



State of Utah

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Department of  
Environmental Quality

Kimberly D. Shelley  
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DIVISION OF AIR QUALITY  
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*Director*

DAQE-IN141780010-24

November 27, 2024

Carl Jacobs  
Owens Corning Insulating Systems, LLC  
One Owens Corning Parkway  
Toledo, OH 43659  
dave.jacobs@owenscorning.com

Dear Mr. Jacobs:

Re: Intent to Approve: Modification to Approval Order to DAQE-AN141780008-23, to Add  
Emergency Equipment and Increase Production  
Project Number: N141780010

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, **Tad Anderson**, as well as the DAQE number as shown on the upper right-hand corner of this letter. Tad Anderson, can be reached at (385) 306-6515 or tdanderson@utah.gov, if you have any questions.

Sincerely,

  
Jon Black (Nov 22, 2024 15:14 MST)

Jon L. Black, Manager  
New Source Review Section

JLB:TA:jg

cc: Central Utah Health Department  
EPA Region 8

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

**INTENT TO APPROVE**  
**DAQE-IN141780010-24**  
**Modification to Approval Order to DAQE-AN141780008-23**  
**to Add Emergency Equipment and Increase Production**

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

**Issued to**  
**Owens Corning Insulating Systems, LLC - Fiberglass Manufacturing Facility**

**Issued On**  
**November 27, 2024**

  
Jon Black (Nov 22, 2024 15:14 MST)

**New Source Review Section Manager**  
**Jon L. Black**

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## GENERAL INFORMATION

### CONTACT/LOCATION INFORMATION

**Owner Name**

Owens Corning Insulating Systems, LLC

**Source Name**

Owens Corning Insulating Systems, LLC -  
Fiberglass Manufacturing Facility

**Mailing Address**

One Owens Corning Parkway  
Toledo, OH 43659

**Physical Address**

2762 South Main  
Nephi, UT 84648

**Source Contact**

Name: Carl Jacobs  
Phone: (740) 953-1023  
Email: dave.jacobs@owenscorning.com

**UTM Coordinates**

426,698 m Easting  
4,391,372 m Northing  
Datum NAD83  
UTM Zone 12

**SIC code**        3296 (Mineral Wool)

### SOURCE INFORMATION

General Description

Owens Corning Insulating Systems, LLC (OCIS) owns and operates a Bonded Loose Fill (BLF) insulation manufacturing facility in Nephi, Utah (Nephi Plant). The Nephi Plant currently utilizes one (1) main production line for BLF products and a Product Development Line for the testing of unbound loose fill manufacturing.

NSR Classification

Minor Modification at Minor Source

Source Classification

Located in Attainment Area  
Juab County  
Airs Source Size: B

Applicable Federal Standards

NSPS (Part 60), A: General Provisions  
NSPS (Part 60), PPP: Standard of Performance for Wool Fiberglass Insulation Manufacturing Plants  
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  
Title V (Part 70) Area Source

Project Description

OCIS has requested a modification to AO DAQE-AN141780008-23 to install emergency equipment. OCIS is requesting to add one (1) 900 horsepower diesel-fired emergency generator and one (1) 226 horsepower diesel-fired fire pump.

On December 7, 2023, OCIS conducted an environmental self-evaluation of the Nephi Plant and discovered one (1) diesel-fired emergency generator engine and one (1) diesel-fired emergency fire pump engine. This modification is part of the process of the non-compliant correction course.

OCIS submitted an NOI dated August 15, 2024, requesting to increase the total glass pull throughput and binder solids limit (to account for the increase in glass pull throughput) at the Nephi Plant.

The increase in total glass throughput (from 38,325 tpy to 43,800 tpy) will not increase VOCs emissions. Stack testing at the Nephi Plant has determined that actual VOCs emissions rates are lower than previously permitted PTE emissions. There is no proposed increase in natural gas usage associated with this project. The glass throughput increase will increase the PTE for PM<sub>10</sub> and PM<sub>2.5</sub>, SO<sub>2</sub>, CO, and GHGs. There is no total glass throughput limit since the total glass throughput is directly limited by the binder solids.

OCIS has requested to increase the binder solids limit (from 1,800 tpy to 4,500 tpy) with the intent to limit VOC emissions from the fiber and pack forming, curing, and cooling sections. This proposed maximum binder solids usage accounts for both the higher than anticipated binder solids usage rate as well as the increase in glass pull throughput.

OCIS has requested to revise the language in their AO to provide for more operational flexibility, update the natural gas consumption recordkeeping requirements, remove the Mulrex Oil tank, and rename the Mineral Oil tank to Vegetable Oil tank.

**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	65	18548.97
Carbon Monoxide	0.79	74.54
Nitrogen Oxides	1.15	9.02
Particulate Matter - PM <sub>10</sub>	9.56	81.93
Particulate Matter - PM <sub>2.5</sub>	8.04	69.28
Sulfur Dioxide	0.03	1.32
Volatile Organic Compounds	0.06	54.38

<b>Hazardous Air Pollutant</b>	<b>Change (lbs/yr)</b>	<b>Total (lbs/yr)</b>
Acetaldehyde (CAS #75070)	0.14	35.14
Chromium Compounds (CAS #CMJ500)	0.04	00.35
Formaldehyde (CAS #50000)	0.24	1440.24
Generic HAPs (CAS #GHAPS)	0.58	1.58

Manganese Compounds (CAS #MAR500)	3.67	29.33
Methanol (CAS #67561)	0	11438
	<b>Change (TPY)</b>	<b>Total (TPY)</b>
Total HAPs	>0.01	6.13

### 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 Nephi Times News on December 4, 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	The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]
I.2	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.3	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.4	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.5	The owner/operator shall comply with UAC R307-107. General Requirements: Breakdowns. [R307-107]
I.6	The owner/operator shall comply with UAC R307-150 Series. Emission Inventories. [R307-150]

I.7	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. [R307-401-8]
I.8	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]

## 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 THE APPROVED EQUIPMENT

II.A.1	<b>Fiberglass Manufacturing Facility</b>
II.A.2	<b>Fabrication and Packaging Operations</b> Enclosed System - Exhaust Air Vented Through STK-1
II.A.3	<b>Mat Fiberizers</b> Eight (8) Fiberizers  Max. Burner Rating of Each Fiberizer: 2.0 MMBTU/hr Burner Fuel Type: Natural Gas  Fiberizers Emission Point: STK-1
II.A.4	<b>Process Development Line</b> The Product Development Line (PDL) will consist of the following:  One (1) Molten Glass Channel One (1) Pack Former One (1) Fiberizer - Burner rating: 2.5 MMBtu/hr One (1) Mill System (various models to be trialed) One (1) Rotary Separator One (1) Bagger One (1) Forehearth One (1) Venturi Scrubber  Various Hoppers (2), Conveyors/Auger, and Bucket System

II.A.5	<p><b>Baghouse - STK 2</b> Raw Material Handling &amp; Storage (Sand Silo &amp; Plant Cullet Silo) Baghouse (STK-2)</p> <p>Manufacturer: Mikropul-PulsAire A:C Ratio: 6:1 Maximum Flow Rate: 2800 actual cubic feet per minute (acfm) Minimum Filter Area: 462 square feet</p> <p>Baghouse Stack Height (STK-2) - 125 ft minimum as measured from ground level at the base of the stack.</p>
II.A.6	<p><b>Baghouse - STK 2</b> Raw Material Dense Phase Transport Baghouse (STK-2)</p> <p>Baghouse Stack Height (STK-2) - 125 ft minimum as measured from ground level at the base of the stack.</p>
II.A.7	<p><b>Baghouse - STK 3</b> Raw Material Handling &amp; Storage (Sand Silo &amp; Post Consumer Purchased Cullet Silo) Baghouse (STK-3)</p> <p>Manufacturer: Mikropul-PulsAire A:C Ratio: 6:1 Maximum Flow Rate: 2800 acfm Minimum Filter Area: 462 square feet</p> <p>Baghouse Stack Height (STK-3) - 125 ft minimum as measured from ground level at the base of the stack.</p>
II.A.8	<p><b>Baghouse - STK 4</b> East Day Bin and East Furnace Baghouse: (STK-4)</p> <p>Manufacturer: Flex Kleen (Dust Collector A) A:C Ratio: 1.69 Maximum Flow Rate: 7,300 acfm Minimum Filter Area: 4,312 square feet</p> <p>Baghouse Stack Height (STK-4) - 60 ft minimum as measured from ground level at the base of the stack. Baghouse serves as a control device for East Day Bin and Furnace and vents through STK-4.</p>
II.A.9	<p><b>Baghouse - STK 4</b> West Day Bin and West Furnace Baghouse (STK-4)</p> <p>Manufacturer: Flex Kleen (Dust Collector B) A:C Ratio: 1.69 Maximum Flow Rate: 7,300 acfm Minimum Filter Area: 4,312 square feet</p> <p>Baghouse Stack Height (STK-4) - 60 ft minimum as measured from ground level at the base of the stack. Baghouse serves as a control device for West Day Bin and Furnace and vents through STK-4.</p>

<p>II.A.10</p>	<p><b>Baghouse - STK 7</b>  Raw Material Handling - Soda Ash Silo (STK-7)</p> <p>Manufacturer: Modu-Kleen  A:C Ratio: 8:1  Maximum Flow Rate: 1250 acfm  Minimum Filter Area: 500 square feet</p> <p>Baghouse Stack Height (STK-7) - 125 ft minimum as measured from ground level at the base of the stack.</p>
<p>II.A.11</p>	<p><b>Baghouse - STK 8</b>  Raw Material Handling - Dolomite Silo (STK-8)</p> <p>Manufacturer: Modu-Kleen  A:C Ratio: 8:1  Maximum Flow Rate: 1250 acfm  Minimum Filter Area: 500 square feet</p> <p>Baghouse Stack Height (STK-8) - 125 ft minimum as measured from ground level at the base of the stack.</p>
<p>II.A.12</p>	<p><b>Baghouse - STK 9</b>  Raw Material Handling - Borax Silo (STK-9)</p> <p>Manufacturer: Modu-Kleen  A:C Ratio: 8:1  Maximum Flow Rate: 1250 acfm  Minimum Filter Area: 500 square feet</p> <p>Baghouse Stack Height (STK-9) - 125 ft minimum as measured from ground level at the base of the stack.</p>
<p>II.A.13</p>	<p><b>Baghouse - STK 10</b>  Batch House Weigh Hopper and Furnace Dust Silo Baghouse (STK-10)</p> <p>Manufacturer: Flex Kleen  A:C Ratio: 3.15  Maximum Flow Rate: 2,500 acfm  Minimum Filter Area: 792 square feet</p> <p>Baghouse Stack Height (STK 10): 35 ft minimum as measured from ground level at the base of the stack. Baghouse serves as a control device for Batch House Weigh Hopper and Furnace Dust Silo Baghouse and vents through STK-10.</p>
<p>II.A.14</p>	<p><b>Venturi Scrubber - STK 1</b>  Wet Venturi Scrubber: Bonded Forming Zone A</p> <p>Maximum Air Flowrate: 60,000 acfm  Minimum Liquid Recirculation Flowrate: 175 gallons/min (gal/min)</p> <p>Scrubber Stack Height (STK-1): 120 ft minimum as measured from ground level at the base of the stack.</p>

II.A.15	<p>Venturi Scrubber - STK 1 Wet Venturi Scrubber: Bonded Forming Zone B</p> <p>Maximum Air Flowrate: 50,000 acfm Minimum Liquid Recirculation Flowrate: 175 gal/min</p> <p>Scrubber Stack Height (STK-1): 120 ft minimum as measured from ground level at the base of the stack.</p>
II.A.16	<p>Venturi Scrubber - STK 1 Wet Venturi Scrubber: Bonded Forming Zone C</p> <p>Maximum Air Flowrate: 66,000 acfm Minimum Liquid Recirculation Flowrate: 175 gal/min</p> <p>Scrubber Stack Height (STK-1): 120 ft minimum as measured from ground level at the base of the stack.</p>
II.A.17	<p>Venturi Scrubber - STK 1 Wet Venturi Scrubber: Bonded Forming Zone D</p> <p>Maximum Air Flowrate: 70,000 acfm Minimum Liquid Recirculation Flowrate: 175 gal/min</p> <p>Scrubber Stack Height (STK-1): 120 ft minimum as measured from ground level at the base of the stack.</p>
II.A.18	<p>Packed Column Scrubber - STK-11 Packed Column Scrubber: Bonded Line Curing Oven (19.4 MMBtu/hr, ULNB)</p> <p>Maximum Air Flowrate: 26,250 scfm Maximum Liquid Recirculation Flowrate: 400 gal/min</p>
II.A.19	<p>Venturi Scrubber - STK-12 Venturi Scrubber: Bonded Line Cooling Area</p> <p>Maximum Air Flowrate: 26,250 scfm Maximum Liquid Recirculation Flowrate: 400 gal/min</p>
II.A.20	<p>Venturi Scrubber - STK 1 Wet Venturi Scrubber: PDL</p> <p>Maximum Air Flowrate: 33,000 acfm Minimum Liquid Recirculation Flowrate: 130 gal/min</p> <p>Scrubber Stack Height (STK-1): 120 ft minimum as measured from ground level at the base of the stack.</p>
II.A.21	<p>Silo One (1) Soda Ash Silo: Controlled by Baghouse (STK-7)</p>
II.A.22	<p>Silo One (1) Dolomite Silo: Controlled by Baghouse (STK-8)</p>
II.A.23	<p>Silo One (1) Borax Silo: Controlled by Baghouse (STK-9)</p>

II.A.24	<b>Silo</b> One (1) Sand Silo: Controlled by Baghouse (STK-2)
II.A.25	<b>Silo</b> One (1) Plant Cullet Silo: Controlled by Baghouse (STK-2)
II.A.26	<b>Silo</b> One (1) Sand Silo: Controlled by Baghouse (STK-3)
II.A.27	<b>Silo</b> One (1) Post Consumer Purchased Cullet Silo: Controlled by Baghouse (STK-3)
II.A.28	<b>Silo</b> One (1) Furnace Dust Bin/Silo: Controlled by Baghouse (STK-10)
II.A.29	<b>Vegetable Oil Tank</b> Vegetable Oil Tank  Capacity: 8,500 gallons Tank Type: Vertical Fixed Roof
II.A.30	<b>Weigh Hopper and Mixer</b> Batch House Weigh Hopper and Mixer: Controlled by Baghouse (STK 10)
II.A.31	<b>Binder Mixing Tanks</b> Various mixing tanks to prepare binder materials from raw materials.
II.A.32	<b>Cooling Towers</b> Various circulated cooling water systems, which include induced draft cooling towers.
II.A.33	<b>Emergency Equipment</b> Diesel Fired Emergency Generator - 223 kW Manufacture Date - 2014  Diesel Fired Emergency Generator - 900 hp (NEW) Manufacture Date - 1995 NSPS III  Fire Pump Engine - 226 hp (NEW) Manufacture Date - 2014 NSPS III
II.A.34	<b>Diesel Storage Tanks</b> Storage Tanks
II.A.35	<b>East Furnace</b> Cold Top Electric Furnace: Emission Point - STK 4
II.A.36	<b>West Furnace</b> Cold Top Electric Furnace: Emission Point - STK 4
II.A.37	<b>Electric Fore Hearths</b>
II.A.38	<b>Ink Jet Printer</b>
II.A.39	<b>Auto Baggers</b>

## 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      REQUIREMENTS AND LIMITATIONS**

II.B.1	<b>Site-Wide Requirements</b>
II.B.1.a	<p>Visible emissions from the following emission points shall not exceed the following values:</p> <ul style="list-style-type: none"> <li>A. All exhaust streams vented through STK-1 (natural gas combustion and wet scrubbers) - 15% opacity</li> <li>B. All remaining natural gas combustion exhaust streams - 10% opacity</li> <li>C. All wet scrubbers - 15% opacity</li> <li>D. All baghouse/bin vents - 10% opacity</li> <li>E. All diesel engines - 20% opacity</li> <li>F. All other points - 20% opacity.</li> </ul> <p>[R307-401-8]</p>
II.B.1.a.1	Opacity Observation of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9. [R307-401-8]
II.B.1.b	The consumption limit of 306 MMscf of natural gas consumed per rolling 12-month period shall not be exceeded. [R307-401-8]
II.B.1.c	The owner/operator shall not exceed 4,500 tons per year of binder solid for bonded fiberglass production. [R307-401-8]
II.B.1.d	When the PDL is operating, the owner/operator shall proportionally reduce the production on the existing bonded line at any given time. The PDL's channel and forehearth network shall be sealed and electrically heated. [R307-401-8]
II.B.1.d.1	Records of PDL operation shall be kept for all periods when the owner/operator facility is in operation. Bonded line reductions shall be kept demonstrating that reduced glass pulled across the bonded line equipment is equivalent to the glass pulled across the PDL equipment. The records of PDL operation shall be kept on a daily basis. Supervisor monitoring and maintaining an operations log shall determine equivalency between the bonded and PDL line operations. [R307-401-8]
II.B.1.e	The owner/operator shall use natural gas as fuel in all on-site equipment with the exception of the emergency equipment which shall use fuel oil or diesel as fuel. [R307-401-8]
II.B.1.e.1	Records of natural gas consumption shall be kept for all periods when the owner/operator facility is in operation. Consumption of natural gas and fuel oils shall be determined by examination of each fuel supplier's billing records. The records of consumption shall be kept on a monthly basis. [R307-401-8]

II.B.2	<b>Scrubber and Baghouse Limitations and Test Procedures</b>						
II.B.2.a	<p>Emissions to the atmosphere at all times from the indicated emission point shall not exceed the following rates and concentrations:</p> <p>Source: Wet Venturi Scrubbers STK-1 (only)</p> <table border="0"> <thead> <tr> <th data-bbox="347 373 464 401"><b>Pollutant</b></th> <th data-bbox="537 373 764 401"><b>lb/ton glass pulled</b></th> <th data-bbox="850 373 915 401"><b>lb/hr</b></th> </tr> </thead> <tbody> <tr> <td data-bbox="347 432 464 459">PM/PM<sub>10</sub></td> <td data-bbox="537 432 591 459">3.49</td> <td data-bbox="850 432 915 459">16.39</td> </tr> </tbody> </table> <p>[R307-401-8]</p>	<b>Pollutant</b>	<b>lb/ton glass pulled</b>	<b>lb/hr</b>	PM/PM <sub>10</sub>	3.49	16.39
<b>Pollutant</b>	<b>lb/ton glass pulled</b>	<b>lb/hr</b>					
PM/PM <sub>10</sub>	3.49	16.39					
II.B.2.a.1	<p>Stack testing to show compliance with the emission limitations stated in the above condition shall be performed as specified below:</p> <p>A. Emissions Point Test  Pollutant Frequency  PM/PM<sub>10</sub> @ Source: (Wet Venturi Scrubbers STK-1)</p> <p>B. Testing Status  @ Test every two (2) years. The Director may require testing at any time.</p> <p>[R307-401]</p>						
II.B.2.a.2	<p>Stack Testing Requirements</p> <p><b>Notification</b>  At least 30 days prior to conducting a stack test, the owner/operator shall submit a source test protocol to the Director. The source test protocol shall include the items contained in R307-165-3. If directed by the Director, the owner/operator shall attend a pretest conference.</p> <p><b>Testing &amp; Test Conditions</b>  The owner/operator shall conduct testing according to the approved source test protocol and according to the test conditions contained in R307-165-4. [R307-165-4, R307-401-8]</p> <p><b>Access</b>  The owner/operator shall provide Occupational Safety and Health Administration (OSHA)- or Mine Safety and Health Administration (MSHA)-approved access to the test location.</p> <p><b>Reporting</b>  No later than 60 days after completing a stack test, the owner/operator shall submit a written report of the results from the stack testing to the Director. The report shall include validated results and supporting information.</p> <p><b>Possible Rejection of Test Results</b>  The Director may reject stack testing results if the test did not follow the approved source test protocol or for a reason specified in R307-165-6.</p> <p><b>Particulate Matter (PM/PM<sub>10</sub>)</b>  40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate, or other EPA-approved testing methods acceptable to the Director.</p> <p>[R307-165-6, R307-401]</p>						

<p>II.B.2.b</p>	<p>The following operating parameters shall be maintained and monitored within the indicated ranges:</p> <p>A. Wet Venturi Scrubbers - STK-1</p> <ol style="list-style-type: none"> <li>1) The pressure drop across each of the five (5) scrubbers shall not be less than one (1) inch of water column or more than eleven (11) inches of water column.</li> <li>2) The liquid flow rate of each of the four (4) Zone wet venturi scrubbers (Zone A thru D) shall not be less than 175 gallons per minute (gpm) or more than 500 gpm.</li> <li>3) The pressure drop across the PDL wet venturi scrubber shall not be less than one (1) inch of water column or more than eleven (11) inches of water column.</li> <li>4) The liquid flow rate of the PDL wet venturi scrubber shall not be less than 130 gpm or more than 330 gpm.</li> <li>5) The pressure drop across the Bonded scrubbers (STK-11 and STK-12) shall not be less than one (1) inch of water column or more than eleven (11) inches of water column.</li> <li>6) The liquid flow rate of the Bonded scrubbers (STK-11 and STK-12) shall not be less than 130 gpm or more than 400 gpm.</li> <li>7) Each scrubbers operating parameters shall be monitored with equipment located such that an inspector/operator can safely read the output at any time. The equipment shall have manufacturer operating range.</li> </ol> <p>B. All Baghouses - STK-2, STK-3, STK-4, STK-7, STK-8, STK-9, and STK-10</p> <ol style="list-style-type: none"> <li>1) The pressure drop of each of the baghouses shall not be less than two (2) inches of water column or more than six (6) inches of water column.</li> <li>2) The baghouse operating parameters shall be monitored with equipment located such that an inspector/operator can safely read the output at any time. The readings shall be accurate to within the following ranges: <ol style="list-style-type: none"> <li>a) Pressure drop - Plus or minus 1.0 inches of water column for all baghouses</li> </ol> <p>All instruments shall be calibrated according to the manufacturer's instructions.</p> </li> </ol> <p>[40 CFR 60 Subpart PPP, R307-401-8]</p>
<p>II.B.2.b.1</p>	<p>Daily records of scrubber liquid flow rate and pressure drop readings shall be maintained. The instrument shall be inspected for functionality, replaced, or calibrated during scheduled maintenance per Manufacturer's recommendations. [R307-401-8]</p>
<p>II.B.2.b.2</p>	<p>Daily recording of the reading of the scrubber flow rates and pressure drop is required. The scrubber flow rates and pressure drop shall be monitored with an indicator located such that an inspector/operator can safely read the output at any time. [R307-401-8]</p>
<p>II.B.3</p>	<p><b>Emergency Generator Limitations</b></p>
<p>II.B.3.a</p>	<p>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]</p>

II.B.3.a.1	<p>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:</p> <ul style="list-style-type: none"> <li>A. The date the emergency engine was used</li> <li>B. The duration of operation in hours</li> <li>C. The reason for the emergency engine usage.</li> </ul> <p>[40 CFR 63 Subpart ZZZZ]</p>
II.B.3.a.2	<p>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]</p>
II.B.3.b	<p>Emergency generator operations for testing and maintenance shall be limited to 30 minutes per clock hour. Testing and maintenance shall be conducted between 9:00 am to 4:00 pm. [R307-401-8]</p>
II.B.3.c	<p>The owner/operator shall only use diesel fuel (e.g., fuel oil #1, #2, or diesel fuel oil additives) as fuel in the emergency engine. [R307-401-8]</p>
II.B.3.c.1	<p>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. [R307-401-8]</p>
II.B.3.c.2	<p>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]</p>
II.B.3.c.3	<p>The owner/operator shall limit the use of the emergency generators engine and fire pump engine to the following:</p> <ul style="list-style-type: none"> <li>A. The owner/operator shall only test one (1) emergency use engine at a time.</li> <li>B. The owner/operator shall not test the 900 hp Cummins emergency engine (II.A.34) prior to 9:00 am nor after 4:00 pm.</li> </ul> <p>[R307-410]</p>

### 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-AN141780008-23 dated April 6, 2023  
Notice of Intent Document dated February 29, 2024  
Additional Information dated August 15, 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 <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