



State of Utah

SPENCER J. COX
Governor

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Department of
Environmental Quality

Kimberly D. Shelley
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQE-AN161190002-24

July 4, 2024

Lee Ware
Kilgore Companies, LLC
7057 West 2100 South
Salt Lake City, UT 84128
lee.ware@kilgorecompanies.com

Dear Mr. Ware:

Re: Approval Order: Administrative Amendment to Approval Order DAQE-AN161190001-23 to Correct NO_x Potential to Emit and Allow Use of Propane under R307-401-12
Project Number: N161190002

The attached Approval Order (AO) is issued pursuant to the Notice of Intent (NOI) received on May 13, 2024. Kilgore Companies, LLC must comply with the requirements of this AO, all applicable state requirements (R307), and Federal Standards.

The project engineer for this action is **Christine Bodell**, who can be contacted at (385) 290-2690 or cbodell@utah.gov. Future correspondence on this AO should include the engineer's name as well as the DAQE number shown on the upper right-hand corner of this letter.

Sincerely,

Bryce C. Bird
Director

BCB:CB:jg

cc: Weber-Morgan Health Department

STATE OF UTAH
Department of Environmental Quality
Division of Air Quality

APPROVAL ORDER
DAQE-AN161190002-24
Administrative Amendment to Approval Order
DAQE-AN161190001-23 to Correct NO_x Potential to Emit and
Allow Use of Propane under R307-401-12

Prepared By
Christine Bodell, Engineer
(385) 290-2690
cbodell@utah.gov

Issued to
Kilgore Companies, LLC - Ogden Hot Mix Asphalt Plant

Issued On
July 4, 2024

Issued By



Bryce C. Bird
Director
Division of Air Quality

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GENERAL INFORMATION

CONTACT/LOCATION INFORMATION

Owner Name

Kilgore Companies, LLC

Source Name

Kilgore Companies, LLC - Ogden Hot Mix
Asphalt Plant

Mailing Address

7057 West 2100 South
Salt Lake City, UT 84128

Physical Address

1729 West 1350 South
Marriott-Slaterville, UT 84401

Source Contact

Name: Lee Ware
Phone: (801) 250-0132 Ext 1412
Email: lee.ware@kilgorecompanies.com

UTM Coordinates

414,670 m Easting
4,565,844 m Northing
Datum NAD83
UTM Zone 12

SIC code 2951 (Asphalt Paving Mixtures & Blocks)

SOURCE INFORMATION

General Description

Kilgore Companies, LLC (Kilgore) currently operates an aggregate processing and hot mix asphalt plant (HMAP) in Ogden, Weber County. To produce HMA, raw materials such as sand, coarse aggregate, lime, fly ash, asphalt oil, and recycled asphalt pavement (RAP) are brought on site and stored. Sand, coarse aggregate, and RAP are stockpiled; lime and fly ash are pneumatically loaded into silos; and asphalt oil is unloaded into storage tanks. The stockpiled aggregate materials are sized and sorted via crushers, conveyors, and screens. The aggregate materials are then dried and mixed with lime and asphalt in a heated mixer to produce HMA. The finished HMA product is stored in silos on site and unloaded into trucks for sale and distribution. This facility is powered via line power, with the exception of the propane and/or natural gas-fired HMA drum burner.

NSR Classification

Administrative Amendment

Source Classification

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

Applicable Federal Standards

NSPS (Part 60), A: General Provisions
NSPS (Part 60), I: Standards of Performance for HMA Facilities
NSPS (Part 60), OOO: Standards of Performance for Nonmetallic Mineral Processing Plants

NSPS (Part 60), IIII: Standards of Performance for Stationary Compression 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

Project Description

Kilgore is currently permitted to use only natural gas as fuel in the HMA drum burner (Condition II.B.1.c in Approval Order DAQE-AN161190001-23). Kilgore has requested an administrative amendment to the 2023 AO to obtain the flexibility of being able to operate the drum burner on propane in addition to natural gas. The propane emission factors are the same or lower than the natural gas emission factors used to estimate emissions for the 2023 AO. Therefore, no emissions are increasing.

Additionally, Kilgore has requested that a clerical error in the 2023 AO regarding the NO_x Potential to Emit (PTE) be corrected. The NO_x emission rate from the asphalt plant baghouse is limited to 9.60 lb/hr. HMA production is limited to 249,000 tons annually, and the HMA burner is guaranteed to emit no more than 0.024 lb of NO_x per ton of asphalt produced. Therefore, the annual PTE for NO_x from the asphalt plant baghouse is 2.99 tpy. Due to a clerical error, the PTE for NO_x from the asphalt plant baghouse was considered to be 1.46 tpy. The site-wide PTE table in the 2023 AO will be updated to reflect the 1.53 tpy increase. No annual or hourly limits are changing, nor is the burner being altered. Therefore, no actual emissions are increasing.

This project meets the requirements of UAC R307-401-12 Reduction in Air Pollutants and does not require a public comment period.

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	0	2229.00
Carbon Monoxide	-2.49	14.83
Nitrogen Oxides	1.53	4.05
Particulate Matter - PM ₁₀	0	7.04
Particulate Matter - PM _{2.5}	0	4.37
Sulfur Dioxide	0	0.45
Volatile Organic Compounds	-0.12	6.09

Hazardous Air Pollutant	Change (lbs/yr)	Total (lbs/yr)
Formaldehyde (CAS #50000)	0	798
Generic HAPs (CAS #GHAPS)	0	240
Hexane (CAS #110543)	0	236
Naphthalene (CAS #91203)	0	26
Toluene (CAS #108883)	0	45
Xylenes (Isomers And Mixture) (CAS #1330207)	0	68

	Change (TPY)	Total (TPY)
Total HAPs	0	0.71

SECTION I: GENERAL PROVISIONS

I.1	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]
I.2	The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]
I.3	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.4	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.5	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.6	The owner/operator shall comply with UAC R307-107. General Requirements: Breakdowns. [R307-107]
I.7	The owner/operator shall comply with UAC R307-150 Series. Emission Inventories. [R307-150]

SECTION II: PERMITTED EQUIPMENT

II.A THE APPROVED EQUIPMENT

II.A.1	Ogden HMAP
II.A.2	<p>One (1) HMA Drum Mixer with Burner</p> <p>Drum Rated Capacity: 400 tons per hour (tph) Drum Mixer Burner Rating: 250 MMBtu/hr Drum Mixer Burner Fuel: Natural Gas/Propane Control: Low-NO_x Burner Rated at <80 ppmv NO_x</p> <p>NSPS Applicability: Subpart I</p>

II.A.3	<p>One (1) Asphalt Plant Baghouse Flow Rate: 85,000 acfm</p> <p>NSPS Applicability: Subpart I</p>
II.A.4	<p>Five (5) Storage Silos</p> <p>One (1) Lime Storage Silo Capacity: 50 tons</p> <p>One (1) Fly Ash Storage Silo Capacity: 50 tons</p> <p>Three (3) HMA Storage Silos Capacity: 300 tons, each</p> <p>NSPS Applicability: Subpart I</p>
II.A.5	<p>Six (6) Storage Tanks</p> <p>Two (2) Diesel Storage Tanks Capacity: 10,000 gallons, each</p> <p>Four (4) Asphalt Oil Storage Tanks Capacity: 30,000 gallons, each</p> <p>NSPS Applicability: Subpart I</p>
II.A.6	<p>Two (2) Emergency Engines</p> <p>One (1) Tier 4 Engine Rating: 1,378 kW (1,848 HP) Fuel: Diesel</p> <p>One (1) Tier 3 Engine Rating: 100 kW (134.1 HP) Fuel: Diesel</p> <p>NSPS Applicability: Subpart III MACT Applicability: Subpart ZZZZ</p>
II.A.7	<p>One (1) Hot Oil Heater Rating: 2.0 MMBtu/hr Fuel: Distillate Fuel Oil</p> <p>NSPS Applicability: Subpart I</p>
II.A.8	<p>One (1) HSI Crusher Capacity: 400 tph</p> <p>NSPS Applicability: Subpart OOO</p>
II.A.9	<p>Two (2) Single-deck Screens Capacity: 400 tph, each Size: 4' x 10', each</p> <p>NSPS Applicability: Subpart OOO</p>

II.A.10	<p>Various Conveyors Capacity: 400 tph, each</p> <p>NSPS Applicability: Subpart OOO</p>
II.A.11	<p>One (1) Pugmill Capacity: 350 tph</p> <p>NSPS Applicability: Subpart OOO</p>
II.A.12	<p>Two (2) Bin Feeders Capacity: 400 tph, each</p> <p>NSPS Applicability: Subpart OOO</p>

SECTION II: SPECIAL PROVISIONS

II.B REQUIREMENTS AND LIMITATIONS

II.B.1	<p>Ogden Hot Mix Asphalt Plant (HMAP) and Associated Equipment Requirements:</p>
II.B.1.a	<p>Unless otherwise specified in this AO, the owner/operator shall not allow visible emissions from any source on site to exceed 20% opacity. [R307-301-3]</p>
II.B.1.a.1	<p>Unless otherwise specified in this AO, opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-201-3]</p>
II.B.1.b	<p>The owner/operator shall not produce more than 249,000 tons combined of warm mix asphalt and HMA per rolling 12-month period. Warm mix asphalt means asphalt produced at a temperature at or below 275°F. [R307-401-8]</p>
II.B.1.b.1	<p>The owner/operator shall:</p> <ul style="list-style-type: none"> A. Determine production by belt scale records or scale house records. B. Record production on a daily basis. C. Use the production data to calculate a new rolling 12-month total by the 20th day of each month using data from the previous 12 months. D. Keep the production records for all periods the plant is in operation. <p>[R307-401-8]</p>
II.B.1.c	<p>The owner/operator shall use natural gas and/or propane as fuel in the HMA drum burner. [R307-401-8]</p>
II.B.1.d	<p>The owner/operator shall install a fabric filter on each storage silo associated with the HMAP to control particulate emissions generated during the filling of the silos. Displaced air from each silo shall pass through a fabric filter before being vented to the atmosphere. [R307-401-8]</p>

II.B.1.e	The HMAP baghouse shall control process streams from the asphalt plant drum mixer. This baghouse shall be sized to handle at least 85,000 acfm for the existing conditions. All exhaust air from the HMAP drum mixer shall be routed through the baghouse before being vented to the atmosphere. [R307-401-8]																
II.B.1.f	The owner/operator shall not allow visible emissions from the HMAP baghouse or storage silo fabric filters on site to exceed 10% opacity. [R307-401-8]																
II.B.1.g	The owner/operator shall install a manometer or magnehelic pressure gauge to measure the static pressure drop across the HMAP baghouse. [R307-401-8]																
II.B.1.g.1	The pressure gauge shall be located such that an inspector/operator can safely read the indicator at any time. [R307-401-8]																
II.B.1.g.2	The pressure gauge shall measure the pressure drop in 1-inch water column increments or less. [R307-401-8]																
II.B.1.h	At least once every 12 months, the owner/operator shall calibrate the pressure gauges in accordance with the manufacturer's instructions or replace the gauges. [R307-401-8]																
II.B.1.h.1	The owner/operator shall maintain records of the pressure gauge calibrations and replacements. [R307-401-8]																
II.B.1.i	The owner/operator shall maintain the static pressure drop across the HMAP baghouse during operation between 3 and 7 inches of water column. [R307-401-8]																
II.B.1.i.1	The owner/operator shall record the pressure drop at least once per operating day while the baghouse is operating. [R307-401-8]																
II.B.1.i.2	The owner/operator shall maintain records of the pressure drop readings. [R307-401-8]																
II.B.1.j	<p>The owner/operator shall not emit more than the following rates and concentrations from the asphalt plant baghouse:</p> <table border="1" style="margin-left: 40px;"> <thead> <tr> <th>Pollutant</th> <th>lb/hr</th> <th>grains/dscf</th> <th>ppmdv</th> </tr> </thead> <tbody> <tr> <td>PM₁₀</td> <td>9.20</td> <td>0.015</td> <td></td> </tr> <tr> <td>PM_{2.5}</td> <td>9.20</td> <td>0.015</td> <td></td> </tr> <tr> <td>NO_x</td> <td>9.60</td> <td></td> <td>80</td> </tr> </tbody> </table> <p>Concentration (ppmdv) is corrected to 3.0% oxygen, dry basis. [40 CFR 60 Subpart I, R307-401-8]</p>	Pollutant	lb/hr	grains/dscf	ppmdv	PM ₁₀	9.20	0.015		PM _{2.5}	9.20	0.015		NO _x	9.60		80
Pollutant	lb/hr	grains/dscf	ppmdv														
PM ₁₀	9.20	0.015															
PM _{2.5}	9.20	0.015															
NO _x	9.60		80														
II.B.1.j.1	<p>Compliance Demonstration To demonstrate compliance with the emission limitations above, the owner/operator shall perform stack testing on the emissions unit according to the stack testing conditions contained in this AO. [R307-401-8]</p>																
II.B.1.j.2	<p>Initial Test The owner/operator shall conduct an initial stack test on the emission unit within 180 days after startup of the emission unit. [R307-165-2]</p>																
II.B.1.j.3	<p>Test Frequency The owner/operator shall conduct a stack test on the emission unit within five (5) years after the date of the most recent stack test of the emission unit. The Director may require the owner/operator to perform a stack test at any time. [R307-401-8]</p>																

II.B.2	Stack Testing Requirements
II.B.2.a	The owner/operator shall conduct any stack testing required by this AO according to the following conditions. [R307-401-8]
II.B.2.a.1	Notification At least 30 days prior to conducting a stack test, the owner/operator shall submit a source test protocol to the Director. The source test protocol shall include the items contained in R307-165-3. If directed by the Director, the owner/operator shall attend a pretest conference. [R307-401-8]
II.B.2.a.2	Testing and Test Conditions The owner/operator shall conduct testing according to the approved source test protocol and according to the test conditions contained in R307-165-4. [R307-401-8]
II.B.2.a.3	Access The owner/operator shall provide Occupational Safety and Health Administration (OSHA)- or Mine Safety and Health Administration (MSHA)-approved access to the test location. [R307-401-8]
II.B.2.a.4	Reporting No later than 60 days after completing a stack test, the owner/operator shall submit a written report of the results from the stack testing to the Director. The report shall include validated results and supporting information. [R307-401-8]
II.B.2.a.5	Possible Rejection of Test Results The Director may reject stack testing results if the test did not follow the approved source test protocol or for a reason specified in R307-165-6. [R307-401-8]
II.B.2.a.6	Standard Conditions A. Temperature - 68 degrees Fahrenheit (293 K) B. Pressure - 29.92 in Hg (101.3 kPa) C. Averaging Time - As specified in the applicable test method. [R307-401-8]
II.B.2.b	Test Methods When performing stack testing, the owner/operator shall use the appropriate EPA-approved test methods as acceptable to the Director. Acceptable test methods for pollutants are listed below. [R307-401-8]
II.B.2.b.1	PM₁₀ The following methods shall be used to measure filterable particulate emissions: 40 CFR 51, Appendix M, Method 201 or Method 201A, 40 CFR 60, Appendix A, Method 5, or other EPA-approved testing method, as acceptable to the Director. If other approved testing methods are used which cannot measure the PM ₁₀ fraction of the filterable particulate emissions, all of the filterable particulate emissions shall be considered PM ₁₀ . [R307-401-8]

<p>II.B.2.b.2</p>	<p>PM_{2.5} Filterable PM_{2.5} emissions shall be determined by 40 CFR 51, Appendix M, Method 201A, or other EPA-approved testing method, as acceptable to the Director.</p> <p>The following methods shall be used to measure condensable particulate emissions: 40 CFR 51, Appendix M, Method 202, 40 CFR 60, Appendix A, Method 5, or other EPA-approved testing method, as acceptable to the Director.</p> <p>The condensable particulate emissions shall not be used for compliance demonstration but shall be used for inventory purposes. [R307-401-8]</p>
<p>II.B.2.b.3</p>	<p>NO_x 40 CFR 60, Appendix A, Method 7; Method 7E; or other EPA-approved testing method as acceptable to the Director. [R307-401-8]</p>
<p>II.B.3</p>	<p>The Aggregate Processing Equipment Requirements:</p>
<p>II.B.3.a</p>	<p>The owner/operator shall not produce more than 323,750 tons of processed aggregate material per rolling 12-month period. [R307-401-8]</p>
<p>II.B.3.a.1</p>	<p>The owner/operator shall:</p> <ul style="list-style-type: none"> A. Determine production by scale house records or vendor receipts. B. Record production on a daily basis. C. Use the production data to calculate a new rolling 12-month total by the 20th day of each month using data from the previous 12 months. D. Keep the production records for all periods the plant is in operation. <p>[R307-401-8]</p>
<p>II.B.3.b</p>	<p>The owner/operator shall install water sprays on each crusher, screen, conveyor transfer point, and conveyor drop point on site to control emissions. Water sprays shall operate as necessary to prevent visible emissions from exceeding the opacity limits listed in this AO. [R307-401-8]</p>
<p>II.B.3.c</p>	<p>The owner/operator shall perform monthly periodic inspections to check that water is flowing to water sprays associated with each crusher, screen, and conveyor. If the owner/operator finds that water is not flowing properly during an inspection of the water sprays, the owner/operator shall initiate corrective action within 24 hours and complete corrective action as expeditiously as practical. [40 CFR 60 Subpart OOO, R307-401-8]</p>
<p>II.B.3.c.1</p>	<p>Records of the water spray inspections shall be maintained in a logbook for all periods when the plant is in operation. The records shall include the following items:</p> <ul style="list-style-type: none"> A. Date the inspections were made. B. Any corrective actions taken. C. Control mechanism used if sprays are not operating. <p>[40 CFR 60 Subpart OOO, R307-401-8]</p>

II.B.3.d	<p>The owner/operator shall not exceed the following opacity limits for indicated the emission units.</p> <ul style="list-style-type: none"> A. Crushers - 12% Opacity. B. Screens - 7% Opacity. C. Conveyor Transfer Points - 7% Opacity. D. Conveyor Drop Points - 20% Opacity. <p>[R307-312-4]</p>
II.B.4	<p>Crushers, Screens, and Conveyors Requirements</p>
II.B.4.a	<p>The owner/operator shall conduct an initial performance test for each crusher, screen, and conveyor transfer point on site. Performance tests shall demonstrate compliance with the limitations specified in Table 3 to Subpart 000. [40 CFR 60 Subpart 000, R307-401-8]</p>
II.B.4.a.1	<p>Initial performance tests for fugitive emissions limits shall be conducted according to 40 CFR 60.675(c). The owner or operator may use methods and procedures specified in 40 CFR 60.675(e) as alternatives to the reference methods and procedures specified in 40 CFR 60.675(c). [40 CFR 60 Subpart 000, R307-401-8]</p>
II.B.4.a.2	<p>The owner/operator shall keep and maintain records of the initial performance test for each crusher, screen, and conveyor for the life of the equipment. [40 CFR 60 Subpart 000, R307-401-8]</p>
II.B.5	<p>Emergency Engine Requirements</p>
II.B.5.a	<p>The owner/operator shall install a Tier 4, 1,378 kW (1,848 HP) emergency engine that is certified to meet a NO_x emission rate of 0.67 g/hp-hr or less and a CO emission rate of 3.50 g/hp-hr or less. The owner/operator shall install a Tier 3, 100 kW (134.1 HP) emergency engine that is certified to meet a NO_x emission rate of 1.94 g/hp-hr or less. [R307-401-8]</p>
II.B.5.a.1	<p>To demonstrate compliance with the above emission rates, the owner/operator shall either:</p> <ul style="list-style-type: none"> A. Own/operate the stationary internal combustion engine which has obtained certification as defined in 40 CFR 1039.801: <ul style="list-style-type: none"> i. 1,378 kW engine certified to Tier 4 standard. ii. 100 kW engine certified to Tier 3 standard. B. Conduct an initial performance test according to 40 CFR Part 1039; or C. Maintain the manufacturer's emissions guarantee for the installed engine model. <p>[R307-401-8]</p>
II.B.5.b	<p>For each of the 1,378 kW (1,848 HP) and 100 kW (134.1 HP) generator engines on site, the owner/operator shall maintain records of engine certification, the initial performance test, or the manufacturer's emissions guarantee. [R307-401-8]</p>
II.B.5.c	<p>The owner/operator shall not operate each emergency engine on site for more than 100 hours per rolling 12-month period during non-emergency situations. There is no time limit on the use of the engines during emergencies. [40 CFR 63 Subpart ZZZZ, R307-401-8]</p>

II.B.5.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 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>[40 CFR 63 Subpart ZZZZ, R307-401-8]</p>
II.B.5.c.2	<p>To determine the duration of operation, the owner/operator shall install a non-resettable hour meter for each emergency engine. [40 CFR 63 Subpart ZZZZ, R307-401-8]</p>
II.B.5.d	<p>The owner/operator shall not conduct engine readiness testing while the asphalt plant's hot oil heater and drum mix dryer are operating. [R307-401-8]</p>
II.B.5.d.1	<p>To demonstrate compliance with the above condition, records documenting the engine readiness testing 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 of the engine readiness testing. B. The duration the engine readiness testing in hours. <p>[R307-401-8]</p>
II.B.5.e	<p>The owner/operator shall only use diesel fuel (e.g., fuel oil #1, #2, or diesel fuel oil additives) as fuel in each emergency engine. [R307-401-8]</p>
II.B.5.e.1	<p>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]</p>
II.B.5.e.2	<p>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]</p>
II.B.6	<p>Hot Oil Heater Requirements</p>
II.B.6.a	<p>The owner/operator shall not operate the hot oil heater on site for more than 6,500 hours per rolling 12-month period. [R307-401-8]</p>
II.B.6.a.1	<p>The owner/operator shall:</p> <ul style="list-style-type: none"> A. Determine hours of operation by supervisor monitoring and maintaining an operations log. B. Record hours of operation each day. C. Use the hours of operation to calculate a new rolling 12-month total by the 20th day of each month using data from the previous 12 months. D. Keep hours of operation records for all periods the plant is in operation. <p>[R307-401-8]</p>

II.B.6.b	The owner/operator shall use natural gas, #1 or #2, or any combination of #1 or #2 fuel oil as fuel in the 2.0 MMBtu/hr hot oil heater on site. [R307-401-8]
II.B.6.c	The sulfur content of any fuel oil burned in the HMAP shall not exceed 15 ppm by weight. [R307-401-8]
II.B.6.c.1	The sulfur content shall be determined by ASTM Method D2880-71, D4294-89, 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. [R307-203-1, R307-401-8]
II.B.6.c.2	The owner/operator shall keep and maintain records of the test certification of sulfur content in fuel oil. Records of the test certifications shall be kept for all periods when the plant is in operation. [R307-203-1, R307-401-8]
II.B.6.d	The owner/operator shall comply with the limitations and compliance requirements under R307-312-5 for burning a fuel other than natural gas or liquefied petroleum gas (LPG). [R307-312]
II.B.7	Paved Haul Roads Requirements
II.B.7.a	The owner/operator shall pave the primary tractor trailer routes in and out of the site. The total length of all paved haul roads on site shall not be less than 0.3 miles combined. [R307-401-8]
II.B.7.a.1	The paved road length shall be determined through source records or GPS measurements. [R307-401-8]
II.B.7.b	An operational vacuum sweeper and water truck shall be made available during each operating day. The owner/operator shall vacuum sweep and flush with water all the paved haul roads on site to maintain opacity limits listed in this AO. If the temperature is below freezing, the owner/operator shall continue to vacuum sweep the road but may stop flushing the paved haul roads with water. Flushing the paved haul road with water shall resume when the temperature is above freezing. If the haul roads are covered with snow or ice, the owner/operator may stop vacuum sweeping the paved haul roads. Vacuum sweeping the paved haul roads shall resume when the haul roads are cleared from snow and ice. [R307-401-8]
II.B.7.b.1	Records of sweeping and water application shall be kept for all periods when the plant is in operation. The records shall include the following items: A. Date and time treatments were made. B. Number of treatments made and quantity of water applied. C. Rainfall amount received, if any. D. Records of temperature, if the temperature is below freezing. E. Records shall note if the paved haul roads are covered with snow or ice. [R307-401-8]
II.B.8	Unpaved Haul Roads Requirements
II.B.8.a	The owner/operator shall cover all unpaved haul roads and wheeled-vehicle operational areas with road base material, and an operational water truck shall be made available during each operating day. The owner/operator shall use water application to maintain opacity limits listed in this AO. If the temperature is below freezing, the owner/operator may stop applying water to the unpaved haul roads and wheeled-vehicle operational areas. The owner/operator shall resume applying water to the unpaved haul roads and wheeled-vehicle operational areas when the temperature is above freezing. [R307-401-8]

<p>II.B.8.a.1</p>	<p>Records of water application shall be kept for all periods when the plant is in operation. The records shall include the following items:</p> <ul style="list-style-type: none"> A. Date and time treatments were made. B. Number of treatments made and quantity of water applied. C. Rainfall amount received, if any. D. Records of temperature, if the temperature is below freezing. <p>[R307-401-8]</p>
<p>II.B.9</p>	<p>All Haul Roads and Fugitive Dust Sources Requirements</p>
<p>II.B.9.a</p>	<p>The owner/operator shall not allow visible emissions from haul roads and fugitive dust sources on site to exceed 20% opacity on site and 10% opacity at the property boundary. [R307-309, R307-401-8]</p>
<p>II.B.9.a.1</p>	<p>Opacity observations of fugitive dust from intermittent sources shall be conducted according to 40 CFR 60, Appendix A, Method 9; however, the requirement for observations to be made at 15-second intervals over a six-minute period shall not apply. The number of observations and the time period shall be determined by the length of the intermittent source. For fugitive dust generated by mobile sources, 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]</p>
<p>II.B.9.b</p>	<p>The combined area occupied by all storage piles on site shall not exceed 5.0 acres. [R307-401-8]</p>
<p>II.B.9.b.1</p>	<p>To determine compliance with the total acres of the storage piles, the owner/operator shall measure the total area of the storage piles at least once every six (6) months and shall maintain a record of the total acres of the storage piles. Compliance shall be determined through GPS measurements or aerial photographs. The area of each storage pile shall be added together to obtain the total area of all the storage piles on site. Records of the total acres of the storage piles shall contain the following:</p> <ul style="list-style-type: none"> A. Date of measurements. B. Size of each storage pile on site. C. Total acres of all storage piles combined. <p>[R307-401-8]</p>
<p>II.B.9.c</p>	<p>The owner/operator shall control particulate emissions from storage piles, exposed areas, and other fugitive dust sources using either water sprays, water trucks, and/or water cannons. The water sprays, water trucks, and/or water cannons shall operate as required to ensure the opacity limits in this AO are not exceeded. [R307-401-8]</p>

<p>II.B.9.c.1</p>	<p>Records of treatments to the storage piles, exposed areas, and other fugitive dust sources shall include:</p> <p>A. The date, time, and location of applications.</p> <p>B. The volume of water applied.</p> <p>Records of water application shall be kept for all periods when the plant is in operation.</p> <p>[R307-401-8]</p>
<p>II.B.9.d</p>	<p>The owner/operator shall comply with all applicable requirements of R307-309 for Fugitive Emission and Fugitive Dust sources on site. [R307-309]</p>

PERMIT HISTORY

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

Supersedes
Is Derived From

AO DAQE-AN161190001-23 dated July 31, 2023
NOI dated May 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 _{2e}	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