

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-IN161390002-24

November 21, 2024

William Kaiser Savage Services Corporation 901 West Legacy Center Way Midvale, UT 84047 WilliamKaiser@savageservices.com

Dear Mr. Kaiser:

Re: Intent to Approve: New Cedar City Liquid and Dry Bulk Transloading Facility Project Number: N161390002

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, **Christine Bodell**, as well as the DAQE number as shown on the upper right-hand corner of this letter. Christine Bodell, can be reached at (385) 290-2690 or cbodell@utah.gov, if you have any questions.

Sincerely,

alm D. Hugher

Alan D. Humpherys, Manager New Source Review Section

ADH:CB:jg

cc: Southwest Utah Public Health Department

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

# INTENT TO APPROVE DAQE-IN161390002-24 New Cedar City Liquid and Dry Bulk Transloading Facility

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

Issued to Savage Services Corporation - Cedar City Transloading Facility

> Issued On November 21, 2024

alm D. Hugher

New Source Review Section Manager Alan D. Humpherys

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### **GENERAL INFORMATION**

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

**Owner Name** Savage Services Corporation **Source Name** Savage Services Corporation - Cedar City Transloading Facility

Mailing Address 901 West Legacy Center Way Midvale, UT 84047 **Physical Address** 6635 West Sage Hills Drive Cedar City, UT 84721

Source Contact Name: William Kaiser Phone: (801) 424-7272 Email: WilliamKaiser@savageservices.com UTM Coordinates

306,873 m Easting 4,178,315 m Northing Datum NAD83 UTM Zone 12

**SIC code** 5171 (Petroleum Bulk Stations & Terminals)

#### **SOURCE INFORMATION**

General Description

Savage Services Corporation (Savage) conducts transloading operations between railcars and trucks for various petroleum liquids and other organic liquids, inorganic liquids, and dry bulk goods. Equipment for the liquid transloading operation includes liquid transfer and vapor return lines. Equipment for dry transloading operations includes enclosed pneumatic systems or enclosed conveyors equipped with dust collectors and diesel-fired, Tier 4i engines to power the pneumatic system or conveyor movements. Savage will also store bulk lump gypsum on site, which will be controlled with water sprays.

NSR Classification New Minor Source

Source Classification Located in Attainment Area Iron County Airs Source Size: B

Applicable Federal Standards NSPS (Part 60), XXa-Standards of Performance for Bulk Gasoline Terminals that Commenced Construction, Modification, or Reconstruction After June 10, 2022 NSPS (Part 60), A: General Provisions 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 DAQE-IN161390002-24 Page 4

Stationary Reciprocating Internal Combustion Engines MACT (Part 63), BBBBBB: National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities Title V (Part 70) Area Source

#### Project Description

Savage has requested a new AO for the Savage Transloading Facility located in Cedar City, Iron County. The source has historically operated under Utah Administrative Code (UAC) R307-401-9 "Small Source Exemption" (see DAQE-EN161390001-23, issued September 21, 2023) and is increasing site throughputs and operations and will now require an AO.

Two major types of products are transloaded at the source, including liquids and dry bulk goods. Savage has requested to transload petroleum liquids, other organic liquids, and inorganic liquids using liquid transfer lines and associated hoses, pumps, valves, flanges, gauges, connections, and fittings.

In addition to the transloading of liquids, Savage will load and unload bulk solid materials such as minerals and grain. The equipment involved in the source's dry bulk goods transloading process includes a total of four (4) covered pneumatic systems or conveyor belts and associated hoses, pumps, valves, flanges, gauges, connections, and fittings. Four (4) Tier 4i diesel engines power the movement of the pneumatic systems or conveyors. The pneumatic systems and conveyors will each be equipped with a baghouse filter with an estimated control efficiency of 99%.

Requested throughput includes 90 million gallons of unpressurized liquids per year and 12 million gallons of pressurized liquids per year. Additionally, Savage has requested a throughput of 375,000 tons per year of bulk solid materials, including grains and minerals such as gypsum.

#### **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		1187.00
Carbon Monoxide		7.60
Nitrogen Oxides		6.17
Particulate Matter - PM <sub>10</sub>		0.55
Particulate Matter - PM <sub>2.5</sub>		0.42
Sulfur Dioxide		0.01
Volatile Organic Compounds		7.90

Hazardous Air Pollutant	Change (lbs/yr)	Total (lbs/yr)
Benzene (Including Benzene From Gasoline) (CAS #71432)		260
Generic HAPs (CAS #GHAPS)		280
Naphthalene (CAS #91203)		220
Toluene (CAS #108883)		1020
Xylenes (Isomers And Mixture) (CAS #1330207)		320
	Change (TPY)	Total (TPY)
Total HAPs		1.05

## 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 Beaver County Journal on November 27, 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]

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

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	Cedar City Transloading Facility
II.A.2	Liquid Transfer Lines Includes vapor balance lines and a pressure relief line
II.A.3	Four (4) Enclosed Mobile Conveyor Belts *Or four (4) enclosed pneumatic systems* Control: Dust Collector
П.А.4	Four (4) Mobile Conveyor Engines Rating: 48 hp (36 kW), each Tier: 4f Fuel: Diesel NSPS Applicability: Subpart IIII MACT Applicability: Subpart ZZZZ
II.A.5	Two (2) Storage Silos Capacities: 140-ton and 195-ton Content: Fly Ash

## 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	Unless otherwise specified in this AO, the owner/operator shall not allow visible emissions to exceed 10% opacity. [R307-401-8]
II.B.1.a.1	Unless otherwise specified in this AO, opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Method 9. [R307-401-8]

II.B.2.aThe owner/operator shall not exceed the following organic liquid through A. 45,000,000 gallons of (unpressurized) low vapor organic liquids vapor pressure of 0.05 psia or less per rolling 12-month period.B.22,500,000 gallons of (unpressurized) gasoline per rolling 12-month C. 22,500,000 gallons of (unpressurized) ethanol per rolling 12-month D. 12,000,000 gallons combined of (pressurized) propane, butane, o petroleum gas (LPG) per rolling 12-month period.II.B.2.a.1The owner/operator shall:	that have an absolute onth period. nth period.	
<ul> <li>vapor pressure of 0.05 psia or less per rolling 12-month period.</li> <li>B. 22,500,000 gallons of (unpressurized) gasoline per rolling 12-month</li> <li>C. 22,500,000 gallons of (unpressurized) ethanol per rolling 12-month</li> <li>D. 12,000,000 gallons combined of (pressurized) propane, butane, or petroleum gas (LPG) per rolling 12-month period.</li> <li>[R307-401-8]</li> </ul>	onth period. 1th period.	
<ul> <li>C. 22,500,000 gallons of (unpressurized) ethanol per rolling 12-mor</li> <li>D. 12,000,000 gallons combined of (pressurized) propane, butane, o petroleum gas (LPG) per rolling 12-month period.</li> <li>[R307-401-8]</li> </ul>	nth period.	
<ul> <li>D. 12,000,000 gallons combined of (pressurized) propane, butane, o petroleum gas (LPG) per rolling 12-month period.</li> <li>[R307-401-8]</li> </ul>	*	
petroleum gas (LPG) per rolling 12-month period. [R307-401-8]	r liquified	
II.B.2.a.1 The owner/operator shall:		
A. Maintain records of each organic liquid type (low vapor pressure ethanol, LPG, propane, butane) and the absolute vapor pressure of		
B. Determine throughput with supervisor monitoring and maintaining	ng an operation log.	
C Record throughput on a daily basis.		
D. Use the throughput data to calculate a new rolling 12-month total each month using data from the previous 12 months.	by the 20th day of	
E. Keep the throughput records for all periods the plant is in operati	on.	
[R307-401-8]		
II.B.2.b The owner/operator shall only load the organic liquids to the rail cars on stanker trucks, or vice versa. [R307-401-8]	site directly from the	
II.B.2.c The owner/operator shall load the rail cars and tanker trucks on site by th or a submerged fill pipe when loading unpressurized organic liquids. [R3		
to venting to the atmosphere during on-site loading operations for the unp liquids. The vapor balance line shall be used at all times during loading o	The owner/operator shall connect a vapor balance line to the receiving and delivery vessels prior to venting to the atmosphere during on-site loading operations for the unpressurized organic liquids. The vapor balance line shall be used at all times during loading operations when conducting unpressurized organic liquid loading operations. [R307-401-8]	
II.B.2.e The owner/operator shall operate each vapor balance system according to recommendations. [R307-401-8]	the manufacturer's	
II.B.2.e.1 To demonstrate compliance with the above condition, the owner/operator of the manufacturer's recommendations for each installed vapor balance s		
II.B.2.f The owner/operator shall only load propane, butane, or LPG under pressu	ure. [R307-401-8]	
II.B.2.g The owner/operator shall only transload the organic liquids to tanker truc certified for the NSPS level annual leak test. [R307-401-8]	ks and rail cars that are	
II.B.2.g.1 To determine compliance with the above condition, the owner/operator sl annual leak test certifications. [R307-401-8]	hall maintain records of	

II.B.3	Bulk Solids Transloading Requirements
II.B.3.a	The owner/operator shall not transfer more than 375,000 tons of dry bulk solids (minerals, fly ash, and grains) per rolling 12-month period. [R307-401-8]
II.B.3.a.1	The owner/operator shall:
	A. Determine throughput with supervisor monitoring and maintaining an operation log.
	B Record throughput on a daily basis.
	C. Use the throughput 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 throughput records for all periods the plant is in operation.
	[R307-401-8]
II.B.3.b	The owner/operator shall install a dust collector on each dry bulk goods conveyor or pneumatic system to control particulate emissions generated during the transfer of dry bulk goods. All displaced air from the dry bulk goods transferring operations shall pass through the dust collector before being vented to the atmosphere. [R307-401-8]
II.B.3.c	The owner/operator shall install a manometer or magnehelic pressure gauge to measure the static pressure differential across each dust collector. [R307-401-8]
II.B.3.c.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.3.c.2	The pressure gauge shall measure the static pressure differential in 1-inch water column increments or less. [R307-401-8]
II.B.3.d	During operation of each dust collector, the owner/operator shall maintain the static pressure differential within the range recommended by the manufacturer for normal operations. [R307-401-8]
II.B.3.d.1	The owner/operator shall record the static pressure differential at least once per operating day while each dust collector is operating. [R307-401-8]
II.B.3.d.2	The owner/operator shall maintain the following records of the static pressure differential:
	A. Unit identification;
	B. Manufacturer recommended static pressure differential for the unit;
	C. Daily static pressure differential readings;
	D. Date of reading.
	[R307-401-8]
II.B.3.e	At least once every 12 months, the owner/operator shall calibrate each pressure gauge in accordance with the manufacturer's instructions or replace the pressure gauge. [R307-401-8]
II.B.3.e.1	The owner/operator shall maintain records of the pressure gauge calibrations and replacements. [R307-401-8]

II.B.3.f	The owner/operator shall install dust collectors on each dry bulk goods conveyor or pneumatic system with a control efficiency of no less than 99%, each. All air exiting each dry bulk goods conveyor or pneumatic system shall pass through the dust collector before being vented to the atmosphere. [R307-401-8]
II.B.3.f.1	To demonstrate compliance with the above condition, the owner/operator shall maintain records of the manufacturer's control efficiency guarantee for the installed dust collector. [R307-401-8]
II.B.4	Haul Road and Fugitive Dust Requirements
II.B.4.a	The owner/operator shall not allow visible emissions from haul roads and fugitive dust sources on site to exceed 20% opacity. [R307-401-8]
II.B.4.a.1	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]
II.B.4.b	The owner/operator shall control particulate emissions from storage piles using water application. The owner/operator shall apply water as required to ensure the opacity limits in this AO are not exceeded. [R307-401-8]
II.B.4.b.1	Records of treatments to the storage piles shall include:
	A. The date, time, and location of applications.
	B. The volume of water applied.
	[R307-401-8]
II.B.4.c	The owner/operator shall not have more than 3,696 feet (0.7 miles) of total haul roads on site. All haul roads on site shall be paved. [R307-401-8]
II.B.4.c.1	Compliance shall be determined through GPS measurements or aerial photographs. [R307-401-8]
II.B.4.d	The owner/operator shall flush with water, as needed, the paved haul road on site to maintain opacity limits listed in this AO. If the temperature is below freezing, the owner/operator may stop applying water to the paved haul road. The owner/operator shall resume applying water to the paved haul road when the temperature is above freezing. [R307-401-8]
II.B.4.d.1	Records of 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.
	[R307-401-8]

II.B.5	Engine Requirements
II.B.5.a	The owner/operator shall not allow visible emissions from any 48 hp (36 kW) engine to exceed 20% opacity. [R307-401-8]
II.B.5.b	The owner/operator shall install four (4) 48 hp (36 kW) generator engines that are each certified to meet a $NO_x$ + nonmethane hydrocarbons (NMHC) emission rate of 4.7 g/kW-hr (3.5 g/hp-hr) or less. [R307-401-8]
II.B.5.b.1	The owner/operator shall keep a record of the manufacture's certification of the emission rate. The record shall be kept for the life of the equipment. [R307-401-8]
II.B.5.c	The owner/operator shall operate and maintain each 48 (36 kW) diesel-fired engine according to the manufacturer's emission-related written instructions. [R307-401-8]
II.B.5.d	The owner/operator shall only use diesel fuel (e.g., fuel oil #1, #2, or diesel fuel oil additives) as fuel in each stationary diesel engine. [R307-401-8]
II.B.5.e	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. [40 CFR 63 Subpart ZZZZ, R307-401-8]
II.B.5.e.1	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]

# **PERMIT HISTORY**

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

Is Derived From	NOI dated August 1, 2024
Incorporates	Additional Information dated August 28, 2024
Incorporates	Additional Information dated September 16, 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,
0014	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) Hazardova cir pollutort(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
$PM_{2.5}$	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