



State of Utah

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Department of
Environmental Quality

Kimberly D. Shelley
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQE-IN160480002-25

January 14, 2025

Kirk Petersen
Geneva Pipe Company
1465 West 400 North
Orem, UT 84057
jfraughton@genevapipe.com

Dear Mr. Petersen:

Re: Intent to Approve: Modification to Approval Order DAQE-AN160480001-22 to Update
Operations and Add New Equipment and Processes
Project Number: N160480002

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, **Mr. Enqiang He**, as well as the DAQE number as shown on the upper right-hand corner of this letter. Mr. Enqiang He, can be reached at (801) 556-1580 or ehe@utah.gov, if you have any questions.

Sincerely,

Alan D. Humpherys, Manager
New Source Review Section

ADH:EH:jg

cc: Utah County Health Department

STATE OF UTAH
Department of Environmental Quality
Division of Air Quality

INTENT TO APPROVE
DAQE-IN160480002-25
Modification to Approval Order DAQE-AN160480001-22 to Update
Operations and Add New Equipment and Processes

Prepared By
Mr. Enqiang He, Engineer
(801) 556-1580
ehe@utah.gov

Issued to
Geneva Pipe Company - Orem Pipe Fabrication Operation

Issued On
January 14, 2025

A handwritten signature in black ink, appearing to read "Alan D. Humpherys", with a stylized, cursive script.

New Source Review Section Manager
Alan D. Humpherys

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GENERAL INFORMATION

CONTACT/LOCATION INFORMATION

Owner Name

Geneva Pipe Company

Source Name

Geneva Pipe Company - Orem Pipe Fabrication
Operation

Mailing Address

1465 West 400 North
Orem, UT 84057

Physical Address

1465 West 400 North
Orem, UT 84057

Source Contact

Name: Justin Fraughton
Phone: (801) 494-0090
Email: jfraughton@genevapipe.com

UTM Coordinates

437,908 m Easting
4,461,787 m Northing
Datum NAD83
UTM Zone 12

SIC code 3272 (Concrete Products, Except Block & Brick)

SOURCE INFORMATION

General Description

Geneva Pipe Company (GPC) operates a pre-cast concrete pipe facility in Orem in Utah County for storm drain/sanitary sewer systems. Production processes include two (2) concrete batch plants, a form manufacturing process, hand-rolled coating operations, expanded polystyrene hot wiring and grinding, and manual fiberglass grinding. GPC also utilizes natural gas combustion equipment in the pipe-making processes.

NSR Classification

Minor Modification at Minor Source

Source Classification

Located in Southern Wasatch Front O3 NAA, Salt Lake City UT PM_{2.5} NAA
Utah County
Airs Source Size: B

Applicable Federal Standards

None

Project Description

GPC has requested to install and operate the following new equipment and processes:

1. The EPS hotwire operations;
2. The EPS grinding, vacuum, silo, and compactor;
3. The hand-rolled coating;
4. The manual fiberglass sanding operations with a dust collector, and
5. Two (2) parts washers.

In addition, GPC has updated the following:

1. Annual production rates are decreased from 45,000 to 36,000 cubic yards for the Lower Concrete Batch Plant and from 14,000 to 12,000 cubic yards for the Upper Concrete Batch Plant.
2. The emission calculation methodology to calculate HAP emissions for the Fiberglass Reinforced Plastic (FRP) form manufacturing process.
3. PM, VOC, and styrene emissions as a result of updated SDS.
4. Haul road emissions as new vehicles, new parameters, and control efficiencies are used.
5. Cleaning and coating throughputs.

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	2449.00
Carbon Monoxide	0	1.71
Nitrogen Oxides	0	2.04
Particulate Matter - PM ₁₀	-0.02	4.96
Particulate Matter - PM _{2.5}	0.44	1.35
Sulfur Dioxide	0	0.01
Volatile Organic Compounds	-0.60	9.01

Hazardous Air Pollutant	Change (lbs/yr)	Total (lbs/yr)
Styrene (CAS #100425)	-4235	13719
	Change (TPY)	Total (TPY)
Total HAPs	-2.12	6.86

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 Daily Herald on January 16, 2025. 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]
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

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	The Orem Facility Pre-Cast Concrete Pipe Plants
II.A.2	Lower Concrete Batch Plant Rated at 15.6 cubic yards (cy)/hr Including the following: One (1) fly ash silo (57k lbs capacity) with a baghouse One (1) cement storage silo (220k lbs capacity) with a baghouse One (1) cement and (1) fly ash conveyor system One (1) coarse storage bin rated at 15 cy Three (3) sand storage bins rated at 25 cy each One (1) fine storage bin rated at 15 cy One (1) aggregate conveying system One (1) bucket elevator rated at 62,400 lb/hr One (1) mixer rated at 1.3 cy
II.A.3	Upper Concrete Batch Plant Rated at 24 cy/hr Including the following: One (1) fly ash silo (107k lbs capacity) with a baghouse One (1) cement storage silo (220k lbs capacity) with a baghouse One (1) cement and one (1) fly ash conveyor system One (1) coarse storage bin rated at 15 cy One (1) sand storage bin rated at 25 cy One (1) fine storage bin rated at 15 cy One (1) aggregate conveyor system One (1) bucket elevator rated at 96,000 lb/hr One (1) mixer rated at 2 cy Misc. admixture storage totes
II.A.4	One (1) Polyurea Spray Booth Airless spray guns Controlled with dry filter pads
II.A.5	One (1) Fiberglass Reinforced Plastic Spray Booth Chop guns Controlled with dry filter pads
II.A.6	Two (2) Natural Gas-Fired Boilers Rated at 5 and 7 MMBtu/hr
II.A.7	Various Natural Gas-Fired Combustion Devices Including boilers, heaters, furnaces, and steamers Rated less than 5.0 MMBtu/hr each Included for information purposes only

II.A.8	Fiberglass Sanding Operations - new Including a power sander and a hand-sanding machine Sanding operations are controlled with filters
II.A.9	Expanded Polystyrene (EPS) Hot Wire Cutting - new
II.A.10	EPS Grinding, Vacuum, and Compactor - new
II.A.11	Hand-Rolled Coating Operations - new
II.A.12	Two (2) Parts Washers - new
II.A.13	Misc. Welding Activities

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	Site-Wide Requirements
II.B.1.a	Unless otherwise specified in this AO, the owner/operator shall not allow visible emissions from any source on site to exceed 20% opacity. [R307-401-8]
II.B.1.a.1	Unless otherwise specified in this AO, opacity observations of visible emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-401-8]
II.B.1.b	<p>The owner/operator shall not allow visible emissions to exceed the following opacity limits:</p> <ul style="list-style-type: none"> A. Any spray booth exhaust point - 10% B. Any natural gas combustion equipment - 10% C. Fiberglass reinforced plastic (FRP) sanding operations - 10% D. Expanded polystyrene (EPS) hot wire cutting - 10%. <p>[R307-401-8]</p>
II.B.2	Lower and Upper Concrete Batch Plant Requirements
II.B.2.a	<p>The owner/operator shall not produce more than the following:</p> <ul style="list-style-type: none"> A. 36,000 cubic yards of concrete per rolling 12-month period in the Lower Concrete Batch Plant; B. 12,000 cubic yards of concrete per rolling 12-month period in the Upper Concrete Batch Plant. <p>[R307-401-8]</p>

II.B.2.a.1	<p>The owner/operator shall:</p> <ul style="list-style-type: none"> A. Determine production with production records B. Record production on a daily basis C. Use the production 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 production records for all periods the plant is in operation. <p>[R307-401-8]</p>
II.B.2.b	The owner/operator shall pneumatically load the cement and fly ash into the silos. A baghouse shall control emissions from each of the cement and fly ash silos. [R307-401-8]
II.B.2.c	The owner/operator shall not allow visible emissions from the concrete batch plants to exceed 7% opacity. [R307-312-4]
II.B.3	All Haul Roads and Fugitive Dust Source Requirements
II.B.3.a	The owner/operator shall comply with the most recent FDCP consistent with R307-309-6. [R307-309-6, R307-401-8]
II.B.3.b	The owner/operator shall not allow visible emissions from haul roads and fugitive dust sources to exceed 20% opacity on site and 10% at the property boundary. [R307-309-5]
II.B.3.b.1	Visible emission determinations for fugitive dust from haul roads and operational areas shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-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 one-half vehicle length behind the vehicle and not less than one-half the height of the vehicle. [R307-309-5]
II.B.3.c	<p>The owner/operator shall not exceed the following haul road limits:</p> <ul style="list-style-type: none"> A. 1,320 ft. of unpaved haul roads B. 5,400 ft. of total haul roads. <p>[R307-401-8]</p>
II.B.3.c.1	To determine compliance with the length of the haul roads, the owner/operator shall measure the total length of the haul truck routes using aerial photographs, land surveys, or on-site measurements. [R307-401-8]
II.B.3.d	The owner/operator shall use water application on all unpaved haul roads to maintain the opacity limits listed in this AO. [R307-401-8]

II.B.3.d.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"> A. Date of treatment B. Number of treatments made and quantity C. Rainfall received, if any, and approximate amount D. Time of day treatments were made E. Records of temperature if the temperature is below freezing. <p>[R307-401-8]</p>
II.B.3.e	The owner/operator shall periodically water spray and sweep the paved haul roads on site to meet the opacity limits in this AO. [R307-401-8]
II.B.3.e.1	<p>The owner/operator shall maintain records of cleaning the paved roads for all periods when the plant is in operation. The records shall include:</p> <ul style="list-style-type: none"> A. Date of cleaning B. Number of sweep/water sprays made C. Rainfall received, if any, and approximate amount, and D. Time of day sweeping/spray were made. <p>[R307-401-8]</p>
II.B.3.f	The owner/operator shall apply water to all storage piles on site to control fugitive emissions. Water shall be applied as required to maintain the opacity limit listed in this AO when the temperature is above freezing. [R307-401-8]
II.B.3.g	The owner/operator shall not exceed 1 acre of combined area occupied by all storage piles. [R307-401-8]
II.B.3.g.1	To determine compliance with the total acres of the storage piles, the owner/operator shall measure the total area of the storage piles at least once every six (6) months and shall maintain a record of the total acres of the storage piles. To determine the acres of the storage piles on site, the owner/operator shall use a handheld GPS or aerial photographs to measure each of the storage piles on site. [R307-401-8]
II.B.3.g.2	<p>Records of the total acres of the storage piles shall contain the following:</p> <ul style="list-style-type: none"> A. Date of measurements B. Size of each storage pile on site C. Total acres of all storage piles combined. <p>[R307-401-8]</p>
II.B.4	Form Manufacturing Requirements
II.B.4.a	The owner/operator shall control emissions from the spray booths and the fiberglass-reinforced plastic sanding operations with particulate filters at all times. [R307-401-8]

II.B.4.b	<p>The owner/operator shall not emit more than the following from the form manufacturing processes and hand-rolled coating operations on site:</p> <p>8.87 tons per rolling 12-month period of VOCs</p> <p>6.86 tons per rolling 12-month period of styrene</p> <p>6.86 tons per rolling 12-month period of all HAPs combined (including styrene).</p> <p>[R307-401-8]</p>
II.B.4.b.1	<p>The owner/operator shall calculate a new 12-month total by the 20th day of each month using data from the previous 12 months. The owner/operator shall use a mass-balance method to calculate emissions from evaporative sources. The owner/operator may use the following equations with applicable units to comply with the mass-balance method:</p> <p>VOCs = [% VOCs by Weight/100] x [Density] x [Volume Consumed]</p> <p>HAP = [% HAP by Weight/100] x [Density] x [Volume Consumed]</p> <p>[R307-401-8]</p>
II.B.4.b.2	<p>The owner/operator shall use a mass-balance method to quantify any amount of VOCs and HAPs reclaimed. The owner/operator shall subtract the amount of VOCs and HAPs reclaimed from the quantities calculated above to provide the monthly total emissions of VOCs and HAPs.</p> <p>[R307-401-8]</p>
II.B.4.b.3	<p>The owner/operator shall keep records each month of the following:</p> <ul style="list-style-type: none"> A. The name (as per SDS) of the VOC- and HAP-emitting material B. The maximum percent by weight of VOCs and each HAP in each material used C. The density of each material used D. The volume of each VOC- and HAP-emitting material used E. The amount of VOCs and the amount of each HAP emitted from each material F. The amount of VOCs and the amount of each HAP reclaimed and/or controlled from each material G. The total amount of VOCs, the total amount of each HAP, and the total amount of all HAPs combined emitted from all materials (in tons). <p>[R307-401-8]</p>
II.B.4.c	<p>The owner/operator shall vent EPS grinding operations through a vacuum collection system. The collection system shall vent to the inside of the building. [R307-401-8]</p>
II.B.4.d	<p>The owner/operator shall comply with R307-304, Solvent Cleaning; R307-325, Ozone Nonattainment and Maintenance Areas: General Requirements; and R307-335, Degreasing. [R307-304, R307-325, R307-335]</p>
II.B.5	<p>Natural Gas Consumption Requirements</p>
II.B.5.a	<p>The owner/operator shall not consume more than 32.6 MMSCF of natural gas per rolling 12-month period. [R307-401-8]</p>

II.B.5.a.1	<p>The owner/operator shall:</p> <ul style="list-style-type: none"> A. Determine consumption with monthly bill statements from a utility company B. Record consumption on a monthly basis C. Use the consumption 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 natural gas consumption records for all periods the plant is in operation. <p>[R307-401-8]</p>
II.B.6	Limitation on Welding Activities
II.B.6.a	The owner/operator shall not consume more than 1.2 tons of welding materials per rolling 12-month period. [R307-401-8]
II.B.6.a.1	<p>The owner/operator shall:</p> <ul style="list-style-type: none"> A. Determine production with vendor receipts B. Record consumption on a monthly basis C. Use the consumption 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 consumption records for all periods the plant is in operation. <p>[R307-401-8]</p>

PERMIT HISTORY

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

Supersedes
 Incorporates
 Incorporates
 Incorporates

AO DAQE-AN160480001-22 dated April 7, 2022
 NOI dated March 8, 2024
 Additional information dated August 8, 2024
 Additional information 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 ₂ e	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