



State of Utah

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Department of  
Environmental Quality

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*Executive Director*

DIVISION OF AIR QUALITY  
Bryce C. Bird  
*Director*

DAQE-AN160210002-24

October 29, 2024

Nate Robinson  
Integrated Water Management  
PO Box 430  
Altamont, UT 84001  
nrobinson@iwmutah.com

Dear Mr. Robinson:

Re: Approval Order: Minor Modification to Approval Order DAQE-160210001-21 for the Addition of Storage Tanks  
Project Number: N160210002

The attached Approval Order (AO) is issued pursuant to the Notice of Intent (NOI) received on January 9, 2023. Integrated Water Management must comply with the requirements of this AO, all applicable state requirements (R307), and Federal Standards.

The project engineer for this action is **John Persons**, who can be contacted at (385) 306-6503 or [jpersons@utah.gov](mailto:jpersons@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:JP:jg

cc: TriCounty Health Department

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

**APPROVAL ORDER**  
**DAQE-AN160210002-24**  
**Minor Modification to Approval Order DAQE-160210001-21**  
**for the Addition of Storage Tanks**

**Prepared By**  
**John Persons, Engineer**  
**(385) 306-6503**  
**jpgersons@utah.gov**

**Issued to**  
**Integrated Water Management - Plumb Facility**

**Issued On**  
October 29, 2024

**Issued By**



**Bryce C. Bird**  
**Director**  
**Division of Air Quality**

# TABLE OF CONTENTS

<b>TITLE/SIGNATURE PAGE .....</b>	<b>1</b>
<b>GENERAL INFORMATION .....</b>	<b>3</b>
CONTACT/LOCATION INFORMATION .....	3
SOURCE INFORMATION .....	3
General Description .....	3
NSR Classification.....	3
Source Classification .....	3
Applicable Federal Standards .....	3
Project Description.....	4
SUMMARY OF EMISSIONS.....	4
<b>SECTION I: GENERAL PROVISIONS .....</b>	<b>4</b>
<b>SECTION II: PERMITTED EQUIPMENT .....</b>	<b>5</b>
<b>SECTION II: SPECIAL PROVISIONS.....</b>	<b>6</b>
<b>PERMIT HISTORY .....</b>	<b>8</b>
<b>ACRONYMS .....</b>	<b>9</b>

## GENERAL INFORMATION

### CONTACT/LOCATION INFORMATION

**Owner Name**

Integrated Water Management

**Source Name**

Integrated Water Management - Plumb Facility

**Mailing Address**

PO Box 430  
Altamont, UT 84001

**Physical Address**

40.250955 -110.376131  
Duchesne, UT 84021

**Source Contact**

Name: Nate Robinson  
Phone: (435) 454-4646  
Email: nrobinson@iwmutah.com

**UTM Coordinates**

553058 m Easting  
4455798 m Northing  
Datum NAD83  
UTM Zone 12

**SIC code** 1389 (Oil & Gas Field Services, NEC)

### SOURCE INFORMATION

**General Description**

Integrated Water Management (IWM) operates the Plumb and Arcadia Transfer Station Facilities. For permitting purposes, these facilities are considered one source, as per the definition in R307-101-2. The facilities operate under the same SIC code, are under common control, are adjacent to one another (connected via pipeline), and both stations act as a support facility to the other. Based on DAQ records, the source elected to group these sites into one source. The Plumb Facility consists of a produced water injection well and an exploration and production (E&P) landfill. The facility will receive water from the Arcadia Transfer Station via a pipeline, which will be directly injected downhole using an electric pump. The Arcadia Transfer Station Facility, located about 8 miles west of the Plumb Facility, receives water from industry pipelines. All water received is sent to the Plumb Facility. This facility consists of twenty-five (25) 500-bbl storage tanks for surge capacity, two (2) electric pumps, and two (2) propane-fired generators.

**NSR Classification**

Minor Modification at Minor Source

**Source Classification**

Located in Uinta Basin O3 NAA  
Duchesne County  
Airs Source Size: B

**Applicable Federal Standards**

NSPS (Part 60), A: General Provisions  
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

IWM has requested to add twenty-one (21) 500 bbl storage tanks to its Arcadia Facility. The source updated emission estimates from the four (4) existing tanks.

IWM additionally requested an administrative change to that facility name to correct a typographical error. The site, previously permitted under "Acadia," was updated to the appropriate "Arcadia."

**SUMMARY OF EMISSIONS**

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

<b>Criteria Pollutant</b>	<b>Change (TPY)</b>	<b>Total (TPY)</b>
CO <sub>2</sub> Equivalent	0	5081.00
Carbon Monoxide	0	17.61
Nitrogen Oxides	0	8.81
Particulate Matter - PM <sub>10</sub>	0	0.55
Particulate Matter - PM <sub>2.5</sub>	0	0.06
Sulfur Dioxide	0	0.02
Volatile Organic Compounds	0.24	54.65

<b>Hazardous Air Pollutant</b>	<b>Change (lbs/yr)</b>	<b>Total (lbs/yr)</b>
Benzene (Including Benzene From Gasoline) (CAS #71432)	0	140
Ethyl Benzene (CAS #100414)	0	100
Generic HAPs (CAS #GHAPS)	0	1600
Toluene (CAS #108883)	0	940
Xylenes (Isomers And Mixture) (CAS #1330207)	0	2180
	<b>Change (TPY)</b>	<b>Total (TPY)</b>
Total HAPs	0	2.48

**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]
I.8	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]

## **SECTION II: PERMITTED EQUIPMENT**

### **II.A THE APPROVED EQUIPMENT**

II.A.1	<b>Integrated Water Management - Plumb &amp; Arcadia Facilities</b>
II.A.2	<b>Plumb Facility</b> Items II.A.3 & II.A.4
II.A.3	<b>Landfill Areas</b> Landfill storing E&P solids and tank bottom and centrifuge solids
II.A.4	<b>Electric Pump</b> One (1) electric pump listed for informational purposes only
II.A.5	<b>Arcadia Facility</b> Items II.A.6 through II.A.9
II.A.6	<b>Electric Pumps</b> Two (2) electric pumps listed for informational purposes only.
II.A.7	<b>Storage Tanks</b> Capacity: 500 bbl each Quantity: Twenty-five (25) (twenty-one (21) new) Contents: Produced water

II.A.8	<p><b>Propane-Fired Generator 1</b>                  Rating: 230 kW (308 hp)                  Fuel: Propane                  Manufacture Date: 2020</p>
II.A.9	<p><b>Propane-Fired Generator 2</b>                  Rating: 450 kW (603 hp)                  Fuel: Propane                  Manufacture Date: 2020</p>

## SECTION II: SPECIAL PROVISIONS

### II.B REQUIREMENTS AND LIMITATIONS

II.B.1	<p><b>Source-Wide Requirements</b></p>
II.B.1.a	<p>The owner/operator shall not allow visible emissions from any stationary point or fugitive source on site to exceed the following opacity limits:</p> <ul style="list-style-type: none"> <li>A. Haul Roads - 20%.</li> <li>B. Propane-Fired Engines - 10%.</li> <li>C. All other sources - 20%.</li> </ul> <p>[R307-201, R307-401-8]</p>
II.B.1.a.1	<p>Visible fugitive dust emission determinations shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a 6-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 1/2 vehicle length behind the vehicle and not less than 1/2 the height of the vehicle. [R307-401-8]</p>
II.B.1.a.2	<p>Opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9. [R307-201]</p>
II.B.2	<p><b>Landfill Requirements</b></p>
II.B.2.a	<p>The owner/operator shall limit disposal to the landfill to the following volumes per rolling 12-month period:</p> <ul style="list-style-type: none"> <li>A. 46,800 cubic yards of imported soils.</li> <li>B. 5,200 cubic yards of in-house solids.</li> </ul> <p>[R307-401-8]</p>

II.B.2.a.1	<p>The following definitions apply to the above throughput limits:</p> <ul style="list-style-type: none"> <li>A. Imported soils consist of material from E&amp;P operations, excavated soils from leaks and spills, and any other solids with potential petroleum hydrocarbons contamination. Imported soils are generated offsite and brought to the onsite landfill for disposal.</li> <li>B. In-house solids consist of tank bottom solids and centrifuge solids generated at other IWM facilities.</li> </ul> <p>[R307-401-8]</p>
II.B.2.a.2	<p>The owner/operator shall:</p> <ul style="list-style-type: none"> <li>A. Determine material disposed at the landfill using billable receipts or scale records.</li> <li>B. Record the number of loads and volume or weight of disposed material on a daily basis.</li> <li>C. Calculate a new rolling 12-month total by the last day of each month using data from the previous 12 months.</li> <li>D. Keep the records for all periods the plant is in operation.</li> </ul> <p>[R307-401-8]</p>
II.B.2.b	<p>All material placed in the landfill shall be covered on a daily basis. The landfill cover shall be applied as soon as possible to minimize VOCs and HAPs emissions. The landfill cover shall consist of a clean soil layer at least 6 inches thick. [R307-401-8]</p>
II.B.2.b.1	<p>The owner/operator shall maintain the following records related to the application of the landfill cover. These records shall be maintained on a daily basis for all periods when the plant is in operation.</p> <ul style="list-style-type: none"> <li>A. Date and time when cover is placed in landfill.</li> <li>B. Area of the landfill receiving the cover.</li> </ul> <p>[R307-401-8]</p>
II.B.2.c	<p>Imported material shall be placed in the landfill as soon as possible and shall not be stockpiled onsite. If soil stabilization is needed, a staging area may be used for temporary soil storage. Soil stabilization shall be performed on the same day as the material is received. Stabilized soil shall be placed in the landfill immediately after soil stabilization. [R307-401-8]</p>
II.B.3	<p><b>Storage Tank Requirements</b></p>
II.B.3.a	<p>The owner/operator shall keep the storage tank thief hatches and other tank openings closed and sealed any time that there is liquid stored in the tanks, except during tank unloading or other maintenance activities. [R307-401-8]</p>
II.B.3.b	<p>At least once each month, the owner/operator shall inspect each closed vent system (including tank openings, thief hatches, and bypass devices) for defects that could result in air emissions. [R307-401-8]</p>
II.B.3.b.1	<p>The owner/operator shall keep records of closed vent system inspections. The records shall include the date of the inspection and the results of the inspection. [R307-401-8]</p>
II.B.3.c	<p>The owner/operator shall only load the storage tanks using submerged loading. [R307-401-8]</p>

II.B.3.d	The owner/operator shall operate the storage tanks according to the manufacturer's operational and maintenance guidelines. [R307-401-8]
II.B.3.d.1	The owner/operator shall keep a copy of the manufacturer's operational and maintenance procedures onsite at all times the facility is in operation. [R307-401-8]
II.B.4	<b>Fugitive Dust Requirements</b>
II.B.4.a	The owner/operator shall apply water to all unpaved roads and other unpaved operational areas that are used by mobile equipment to control fugitive dust. The application of water shall be used except when the ambient temperature is below freezing. Treatment shall be of sufficient frequency and quantity to meet the opacity limits listed in this AO, or as determined necessary by the Director. [R307-401-8]
II.B.4.a.1	<p>Records of water treatment 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"> <li>A. Date of treatment.</li> <li>B. Number of treatments made.</li> <li>C. Records of temperature if the temperature is below freezing.</li> </ul> <p>[R307-401-8]</p>

### PERMIT HISTORY

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

Supersedes	AO DAQE-AN160210001-21 dated May 5, 2021
Is Derived From	NOI dated January 9, 2023
Incorporates	Additional Information dated February 16, 2023
Incorporates	Additional Information dated February 22, 2023
Incorporates	Additional Information dated February 28, 2023
Incorporates	Additional Information dated May 1, 2023

## 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 <sub>2</sub>	Carbon Dioxide
CO <sub>2e</sub>	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 <sub>10</sub>	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 <sub>2</sub>	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