

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-IN144290009-24

April 4, 2024

Michael LeBaron Peak Minerals Incorporated 10808 South River Front Parkway, Suite 343 South Jordan, UT 84095 mike@peakminerals.com

Dear Mr. LeBaron:

Re: Intent to Approve: Minor Modification to Approval Order DAQE-AN144290005A-19 for the Sevier Playa Potash Project Project Number: N144290009

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, **John Jenks**, as well as the DAQE number as shown on the upper right-hand corner of this letter. John Jenks, can be reached at (385) 306-6510 or jjenks@utah.gov, if you have any questions.

Sincerely,

Jon L. Black, Manager New Source Review Section

JLB:JJ:jg

cc: Central Utah Health Department

# STATE OF UTAH Department of Environmental Quality Division of Air Quality

# INTENT TO APPROVE DAQE-IN144290009-24 Minor Modification to Approval Order DAQE-AN144290005A-19 for the Sevier Playa Potash Project

Prepared By John Jenks, Engineer (385) 306-6510 jjenks@utah.gov

Issued to Peak Minerals Incorporated - Sevier Playa Potash Project

> Issued On April 4, 2024

Jon Bhile n Black (Apr 2, 2024 14:04 MDT)

New Source Review Section Manager Jon L. Black

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### **GENERAL INFORMATION**

#### **CONTACT/LOCATION INFORMATION**

**Owner Name** Peak Minerals Incorporated

Mailing Address 10808 South River Front Parkway, Suite 343 South Jordan, UT 84095

Source Contact Name: Michael LeBaron Phone: (801) 920-4421 Email: mike@peakminerals.com Source Name Peak Minerals Incorporated - Sevier Playa Potash Project

**Physical Address** Sevier Playa Lakeview Yard 36200 West Crystal Peak Spur Road Delta, UT 84624

#### **UTM Coordinates**

314,505 m Easting 4,313,105 m Northing Datum NAD83 UTM Zone 12

SIC code 1474 (Potash, Soda, & Borate Minerals)

#### SOURCE INFORMATION

General Description

Peak Minerals Incorporated (Peak Minerals) will operate a potash mining project, the Sevier Playa Potash Project, in Millard County. Peak Minerals will produce potash in the form of potassium sulfate (K2SO<sub>4</sub>), also known as sulfate of potash (SOP), and magnesium chloride from salts present in the brines of the playa.

The site will consist of the following major features:

1) a brine extraction system consisting of canals, trenches, and wells;

2) a recharge system consisting of canals and trenches. Fresh water is introduced to the extraction system to maintain the hydraulic head.

3) evaporation ponds consisting of preconcentration and production ponds. This will concentrate the brine to the saturation point. Salts will precipitate within each of the ponds. At the pre-concentration ponds, sodium chloride (NaCl) wet harvesting will occur via a dredge, and solid NaCl storage areas (salt pads) allow for additional potassium recovery.

4) Waste Product Storage Area; and

5) Processing Facility. Brines will be extracted from below the surface of the Sevier Playa and concentrated by solar evaporation in a series of preconcentration ponds. The potassium-rich salts harvested from the production ponds will be windrowed and then hauled to the processing facility for final treatment. Process tailings will be loaded and hauled to the tailing's management area. MOP will be imported to the processing facility, where it will be reacted with the residual brine containing magnesium sulfate to increase SOP production.

In the processing facility, muriate of potash (MOP) reacts with the residual brine containing magnesium sulfate to increase SOP production. Raw potash salts in the processing facility will go through the process feed. This step will convey salts from a hopper into a crusher to be sized. A crushed salt slurry

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will then enter the conversion circuit. In this step, high-sulfate brine from the halite leach step will cause the mixed potassium pond salts to form schoenite. Along with schoenite, halite and magnesium sulfate are also expected to be present. Then the slurry will enter conditioning and flotation to remove insolubles. Insolubles are then conveyed to the tailing management area. Schoenite will be separated from other salts and slimes by adding flotation reagents and oils to the potash salt slurry. The flotation concentrate will be centrifuged, and the solids will be washed to remove brine and then sent to the leach reactor. The next step is SOP leach and crystallization, where the SOP crystals will be recovered from the brine by a combination of cyclones and centrifuges. Potassium chloride will react with the magnesium sulfate in solution to form additional SOP and magnesium chloride. The last steps are drying, handling, and shipping.

The processing facility is also exploring the opportunity to produce de-sulfated magnesium chloride (MgCl<sub>2</sub>) brine and bischofite flakes after SOP production is established and running.

<u>NSR Classification</u> Minor Modification at Minor Source

Source Classification Located in Attainment Area Millard County Airs Source Size: SM

Applicable Federal Standards

NSPS (Part 60), A: General Provisions NSPS (Part 60), Dc: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units 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** 

Peak Minerals is requesting approval to construct and operate the previously permitted potash mining project. This modification is a review and revision of the previously proposed operations. Since the previous NOI, process changes, include the addition of magnesium chloride processing and shipping over rail transport, have been included. Emissions from this operation are generated from material handling and heating. The majority of pre-process operations are done under wet conditions.

#### 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 <sub>2</sub> Equivalent	-15192	10689.00
Carbon Monoxide	-82.35	15.00

Nitrogen Oxides	-13.72	12.00
Particulate Matter - PM <sub>10</sub>	-153.74	17.00
Particulate Matter - PM <sub>10</sub> (Fugitives)	-20.56	95.00
Particulate Matter - PM <sub>2.5</sub>	-36.03	16.00
Particulate Matter - PM <sub>2.5</sub> (Fugitives)	1.33	17.00
Sulfur Dioxide	-0.11	0.05
Volatile Organic Compounds	-5.12	1.10

Hazardous Air Pollutant	Change (lbs/yr)	Total (lbs/yr)
Generic HAPs (CAS #GHAPS)	42	110
	Change (TPY)	Total (TPY)
Total HAPs	-0.28	0.06

### 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 Millard County Chronicle Progress on April 10, 2024. 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	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]

1.5	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]
1.8	The owner/operator shall submit documentation of the status of construction or modification to the Director every 18 months from the date of this AO until construction is completed to demonstrate reasonable construction progress. 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]

# 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 <u>THE APPROVED EQUIPMENT</u>

II.A.1	Sevier Playa Potash Project
II.A.2	MgCl <sub>2</sub> Steam Boiler Rating: 15 MMBtu/hr Fuel: Propane NSPS Applicability: Subpart Dc
II.A.3	Drying and sizing fluid bed dryer Heat Input Rating: 4.4 MMBtu/hr Fuel: Propane Control: Main Dryer Baghouse
II.A.4	Glazing Fluid Bed Dryer Heat Input Rating: 2 MMBtu/hr Fuel: Propane Control: Glazing Dryer Baghouse
II.A.5	<b>Compaction Baghouse</b> Flow Rate: 35,000 acfm Description: Controls emissions from all compaction operations including crushers, screens, and material handling (conveyors, bucket elevators, magnetic chutes, diverters, compactor, flake breaker, and bin)

II.A.6	Main Dryer Baghouse   Flow Rate: 14,125 acfm   Description: Controls emissions from the Fluid Bed Dryer
II.A.7	Glazing Dryer Baghouse Flow Rate: 6,769 acfm Description: Controls emissions from drop points, conveyors, chute, bucket elevator, and the Glazing Fluid Bed Dryer
II.A.8	Loadout Silo #1 Baghouse   Flow Rate: 1,500 acfm   Description: Controls emissions from loadout silo
II.A.9	MOP Silo Dust Collector Flow Rate: 1,900 acfm Description: Controls MOP silo
II.A.10	Bagging Plant Buffer Silo Baghouse Flow Rate: 1,500 acfm Description: Controls bagging operations, such as conveyors, silo, bucket elevator, and bagging filling station
II.A.11	Quick Lime Silo Bin Vent Flow Rate: 1,900 acfm
II.A.12	50 Lb Bischofite Silo Bin Vent 1,900 acfm
II.A.13	1 Ton Bischofite Silo Vent 1,900 acfm
II.A.14	Material Handling Equipment Various material handling equipment, including conveyors, bucket elevators, chutes, six (6) silos, feeder hoppers, diverter, flake breaker, bin, compactor, drum, drier/cooler, filling station, and apron feeder.

TI A 15	Savaana and Chuichana
II.A.15	Screens and Crushers Controlled by Wet Process
	Screens:
	Mixed Salts Screen
	Capacity 307 TPH
	Controlled by Compaction Baghouse and Glazing Dryer Baghouse
	Crushers Dryer Oversize Roll Crusher
	Capacity: 20.4 TPH
	Capacity. 20.4 1111
	Compaction Flake Breaker
	Capacity: 95 TPH
	Compaction Double Roll Crusher
	Capacity: 25 TPH
	Screens
	Product Screen
	Capacity: 107 TPH
	Compaction Screen
	Capacity:118 TPH
	Granular Product Glazing Screen
	Capacity: 39 TPH
II.A.16	Eight (8) Generator Sets
	Fuel: Diesel
	Certified Tier 4
	NSPS Applicability: Subpart IIII
	MACT Applicability: Subpart ZZZZ
	Concreter Set 1, 2, and 3
	Generator Set 1, 2, and 3 Rating: 53 hp Each
	Rating. 55 np Lach
	Generator Set 4
	Rating:139 hp
	Generator Set 5 and 6
	Rating: 59 hp Each
	Generator Set 7
	Rating: 111 hp
	Generator Set 8
	Rating: 78 hp
II.A.17	One (1) Fire Pump Engine
11.A.17	Rating: 100 hp
	Fuel: Diesel
	MACT Applicability: Subpart ZZZZ

II.A.18	<b>Two (2) Emergency Generator Engines</b> Fuel: Diesel Certified Tier 4 Rating: 1,342 hp NSPS Applicability: Subpart IIII MACT Applicability: Subpart ZZZZ
II.A.19	<b>Three (3) Mobile Pumps</b> Fuel: Diesel Rating: 20 hp
II.A.20	Supporting Equipment Supporting equipment including diesel dispensing facility, diesel storage tanks

## 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 <u>REQUIREMENTS AND LIMITATIONS</u>

II.B.1	Site-Wide Requirements
II.B.1.a	The owner/operator shall not produce more than 215,000 tons per year of sulfates of potash and 300,000 tpy of magnesium chloride and other associated minerals per rolling 12-month period. [R307-401-8]
II.B.1.a.1	Compliance with the production limitation shall be determined on a rolling 12-month total. A new 12-month total shall be calculated using data from the previous 12 months. Monthly calculations shall be made no later than 20 days after the end of each calendar month. Records of production shall be kept for all periods when the plant is in operation. Production shall be determined by examination of production records, which will be maintained by Peak Minerals and housed in the administrative offices onsite. The records of production shall be kept on a daily basis. [R307-401-8]
II.B.1.b	Unless otherwise specified in this AO, visible emissions from any stationary and fugitive dust source shall not exceed 20% opacity. [R307-401-8]
II.B.1.b.1	Opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9. [R307-205]
II.B.1.c	The owner/operator shall comply with the latest version of the FDCP approved by the Director. The FDCP shall address the control of all fugitive dust sources at this source. [R307-401-8]
II.B.2	Haul Road and Disturbed Areas Requirements
II.B.2.a	Visible emissions in disturbed areas and unpaved haul roads from haul trucks and mobile equipment and windblown dust in operational areas shall not exceed 20% opacity at any point. [R307-205-4, R307-401-8]

II.B.2.a.1	Visible emission determinations for fugitive dust from operational disturbed areas shall use Method 9. However, with respect to emissions from mobile or intermittent sources, the normal requirement for observations to be made at 15-second intervals over a six-minute period shall not apply. Visible emissions shall be observed 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. [R307-201-3, R307-205-4]
II.B.2.b	The owner/operator shall limit disturbed areas to the following:
	A. On-Playa Disturbed Areas - 4.6 acres per day
	B. Production Ponds Disturbed Areas - 1.8 acres per day
	Disturbed areas include berms, playa surfaces, and all areas disturbed by operational activities, such as bulldozing, scraping, grading, etc.
	[R307-401-8]
II.B.2.b.1	To determine compliance with the maximum daily limits for disturbed areas, the owner/operator shall perform daily visual inspections. Records of daily visual inspections shall be maintained for all periods when the plant is in operation. The Director may require a survey of disturbed areas at any time. [R307-401-8]
II.B.2.c	All operational disturbed areas and haul roads shall be sprayed with water, brine, or a chemical suppressant to control fugitive dust and maintain the opacity limit listed in this AO. The owner/operator may stop applying water when the temperature is below freezing or when the area is wet from precipitation. Records of water and/or chemical treatment shall be kept for all periods when the plant is in operation. The records shall include the following items:
	A. Date.
	B. Location of treatment.
	C. Rainfall received, if any, and approximate amount.
	D. Records of temperature if the temperature is below freezing.
	[R307-401-8]
II.B.3	Material Handling and Processing Equipment Requirements
II.B.3.a	All material handling and processing equipment used for non-slurried material shall be controlled by baghouses, full enclosures, or partial enclosures. All material handling and processing equipment not controlled by baghouses shall be controlled by enclosed or partially enclosed structures or located within buildings. Partial enclosures include conveyor covers for conveyors and socks/retractable chutes for transfer points. [R307-401-8]
II.B.3.b	Visible emissions from material handling and processing equipment located outdoors shall not exceed 20% opacity. [R307-401-8]
II.B.3.b.1	Opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9. [R307-205-4, R307-401-8]
II.B.3.c	The owner/operator shall allow no visible emissions from tailings material stored at the Waste Product Storage Area. [R307-401-8]

II.B.4	Emergency and Non-Emergency Engine Requirements		
II.B.4.a	Visible emissions from diesel-fired emergency and non-emergency generator engines shall not exceed 20% opacity. [R307-401-8]		
II.B.4.a.1	Opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9. [R307-205, R307-401-8]		
II.B.4.b	maintenance per rolling 12-month period. The 100 hours of operation for testing and maintenance purposes may include up to 50 hours per calendar year for operation in nonemergency situations as provided in 40 CFR 60.4211(f).		
	To determine the duration of operation, the owner/operator shall install a non-resettable hour meter for each emergency engine. [40 CFR 60 Subpart IIII, 40 CFR 60 Subpart ZZZZ, R307-401-8]		
II.B.4.b.1	Compliance with the limit of the hours of operation shall be determined by installation of an hour meter on the emergency generator engine or by recording hours of operation in an operations log. Records documenting the operation of the emergency generator engine shall be kept in a log and shall include the following:		
	A. The date the emergency generator engine was used;		
	B. The duration of operation each day in hours; and		
	C. The reason for the emergency generator engine usage.		
	[R307-401-8]		
II.B.4.b.2	To determine compliance with the rolling 12-month total, the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. [R307-401-8]		
II.B.4.c	The owner/operator shall install emergency and non-emergency generator engines certified to meet Tier 4 emission standards. [R307-401-8]		
II.B.4.c.1	The owner/operator shall keep a record of the manufacturer's emission rate certification for the life of the equipment. [R307-401-8]		
II.B.5	Baghouse Requirements		
II.B.5.a	Visible emissions from baghouses shall not exceed the following opacity limits:		
	A. Main Dryer Baghouse - 10%.		
	B. Glazing Dryer Baghouse - 10%.		
	C. All Other Baghouses - 7%.		
	[R307-401-8]		
II.B.5.a.1	Opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9. [R307-205, R307-401-8]		

II.B.5.b	Each baghouse shall operate within t for normal operations. Manometer o the differential pressure across each o within plus or minus one (1) inch of that an inspector/operator can safely	or magnehelic pressure gauges shal of the baghouses. The monitoring water column. The pressure gauge	l be installed to measure device shall be accurate es shall be located such
II.B.5.b.1	Pressure drop readings shall be recorded at least once during each week of operation. Records documenting these inspections shall be kept in a log and shall include the following:		
	A. Unit identification;		
	B. Manufacturer recomm	ended pressure drop for the unit;	
	C. Weekly pressure drop	readings; and	
	D. Date of bag replaceme	nt, if applicable.	
	[R307-401-8]		
II.B.5.b.2	The instrument shall be calibrated in accordance with the manufacturer's instructions or recommendations. Documentation of calibrations shall be maintained. [R307-401-8]		
II.B.5.c	Emissions of $PM_{10}$ and $PM_{2.5}$ from the baghouses to the atmosphere shall not exceed the following rates and concentrations, based on an average of three (3) test runs:		
	Processing Facility Baghouses PM <sub>10</sub> Emission Point	and PM <sub>2.5</sub> Emission Rate (lb/hr) 68 degrees F, 29.92 in Hg	Concentration (grains/dscf)
	Compaction Baghouse Main Dryer Baghouse Glazing Dryer Baghouse	1.5** 1.2* 0.6*	0.005** 0.010* 0.010*
	*Includes both filterable and condent **Includes filterable particulates on		
	[R307-401-8]		
II.B.5.c.1	Testing Frequency		
		esting is required on all above listed erformed as soon as possible and is o of each unit.	
	every five (5) years a require testing at any	nce tests shall be done on each em subsequent to the initial compliance y time. If an existing source is mo- ified emission point that has an em-	te test. The Director may dified, a compliance test is
	[R307-401-8]		
II.B.5.c.2	Notification The Director shall be notified at least 30 days prior to conducting any required emission testing. A source test protocol shall be submitted to DAQ. The source test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. A pretest conference shall be held, if directed by the Director. [R307-165]		

II.B.5.c.3	Sample Location The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA-approved methods acceptable to the Director. An Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location. [R307-165]
II.B.5.c.4	Calculations To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods herein shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Director, to give the results in the specified units of the emission limitation. [R307-165]
II.B.5.c.5	New Source Operation For a new source/emission point, the production rate during all compliance testing shall be no less than 90% of the production rate listed in this AO. If the maximum AO allowable production rate has not been achieved at the time of the test, the following procedure shall be followed:
	1) Testing shall be at no less than 90% of the production rate achieved to date.
	2) If the test is passed, the new maximum allowable production rate shall be 110% of the tested achieved rate, but not more than the maximum allowable production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate.
	3) The owner/operator shall request a higher production rate when necessary. Testing at no less than 90% of the higher rate shall be conducted. A new maximum production rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum AO production rate is achieved.
	[R307-165]
II.B.5.c.6	Existing Source Operation For an existing source/emission point, the production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years. [R307-165]
II.B.5.c.7	Volumetric Flow Rate 40 CFR 60, Appendix A, Method 2 or other EPA-approved testing methods acceptable to the Director. [R307-165]

II.B.5.c.8		
п.в.э.с.8	PM <sub>10</sub> /PM <sub>2.5</sub> For baghouse stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a, or other EPA-approved testing method, as acceptable by the Director. The back half condensable particulate emissions shall also be tested (where applicable) using 40 CFR 51, Appendix M Method 202, or other EPA-approved testing method, acceptable to the Director. All particulate captured using Method 202 shall be considered PM <sub>2.5</sub> . The only baghouse sources that will emit condensables are the Main Dryer Baghouse and the Glazing Dryer Baghouse.	
	For baghouse stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, 5i, or other as appropriate. Using Method 5, all filterable particulate emissions shall be considered PM <sub>10</sub> , unless otherwise approved by the Director. The portion of the filterable particulate emissions considered PM <sub>2.5</sub> shall be based on information in Appendix B of the fifth addition of the EPA document, AP-42, or other data acceptable to the Director. The back half condensable particulate emissions shall also be tested using 40 CFR 51, Appendix M Method 202, or other EPA-approved testing method, acceptable to the Director. All particulate captured using Method 202 shall be considered PM <sub>2.5</sub> . [R307-165]	
II.B.5.c.9	Reporting The results of stack testing shall be submitted to the Director within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. [R307-165]	
II.B.6	Dryer and steam Boiler Requirements	
II.B.6.a	The owner/operator shall use only propane and natural gas as a fuel in the dryers. [R307-401-8]	
II.B.6.b	The owner/operator shall install:	
	A. Dryers that are certified to meet a $NO_x$ emission rate of 25 ppmvd or less, and;	
	B. The steam boiler is certified to meet a $NO_x$ emission rate of 13 ppmvd or less.	
	[R307-401-8]	
II.B.6.b.1	The owner/operator shall keep a record of the manufacturer's certification of the emission rate for each unit. The record shall be kept for the life of the equipment. [R307-401-8]	
II.B.6.c	The owner/operator shall route emissions from each Dryer through a baghouse prior to venting to the atmosphere. [R307-401-8]	
	Engine Fuel Requirements	
II.B.7	Engine Fuel Requirements	
II.B.7 II.B.7.a	Engine Fuel RequirementsThe owner/operator shall only use diesel fuel (e.g. fuel oil #1, #2, or diesel fuel oil additives) as fuel in the emergency engines, fire pumps, pond pumps, and Generator Sets. [R307-401-8]	
	The owner/operator shall only use diesel fuel (e.g. fuel oil #1, #2, or diesel fuel oil additives) as	
II.B.7.a	The owner/operator shall only use diesel fuel (e.g. fuel oil #1, #2, or diesel fuel oil additives) as fuel in the emergency engines, fire pumps, pond pumps, and Generator Sets. [R307-401-8] The owner/operator shall only combust diesel fuel that meets the definition of ultra-low sulfur	

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## **PERMIT HISTORY**

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

Supersedes Is Derived From Incorporates Incorporates Incorporates AO DAQE-AN144290005A-19 dated August 13, 2019 NOI dated October 31, 2023 Additional Information dated December 1, 2023 Additional Information dated December 11, 2023 Additional Information dated February 29, 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,
COM	Subpart A, Table A-1
COM	Continuous opacity monitor
DAQ/UDAQ	Division of Air Quality This is a decument tracking code for internal Division of Air Quality use
DAQE EPA	This is a document tracking code for internal Division of Air Quality use
FDCP	Environmental Protection Agency 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 92.21 (0)(49)(1)
UWI	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 <sub>x</sub>	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
	Particulate matter less than 10 microns in size
$PM_{10}$	
PM <sub>2.5</sub>	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