

State of Utah

SPENCER J. COX Governor

DEIDRE HENDERSON Lieutenant Governor Department of Environmental Quality

> Tim Davis Interim Executive Director

DIVISION OF AIR QUALITY Bryce C. Bird Director

DAQE-AN106270013-25

March 17, 2025

Cecilia Diaz Northwest Pipeline LLC PO Box 58900 Salt Lake City, UT 84158-0900 Cecilia.Diaz@williams.com

Dear Ms. Diaz:

Re: Approval Order: Administrative Amendment to Approval Order DAQE-AN0106270010-10 to Update Equipment Designation, Classification, and Conditions Project Number: N106270013

The attached Approval Order (AO) is issued pursuant to the Notice of Intent (NOI) received on November 18, 2024. Northwest Pipeline LLC must comply with the requirements of this AO, all applicable state requirements (R307), and Federal Standards.

The project engineer for this action is **Tad Anderson**, who can be contacted at (385) 306-6515 or tdanderson@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,

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Bryce C. Bird Director

BCB:TA:jg

cc: Southeastern Utah District Health Department

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

# APPROVAL ORDER DAQE-AN106270013-25 Administrative Amendment to Approval Order DAQE-AN0106270010-10 to Update Equipment Designation, Classification, and Conditions

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

Issued to Northwest Pipeline LLC - Moab Compressor Station

> Issued On March 17, 2025

> > **Issued By**

Sach

Bryce C. Bird Director Division of Air Quality

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### **GENERAL INFORMATION**

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

**Owner Name** Northwest Pipeline LLC

**Mailing Address** 

PO Box 58900

**Source Name** Northwest Pipeline LLC - Moab Compressor Station

Physical Address 23 Miles south of Moab on Highway 191 La Sal Route Moab, UT 84532

Source Contact Name: Cecilia Diaz Phone: (281) 467-1608 Email: Cecilia.Diaz@williams.com

Salt Lake City, UT 84158-0900

**UTM Coordinates** 

637,500 m Easting 4,243,000 m Northing Datum NAD27 UTM Zone 12

SIC code 4922 (Natural Gas Transmission)

#### **SOURCE INFORMATION**

General Description

Northwest Pipeline LLC (Northwest Pipeline), Moab Compressor Station, is a natural gas pipeline compression facility in east-central Utah. The Moab Compressor Station consists of four (4) reciprocating engines, one (1) natural gas-fired turbine, and associated equipment that are operated to meet the demand of the natural gas pipeline system.

<u>NSR Classification</u> Administrative Amendment

Source Classification Located in Attainment Area San Juan County Airs Source Size: A

Applicable Federal Standards NSPS (Part 60), A: General Provisions NSPS (Part 60), GG: Standards of Performance for Stationary Gas Turbines MACT (Part 63), A: General Provisions MACT (Part 63), ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines Title V (Part 70) Major Source

#### Project Description

Northwest Pipeline has requested an administrative amendment to update equipment designation, emergency generator conditions, and update the HAP source classification. The equipment designation in the AO needs to be updated to match the issued Title V operating permit. The equipment is not being modified or altered. The emergency generator conditions are being updated to clarify the hours of operations for the emergency backup generator's engine. The AO was issued with an hour of operation condition, which was not clarified as operational hours or testing and maintenance hours. The emergency generator engine conditions will be updated to reflect equipment subject to 40 CFR 63.6640(f)(2) 100 hours of operation annually for testing and maintenance with no limits for emergencies. The HAP emissions that are listed in the existing AO are only accounting for permitted equipment but not the grandfathered engines (Reciprocating IC Engine #1-4). The added grandfathered HAP emissions are not considered new emissions, since they are accounted for in the Title V and emissions inventory. The addition of the grandfathered HAP emissions to the AO will clarify the Title V Major HAP source classification discrepancy.

#### **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	*	68074.00
Carbon Monoxide	0	177.05
Nitrogen Oxides	0	1066.51
Particulate Matter - PM <sub>10</sub>	0	4.48
Particulate Matter - PM <sub>2.5</sub>	0	4.48
Sulfur Oxides	0	1.96
Volatile Organic Compounds	0	49.08

Hazardous Air Pollutant	Change (lbs/yr)	Total (lbs/yr)
1,3-Butadiene (CAS #106990)	**	640
2,2,4-Trimethylpentane (CAS #540841)	**	660
Acetaldehyde (CAS #75070)	**	6020
Acrolein (CAS #107028)	**	6020
Benzene (Including Benzene From Gasoline) (CAS #71432)	**	1520
Ethyl Benzene (CAS #100414)	**	100
Formaldehyde (CAS #50000)	**	42980
Generic HAPs (CAS #GHAPS)	**	520
Hexane (CAS #110543)	**	500
Methanol (CAS #67561)	**	1920
Polycyclic aromatic hydrocarbons (CAS #65996932)	**	240
Toluene (CAS #108883)	**	780
Xylenes (Isomers And Mixture) (CAS #1330207)	**	220
	Change (TPY)	Total (TPY)
Total HAPs	**	31.06

Note: Change in emissions indicates the difference between previous AO and proposed modification.

\*CO2 emissions were never considered and are now being added.

\*\*HAP emissions are coming from grandfathered equipment and are now being added.

## **SECTION I: GENERAL PROVISIONS**

I.1	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 five-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 five (5) years. [R307-415-6a]
I.2	The owner/operator shall comply with UAC R307-107. General Requirements: Breakdowns. [R307-107]
1.3	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.4	The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]
I.5	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.6	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.7	The owner/operator shall comply with UAC R307-150 Series. Emission Inventories. [R307-150]

# SECTION II: PERMITTED EQUIPMENT

### II.A <u>THE APPROVED EQUIPMENT</u>

II.A.1	Moab Compressor Station Source Wide
II.A.2	Reciprocating IC Engine #1 (Unit #P001) Installed 1956 - Grandfathered Fired on pipeline-quality natural gas only
II.A.3	Reciprocating IC Engine #2 (Unit #P002) Installed 1956 - Grandfathered Fired on pipeline-quality natural gas only

II.A.4	Reciprocating IC Engine #3 (Unit #P003) Installed 1956 - Grandfathered Fired on pipeline-quality natural gas only
II.A.5	Reciprocating IC Engine #4 (Unit #P004) Installed 1956 - Grandfathered Fired on pipeline-quality natural gas only
II.A.6	Turbine (Unit #P005) 4,354 hp Compressor Turbine (4680 hp Nameplate) Fired on pipeline-quality natural gas only Installed 2003
II.A.7	<b>Boiler #1 (Unit #B001)</b> 5.23 MMBtu/hr boiler for comfort heating Fired on pipeline-quality natural gas only Installed 1992
II.A.8	Boiler #2 (Unit #B002) 2.5 MMBtu/hr boiler (installed 2001) Fired on pipeline quality natural gas only Installed 1992
II.A.9	Backup Generator #1 (Unit #G001) 292 hp emergency backup generator Fired on pipeline-quality natural gas only Installed 1992
II.A.10	Backup Generator #2 (Unit #G002) 565 hp emergency backup generator Fired on pipeline-quality natural gas only Installed 1992
II.A.11	Salt Bath Heater (Unit SB001) 0.25 MMBtu/hr heater (installed 2001) Fired on pipeline-quality natural gas only
II.A.12	Miscellaneous Emission Points (Unit #F001) Fugitive VOC emissions from miscellaneous points, including the blowdown vent stack

## SECTION II: SPECIAL PROVISIONS

### II.B <u>REQUIREMENTS AND LIMITATIONS</u>

Moab Compressor Station
Visible emissions from the following emission points shall not exceed the following values:
Turbine Unit #P005 - 10%
Backup Generator Unit G001 - 10%
Backup Generator Unit G002 - 10%
Boiler Unit #B001 - 10%
Salt Bath Heater Unit SB001 - 10%
Fugitive Emissions - 10%
All other points - 20%
Opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9.
[R307-201]
The owner/operator shall use only pipeline-quality natural gas as fuel. If any other fuel is to be used, an AO shall be required. [R307-401]
Requirements on Turbine Unit #P005
Emissions of NO <sub>x</sub> from the Turbine Unit #P005 shall be no greater than 6.28 lbs/hour. [R307-401]
Emissions of CO from the Turbine Unit #P005 shall be no greater than 4.55 lbs/hour. [R307-401]
Sulfur content of the fuel combusted shall be no greater than 0.8 percent by weight. [40 CFR 60 Subpart GG]
Emergency Backup Generators
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]
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:
A. The date the emergency engine was used
B. The duration of operation in hours
C. The reason for the emergency engine usage.
[40 CFR 63 Subpart ZZZZ]

II.B.3.a.2 To determine the duration of operation, the owner/operator shall install a non-resettable hour meter on each emergency engine. [40 CFR 63 Subpart ZZZZ]

## **PERMIT HISTORY**

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

Supersedes Is Derived From Incorporates AO DAQE-AN0106270010-10 dated August 3, 2010 NOI dated November 18, 2024 Additional Information dated February 12, 2025

## 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 <sub>x</sub>	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
$PM_{10}$	Particulate matter less than 10 microns in size
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	
VUC	Volatile organic compounds