perchlorate Processing Control: Pulse jet baghouse and HEPA filtration system Baghouse maximum flow rate: 400 acfm Baghouse pressure drop range during processing: Between 1 and 5.2 inches of H ₂ O
II.A.4	Building 17A Fiberglass Cutting Vacuum dust collector
II.A.5	Building 2387 HMX Dryer Building HMX Dryer Control: Condenser Dryer Stack V-1 (emits IPA and water vapor) IPA vapor ventilation hood Vents inside, listed for informational purposes only

II.A.6	Building 2440 3-D Carbon/Carbon Process control: Fume incinerator, 1 MMBtu/hr rate Process control: Central vacuum system																										
II.A.7	Building 2471 Case Preparation Three (3) spray lance robot booths: SLR-1, SLR-2, and SLR-3 Control: Fabric filters																										
II.A.8	Diesel-Fired Emergency Generators >600 Hp <table> <tr> <th>Building Location</th><th>Maximum Hp rating</th></tr> <tr> <td>35A</td><td>755*</td></tr> <tr> <td>55, Stores</td><td>755*</td></tr> <tr> <td>2428, Al/AP Prep</td><td>804</td></tr> <tr> <td>2444, Mix #1</td><td>1340</td></tr> <tr> <td>2449, Cast Cure #1 (south)</td><td>1005</td></tr> <tr> <td>2484, Mix #3</td><td>1474</td></tr> <tr> <td>2489(A), Cast Cure #2 (west)</td><td>1005</td></tr> <tr> <td>2489(B), Cast Cure #2 (east)</td><td>1005</td></tr> <tr> <td>2500, Mix #2A</td><td>1340</td></tr> <tr> <td>2609, MBC#4</td><td>755*</td></tr> <tr> <td>2617, 2618, Cast Cure #3 & #4</td><td>4309*</td></tr> <tr> <td>8608, Plt.#1 Powerhouse</td><td>755*</td></tr> </table> *NSPS Applicability: Subpart IIII MACT Applicability: Subpart ZZZZ (applies to all)	Building Location	Maximum Hp rating	35A	755*	55, Stores	755*	2428, Al/AP Prep	804	2444, Mix #1	1340	2449, Cast Cure #1 (south)	1005	2484, Mix #3	1474	2489(A), Cast Cure #2 (west)	1005	2489(B), Cast Cure #2 (east)	1005	2500, Mix #2A	1340	2609, MBC#4	755*	2617, 2618, Cast Cure #3 & #4	4309*	8608, Plt.#1 Powerhouse	755*
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II.A.9	Diesel-Fired Emergency Generators 100-600 Hp (NEW) <table> <tr> <th>Building Location</th><th>Maximum Hp rating</th></tr> <tr> <td>27-A, Laboratory</td><td>335*</td></tr> <tr> <td>50A</td><td>464*(NEW)</td></tr> <tr> <td>56, Compressor Building</td><td>402</td></tr> <tr> <td>2430, Al-Premix</td><td>469</td></tr> <tr> <td>2450, Control House</td><td>268</td></tr> <tr> <td>2466, Mix Bowl Clean #2</td><td>469</td></tr> <tr> <td>2498, Mix Bowl Clean #3</td><td>536</td></tr> <tr> <td>2507, Subscale ReCast</td><td>469</td></tr> <tr> <td>8501, Powerhouse</td><td>464*</td></tr> <tr> <td>8503, Compressor House</td><td>268</td></tr> <tr> <td>8569, Wastewater</td><td>335</td></tr> <tr> <td>8695, Pumphouse #3</td><td>268</td></tr> </table> *NSPS Applicability: Subpart IIII MACT Applicability: Subpart ZZZZ (applies to all)	Building Location	Maximum Hp rating	27-A, Laboratory	335*	50A	464*(NEW)	56, Compressor Building	402	2430, Al-Premix	469	2450, Control House	268	2466, Mix Bowl Clean #2	469	2498, Mix Bowl Clean #3	536	2507, Subscale ReCast	469	8501, Powerhouse	464*	8503, Compressor House	268	8569, Wastewater	335	8695, Pumphouse #3	268
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II.A.10	Diesel-Fired Emergency Generators <100 Hp <table> <tr> <th>Building Location</th><th>Maximum Hp rating</th></tr> <tr> <td>55, Material</td><td>72</td></tr> <tr> <td>8100D, (Admin)PBX</td><td>81</td></tr> </table> MACT Applicability: Subpart ZZZZ (applies to all)	Building Location	Maximum Hp rating	55, Material	72	8100D, (Admin)PBX	81																				
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II.A.11	Natural Gas-Fired Emergency Generator <table> <tr> <td>Building Location 2440, 3D Carbon</td><td>Maximum Hp rating 163</td></tr> </table> NSPS Applicability: Subpart JJJ MACT Applicability: Subpart ZZZZ	Building Location 2440, 3D Carbon	Maximum Hp rating 163
Building Location 2440, 3D Carbon	Maximum Hp rating 163		
II.A.12	Propane-Fired Emergency Generator <table> <tr> <td>Building Location 8275, Microwave Station</td><td>Maximum Hp rating 16</td></tr> </table> MACT Applicability: Subpart ZZZZ	Building Location 8275, Microwave Station	Maximum Hp rating 16
Building Location 8275, Microwave Station	Maximum Hp rating 16		
II.A.13	Area 32A Burning Grounds		
II.A.14	Miscellaneous Natural Gas-fired Equipment Natural gas-fired boilers, air handlers, heaters, and water heaters less than 5 MMBTU/hr		
II.A.15	Miscellaneous Buildings Includes: miscellaneous operations, spray booths, baghouses, ovens, dust collectors, gasoline and diesel tanks, and other processes. Gasoline storage tank MACT applicability: Subpart CCCCCC		

SECTION II: SPECIAL PROVISIONS

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO.

II.B REQUIREMENTS AND LIMITATIONS

II.B.1	Sitewide Requirements
II.B.1.a	The owner/operator shall not allow visible emissions from the following emission points to exceed the following values: A. Diesel-fired emergency generators - 20% opacity B. All other point or fugitive emissions sources, excluding the burning grounds - 10% opacity. [R307-401-8]
II.B.1.a.1	Opacity observations of emissions from stationary sources, except haul roads, shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-401-8]
II.B.1.a.2	Visible emission determinations for fugitive dust from haul roads shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Visible emissions shall be measured at the densest point of the plume but at a point not less than one-half vehicle length behind the vehicle and not less than one-half the height of the vehicle. [R307-401-8]

II.B.1.b	The owner/operator shall equip each paint spray booth with paint arrestor particulate filters, or equivalent, to control particulate emissions. All air exiting the booths shall pass through this control system before being vented to the atmosphere. [R307-401-8]
II.B.1.c	Except when in use, the owner/operator shall store all VOC- and/or HAP-containing materials and VOC- and/or HAP-laden rags in covered containers. [R307-401-8]
II.B.1.d	<p>The owner/operator shall not emit more than the following for plant-wide emissions of HAPs:</p> <ul style="list-style-type: none"> A. 0.98 tons per rolling 12-month period for 2,4 Toluene Diisocyanate B. 0.58 tons per rolling 12-month period for Methylene Diphenyl Diisocyanate C. 1.00 tons per rolling 12-month period for Methyl Chloroform D. 1.00 tons per rolling 12-month period for Methanol E. 0.10 tons per rolling 12-month period for Chromium Compounds F. 1.00 tons per rolling 12-month period for Methyl Isobutyl Ketone G. 0.95 tons per rolling 12-month period for Hexamethylene-1,6-Diisocyanate H. 1.50 tons per rolling 12-month period for Ethyl Benzene I. 2.30 tons per rolling 12-month period for Hexane J. 3.00 tons per rolling 12-month period for Toluene K. 3.50 tons per rolling 12-month period for Hydrochloric Acid L. 4.00 tons per rolling 12-month period for Xylene. <p>[R307-401-8]</p>
II.B.1.d.1	To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the 20th day of each month using data from the previous 12 months. HAP emissions shall be determined by maintaining a record of HAP-emitting materials used, burned, or destroyed each month. [R307-401-8]
II.B.2	Building 4B - Ammonium Perchlorate Processing Building
II.B.2.a	The owner/operator shall control emissions from the ammonium perchlorate process with a baghouse and HEPA filtration system in series. Emissions from the ammonium perchlorate process shall be routed to the operating baghouse and HEPA filtration system before being discharged to the atmosphere. [R307-401-8]
II.B.2.a.1	The owner/operator shall install and maintain a high-pressure differential interlock in the HEPA filtration system to shut down the ammonium perchlorate process when the pressure differential goes above the maximum operating set point of 5.2 inches of water column for more than 60 seconds. The ammonium perchlorate process shall not operate without the operating HEPA filtration system interlock. [R307-401-8]
II.B.2.a.2	The owner/operator shall record the pressure drop readings from the differential pressure transmitters on a daily basis. [R307-401-8]

II.B.3	Building 2387 (CD3A) - HMX Dryer Building Requirements
II.B.3.a	The owner/operator shall control emissions from the HMX dryer with the condenser. Emissions from the HMX dryer shall be routed to the operating condenser before being discharged to the atmosphere. [R307-401-8]
II.B.3.b	The owner/operator shall not exceed 450 drying cycles of HMX per rolling 12-month period. [R307-401-8]
II.B.3.b.1	To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the 20th day of each month using data from the previous 12 months. Drying cycles of HMX shall be determined by an operations log. [R307-401-8]
II.B.4	Building 2440 - 3D Carbon Building Requirements
II.B.4.a	The fume incinerator shall control carbon vapor deposition (CVD) emissions from the 3D carbon process. All CVD emissions shall be routed to the operating fume incinerator before being discharged to the atmosphere. [R307-401-8]
II.B.4.b	At all times while incinerating CVD emissions, the owner/operator shall maintain a temperature at or above 1,500 degrees Fahrenheit in the fume incinerator. [R307-401-8]
II.B.4.b.1	The owner/operator shall install, calibrate, maintain, and operate a device to monitor the operating temperature of the fume incinerator. The monitoring device shall be located such that an inspector/operator can safely read the output at any time. The operating temperature of the fume incinerator shall be recorded on a daily basis when the incinerator operates. [R307-401-8]
II.B.4.c	The owner/operator shall operate the fume incinerator at a minimum residence time of 0.5 seconds. [R307-401-8]
II.B.4.c.1	The owner/operator shall maintain the manufacturer's specifications or analysis documenting an incinerator design residence time of no less than 0.5 seconds at maximum flow rate. This documentation shall be kept on site and be readily available for inspection upon request. [R307-401-8]
II.B.4.d	The owner/operator shall equip each weaving machine's ventilation exhaust with particulate filters to control particulate emissions. All exhaust exiting the weaving machines shall pass through this control system before being vented to the atmosphere. [R307-401-8]
II.B.4.e	The owner/operator shall equip the central vacuum system with particulate filters to control particulate emissions. All air exiting the central vacuum system shall pass through this control system before being vented to the atmosphere. [R307-401-8]
II.B.5	Building 2471 - Case Preparation Building Requirements
II.B.5.a	The owner/operator shall not exceed 14.0 tons of VOC emissions per rolling 12-month period for all operations in Building 2471. [R307-401-8]

II.B.5.a.1	<p>To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the 20th day of each month using data from the previous 12 months. VOC emissions shall be determined by maintaining a record of VOC-emitting materials used each month. The record shall include the following data for each material used:</p> <ul style="list-style-type: none"> A. Name of the VOC-emitting material, such as paint, adhesive, solvent, thinner, reducers, chemical compounds, toxics, isocyanates, etc. B. Density of each VOC-emitting material used (lbs per gallon) C. Maximum percent by weight of all VOC in each material used D. Mass of each VOC-emitting material used E. The emission release factor (ERF) associated with each type of VOC-emitting material F. The amount of VOC emitted monthly from each material used. The amount of VOC emitted monthly by each material used shall be calculated by the following procedure: $\text{VOC} = (\% \text{ VOC by Weight}) / 100 \times [\text{Density (lb/gal)}] \times (\text{Gal Consumed}) \times (1 \text{ ton} / 2,000 \text{ lb}) \times \text{ERF}$ (example if unit of measure is gallons) G. The total amount of VOC emitted monthly from all materials used H. The amount of VOCs reclaimed for the month shall be similarly quantified and subtracted from the quantities calculated above to provide the monthly total VOC emissions. <p>[R307-401-8]</p>
II.B.5.b	<p>The owner/operator shall vent all air exiting the Building 2471 spray lance robot booth SLR-1 with a stack release height of no less than 39' 3" as measured from the base of the stack. [R307-401-8]</p>
II.B.6	Fuel Requirements
II.B.6.a	<p>The owner/operator shall not exceed a total natural gas consumption limit of 633,000 MMBtu per rolling 12-month period for all natural gas-fired equipment on site. [R307-401-8]</p>
II.B.6.a.1	<p>To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the 20th day of each month using data from the previous 12 months. Natural gas consumption shall be determined by gas billing records. [R307-401-8]</p>
II.B.6.b	<p>The owner/operator shall use only natural gas as the primary fuel in all fuel-burning furnaces, ovens, boilers, and fume incinerators, and only use fuel oil as a backup fuel in all fuel-burning boilers. [R307-401-8]</p>
II.B.6.c	<p>The owner/operator shall limit fuel oil usage in all fuel-burning boilers to 48 hours each per rolling 12-month period for periodic testing, maintenance, or operator training. There is no time limit on the use of fuel oil in the fuel-burning boilers during periods of natural gas curtailment, gas supply interruption, or startups. [R307-401-8]</p>

II.B.6.c.1	<p>To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the 20th day of each month using data from the previous 12 months. Records documenting fuel oil usage in each fuel-burning boiler shall be kept in a log and shall include the following:</p> <ul style="list-style-type: none"> A. The date fuel oil was used B. The duration of operation in hours C. The reason for fuel oil usage. <p>[R307-401-8]</p>
II.B.6.d	The sulfur content of any fuel oil burned in all fuel-burning boilers on site shall not exceed 0.50% by weight. [R307-401-8]
II.B.6.d.1	The sulfur content shall be determined by the American Standard for Testing and Materials (ASTM) Method D2880-71, D-4294-89, or approved equivalent. Certification of fuel oil shall be either by the owner/operator's own testing or by test reports from the fuel oil marketer. [R307-401-8]
II.B.7	Emergency Engine Requirements
II.B.7.a	The owner/operator shall not operate each emergency engine on site for more than 100 hours per year during non-emergency situations. There is no time limit on the use of the engines during emergencies. [R307-401-8]
II.B.7.a.1	<p>To determine compliance with a yearly total, the owner/operator shall update records documenting generator usage by January 30th for the preceding year. Records documenting the operation of each emergency engine shall be kept in a log and shall include the following:</p> <ul style="list-style-type: none"> A. The date the emergency engine was used B. The duration of operation in hours C. The reason for the emergency engine usage. <p>[R307-401-8]</p>
II.B.7.a.2	To determine the duration of operation, the owner/operator shall install a non-resettable hour meter for each emergency engine. [R307-401-8]
II.B.7.b	The owner/operator shall only use diesel fuel (e.g., fuel oil #1, #2, or diesel fuel oil additives) as fuel in each stationary diesel emergency engine. [R307-401-8]
II.B.7.b.1	The owner/operator shall only combust diesel fuel that meets the definition of ultra-low sulfur diesel (ULSD), which has a sulfur content of 15 ppm or less. [R307-401-8]
II.B.7.b.2	To demonstrate compliance with the ULSD fuel requirement, the owner/operator shall maintain records of diesel fuel purchase invoices or obtain certification of sulfur content from the diesel fuel supplier. The diesel fuel purchase invoices shall indicate that the diesel fuel meets the ULSD requirements. [R307-401-8]
II.B.8	Area 32A - Burning Ground Requirements
II.B.8.a	The owner/operator shall use the open burning site to destroy only scrap explosive and hazardous material. The size of the open burning site shall not exceed five (5) acres. [R307-401-8]

II.B.8.b	The owner/operator shall not exceed a daily limit of 4,500 lbs of waste propellant and contaminated waste burned or destroyed per day. [R307-401-8]
II.B.8.b.1	To determine compliance with the daily limit, the owner/operator shall maintain a record of the quantity of waste burned or destroyed on a daily basis. [R307-401-8]
II.B.8.c	When a Salt Lake County "No Burn" order is in effect for wood-burning stoves, open burning of waste propellant and contaminated wastes shall not be performed, except for unstable wastes. [R307-401-8]
II.B.8.c.1	The owner/operator shall maintain, with the record of waste burned or destroyed on a daily basis, a record of whether or not a Salt Lake County "No Burn" order was in effect for that day. [R307-401-8]
II.B.8.d	When a Salt Lake County "No Burn" order is in effect, the owner/operator is allowed to perform open burning of the most unstable wastes, including nitroglycerin wastes, laboratory-generated wastes, and unburned reactive wastes from a previous burn attempt. The open burning of unstable wastes during a Salt Lake County "No Burn" order shall not exceed 400 lbs per day. [R307-401-8]
II.B.8.d.1	The owner/operator shall maintain a record of the quantity of unstable waste burned or destroyed during a Salt Lake County "No Burn" order. The record shall include the type of waste burned or destroyed. [R307-401-8]
II.B.8.e	The owner/operator is allowed to destroy the backlog of wastes not burned during the Salt Lake County "No Burn" order up to a total of 6,000 lbs per day on the days following the burning restrictions. [R307-401-8]
II.B.8.e.1	The owner/operator shall maintain a record of the quantity of backlogged waste burned or destroyed on the days following a Salt Lake County "No Burn" order. The record shall include the date and reason for open burning. [R307-401-8]
II.B.8.f	<p>The owner/operator shall not burn wastes exceeding 5% chlorine content unless the following conditions are all met:</p> <ul style="list-style-type: none"> A. Surface wind direction at Building 32A is less than or equal to 112 degrees or more than or equal to 270 degrees B. Elevated wind direction has been verified by a helium balloon C. Wind speed does not exceed 15 miles/hr. <p>[R307-401-8]</p>
II.B.8.f.1	The owner/operator shall verify and record the wind speed and direction measurements prior to the burn. The owner/operator shall not verify and record the measurements more than ten (10) minutes before the burn. [R307-401-8]

PERMIT HISTORY

This Approval Order shall supersede (if a modification) or will be based on the following documents:

Supersedes
Is Derived From

AO DAQE-AN104020060-24 dated June 5, 2024
NOI dated November 13, 2024

ACRONYMS

The following lists commonly used acronyms and associated translations as they apply to this document:

40 CFR	Title 40 of the Code of Federal Regulations
AO	Approval Order
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDS	Classification Data System (used by Environmental Protection Agency to classify sources by size/type)
CEM	Continuous emissions monitor
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CMS	Continuous monitoring system
CO	Carbon monoxide
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent - Title 40 of the Code of Federal Regulations Part 98, Subpart A, Table A-1
COM	Continuous opacity monitor
DAQ/UDAQ	Division of Air Quality
DAQE	This is a document tracking code for internal Division of Air Quality use
EPA	Environmental Protection Agency
FDCP	Fugitive dust control plan
GHG	Greenhouse Gas(es) - Title 40 of the Code of Federal Regulations 52.21 (b)(49)(i)
GWP	Global Warming Potential - Title 40 of the Code of Federal Regulations Part 86.1818-12(a)
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
LB/YR	Pounds per year
MACT	Maximum Achievable Control Technology
MMBTU	Million British Thermal Units
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NO _x	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM ₁₀	Particulate matter less than 10 microns in size
PM _{2.5}	Particulate matter less than 2.5 microns in size
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
R307	Rules Series 307
R307-401	Rules Series 307 - Section 401
SO ₂	Sulfur dioxide
Title IV	Title IV of the Clean Air Act
Title V	Title V of the Clean Air Act
TPY	Tons per year
UAC	Utah Administrative Code
VOC	Volatile organic compounds