State of Utah

SPENCER J. COX
Governor

DEIDRE HENDERSON
Lieutenant Governor

Department of
Environmental Quality

Tim Davis
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQE-AN124390012-25

July 30, 2025

Ian Wright
Compass Minerals Inc.
9900 West 109th Street
Overland Park, KS 66210
wrighti@compassminerals.com

Dear Mr. Wright:

Re: Approval Order: Modification to Approval Order DAQE-AN124390010-23 to Remove OGN 003 Equipment (145 HP Natural Gas Generator)
Project Number: N124390012

The attached Approval Order (AO) is issued pursuant to the Notice of Intent (NOI) received on October 3, 2024. Compass Minerals Inc. must comply with the requirements of this AO, all applicable state requirements (R307), and Federal Standards.

The project engineer for this action is **Stockton Antczak**, who can be contacted at (385) 306-6724 or santczak@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. No public comments were received on this action.

Sincerely,

Bryce C. Bird
Director

BCB:SA:jg

cc: Bear River Health Department
EPA Region 8

STATE OF UTAH
Department of Environmental Quality
Division of Air Quality

APPROVAL ORDER
DAQE-AN124390012-25
Modification to Approval Order DAQE-AN124390010-23 to Remove OGN 003 Equipment (145 HP Natural Gas Generator)

Prepared By
Stockton Antczak, Engineer
(385) 306-6724
santczak@utah.gov

Issued to
Compass Minerals Inc. - West Desert Operations

Issued On
July 30, 2025

Issued By

Bryce C. Bird
Director
Division of Air Quality

TABLE OF CONTENTS

GENERAL INFORMATION

CONTACT/LOCATION INFORMATION

Owner Name
Compass Minerals Inc.

Mailing Address
9900 West 109th Street
Overland Park, KS 66210

Source Contact
Name: Ian Wright
Phone: (801) 732-3011
Email: wrighti@compassminerals.com

Source Name
Compass Minerals Inc. - West Desert Operations

Physical Address
West side of Great Salt Lake (Remote Location)
Box Elder County, UT 84402

UTM Coordinates
332,885 m Easting
4,578,003 m Northing
Datum NAD83
UTM Zone 12

SIC code 2819 (Industrial Inorganic Chemicals, NEC)

SOURCE INFORMATION

General Description
Compass Minerals Inc. (Compass) owns and operates a pumping operation, West Desert Operations (West Desert), located in Box Elder County. Brine is pumped from the North Arm of the Great Salt Lake into a series of initial evaporation ponds at two pump stations. The brine is then concentrated in the solar evaporation pond complex for approximately one year before being pumped to Behren's Trench at a pump station. The facility operates twelve diesel engines each to pump water from the Great Salt Lake into the West Desert evaporative pond complex.

NSR Classification
Administrative Amendment

Source Classification
Located in Attainment Area
Box Elder County
Airs Source Size: B

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

Project Description
Compass has requested for OGN 003 equipment (145 HP Natural Gas Generator) to be removed from AO DAQE-AN124390010-23. This equipment will be incorporated into another approval order.

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	30656.00
Carbon Monoxide	-1.60	93.40
Nitrogen Oxides	-0.80	94.20
Particulate Matter - PM_{10}	-0.05	11.85
Particulate Matter - $PM_{2.5}$	-0.05	11.85
Sulfur Dioxide	0	35.90
Volatile Organic Compounds	-0.56	14.84

Hazardous Air Pollutant	Change (lbs/yr)	Total (lbs/yr)
Formaldehyde (CAS #50000)	0	10000
Generic HAPs (CAS #GHAPS)	-180	3420
	Change (TPY)	**Total (TPY)**
Total HAPs	-0.09	6.71

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 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	**West Desert Operations** West desert pumping stations and associated equipment & activities
II.A.2	**Pumping Stations 112, 113 and 114** Primary brine pumping stations
II.A.3	**Lakeside Flush Water Station** Flush water station
II.A.4	**Living Quarters** Crew living quarters and associated equipment/storage
II.A.5	**Two Natural Gas-fired Engines** OGN-001 (Built 3/24/1992) and OGN-002 (Built 2/20/1992) Capacity: 602 HP (each)
II.A.6	**Natural Gas-fired Engine** OGN-004 Capacity: 36 HP
II.A.7	**Two Diesel-fired Engines** OGN-006 (Built 2022) and OGN-008 (Built 5/29/2017) Capacity: 95.2 HP (each)
II.A.8	**Diesel-fired Engine** OGN-005 (Built 2022) Capacity: 30.6 HP

II.A.9	**Twelve Diesel-fired Engines** V13-705 (5/1/2023), V13-706 (5/1/2023), V13-707 (6/1/2020), V13-708 (4/1/2014), V13-709 (5/1/2023), V13-710 (3/1/2016), V13-711 (2/1/2014), V13-712 (5/1/2022), V13-713 (5/1/2023), V13-714 (5/1/2022), V13-715* (4/1/2014), and V13-791 (5/1/2022). Capacity: 300 HP (each) NESHAP Applicability: Subpart ZZZZ *NSPS Applicability: Subpart IIII All dates listed are rebuild dates.

SECTION II: SPECIAL PROVISIONS

II.B REQUIREMENTS AND LIMITATIONS

II.B.1	**Site-Wide Requirements**
II.B.1.a	Visible emissions from the following emission points shall not exceed the following values: A. All diesel-fired engines - 20% opacity B. All natural gas-fired engines - 10% opacity C. All other points - 20% opacity. [R307-401-8]
II.B.1.a.1	Opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9, or as approved by the Director. [R307-401-8]
II.B.1.b	The following emission limits shall not be exceeded: A. 94.20 tons of NO_x per rolling 12-month period for all engines combined B. 93.40 tons of CO per rolling 12-month period for all engines combined. [R307-401-8]
II.B.1.c	Emissions shall be determined monthly for each engine and then summed to arrive at a monthly total for the previous month by no later than the 20th day of each month. To determine compliance with a rolling 12-month total, each month a new 12-month total shall be calculated by summing the monthly totals from the previous 12 months. Hours of operation shall be determined by use of an hour meter and by maintaining an operations logbook. Emission factors for each engine shall be as provided by stack testing or federal NSPS/NESHAP subpart. If tested emission factors are to be used in rolling 12-month totals, the most recent stack test shall be used. [R307-401-8]

II.B.2	**Engine Testing Requirements**
II.B.2.a	The owner/operator shall not emit more than the following rates and concentrations from the indicated emissions unit(s): Natural Gas-fired Engines OGN-001 and OGN-002 **Pollutant** **lb/hr** NO_x 5.0 Diesel-fired Engines V13-705, V13-706, V13-707, V13-708, V13-709, V13-710, V13-711, V13-712, V13-713, V13-714, and V13-791 **Pollutant** **lb/hr** NO_x 3.2 Diesel-fired Engines V13-715 **Pollutant** **lb/hr** NO_x 2.3 [R307-401-8]

II.B.2.a.1	Test Frequency The owner/operator shall conduct emission tests on all engines within five years after the date of the most recent emission test. The Director may require the owner/operator to perform an emission test at any time. Notification At least 30 days prior to conducting an emission test, the owner/operator shall submit a source test protocol to the Director. The source test protocol shall include: A. The date, time, and place of the proposed test B. The proposed test methodologies C. The stack(s) to be tested D. The procedures to be used E. Any deviation from an EPA-approved test method F. Explanation of any deviation from an EPA-approved test method. If directed by the Director, the owner/operator shall attend a pretest conference. Testing The owner/operator shall conduct testing according to the approved source test protocol. The Director may reject emission test data if the test did not follow the approved source test protocol or if the Director was not provided an opportunity to have an observer present at the test. Test Conditions The owner/operator shall conduct all tests at no less than 90% of the maximum combustion rate achieved in the previous three years unless otherwise specified in the approved source test protocol. During the tests, the owner/operator shall burn fuels or combinations of fuels, use raw materials, and maintain process conditions representative of normal operations. In addition, the owner/operator shall operate under any other relevant conditions that the Director specifies. [R307-401-8]

II.B.2.a.2	Test Methods When performing emission 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. Sample Location The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by 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. Volumetric Flow Rate 40 CFR 60, Appendix A, Method 2, or other testing methods approved by the Director. Calculations To determine mass emission rates (lb/hr, etc.), the pollutant concentration as determined by the appropriate methods above 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. 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]
II.B.3	**Fuel Requirements**
II.B.3.a	The owner/operator shall only use diesel fuel (fuel oil #1, #2, or diesel fuel oil additives) in V13-705, V13-706, V13-707, V13-708, V13-709, V13-710, V13-711, V13-712, V13-713, V13-714, V13-715, V13-791, OGN-005, OGN-006, and OGN-008. All diesel burned shall meet the requirements of 40 CFR 80.510(c). [40 CFR 60 Subpart IIII, 40 CFR 63 Subpart ZZZZ]
II.B.3.a.1	To demonstrate compliance with the fuel oil requirements, the owner/operator shall keep and maintain fuel purchase invoices. The fuel purchase invoices shall indicate that the diesel fuel meets the ultra-low sulfur diesel requirements, or the owner/operator shall obtain certification of sulfur content from the fuel supplier. [R307-401-8]
II.B.3.b	The owner/operator shall only use natural gas as fuel in the natural gas-fired engines OGN-001, OGN-002, and OGN-004. [R307-401-8]

PERMIT HISTORY

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

Supersedes	AO DAQE-AN124390010-23 dated April 17, 2023
Is Derived From	NOI dated October 3, 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