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-IN157930004-23

May 1, 2023

Natalie Anderson
CertainTeed, LLC
1330 West 400 North
Orem, UT 84057
Natalie.B.Anderson@Saint-Gobain.com

Dear Ms. Anderson:

Re: Intent to Approve:
Modification to Approval Order DAQE-AN157930003-20 to Change the Emissions from Internally Venting Baghouses into Externally Venting Baghouses
Project Number: N157930004

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. Tim DeJulis,** as well as the DAQE number as shown on the upper right-hand corner of this letter. Mr. Tim DeJulis, can be reached at (385) 306-6523 or tdejulis@utah.gov, if you have any questions.

Sincerely,

Alan D. Humpherys, Manager
New Source Review Section

ADH:TD:jg

cc: Utah County Health Department

STATE OF UTAH
Department of Environmental Quality
Division of Air Quality

INTENT TO APPROVE
DAQE-IN157930004-23
Modification to Approval Order DAQE-AN157930003-20 to Change the Emissions from Internally Venting Baghouses into Externally Venting Baghouses

Prepared By
Mr. Tim DeJulis, Engineer
(385) 306-6523
tdejulis@utah.gov

Issued to
CertainTeed, LLC - Polyethylene Fence Manufacturer

Issued On
May 1, 2023

New Source Review Section Manager
Alan D. Humpherys

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GENERAL INFORMATION

CONTACT/LOCATION INFORMATION

Owner Name
CertainTeed, LLC

Source Name
CertainTeed, LLC - Polyethylene Fence Manufacturer

Mailing Address
1330 West 400 North
Orem, UT 84057

Physical Address
1330 West 400 North
Orem, UT 84057

Source Contact
Name Natalie Anderson
Phone (801) 655-5236 Ext 306
Email Natalie.B.Anderson@Saint-Gobain.com

UTM Coordinates
438,137 m Easting
4,461,928 m Northing
Datum NAD83
UTM Zone 12

SIC code 3089 (Plastics Products, NEC)

SOURCE INFORMATION

General Description
This plant makes fence posts and panels in an assembly line, 24 hours a day, 365 days a year. The process begins with raw polyethylene pellets. These pellets are then combined with a custom colorant and then fed into a pulverizer process. This blend is then placed into the casings of each mold, producing the fencing. A small amount of molding agent is applied to each mold, each mold is filled with plastic to form the fence pieces, and then the mold is sent through a natural gas-fired oven. The product is allowed to cool and then the mold is taken off the fencing. Steel is placed into the fencing during or after the molding; the molding agent is cleaned off; and the production is finished.

NSR Classification
Minor Modification at Minor Source

Source Classification
Located in Southern Wasatch Front O3 NAA, Provo UT $PM_{2.5}$ NAA
Utah County
Airs Source Size: B

Applicable Federal Standards
None

Project Description
CertainTeed, LLC has requested a modification to Approval Order DAQE-AN157930003-20, dated January 29, 2020, to change the $PM_{10}/PM_{2.5}$ emissions from internally venting baghouses to externally venting baghouses.

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	24104.00
Carbon Monoxide	0	16.80
Nitrogen Oxides	0	9.86
Particulate Matter - PM_{10}	0.71	2.54
Particulate Matter - $PM_{2.5}$	0.71	2.36
Sulfur Dioxide	0	0.12
Volatile Organic Compounds	0	3.94

Hazardous Air Pollutant	Change (lbs/yr)	Total (lbs/yr)
Formaldehyde (CAS #50000)	0	30
Hexane (CAS #110543)	0	720
	Change (TPY)	**Total (TPY)**
Total HAPs	0	0.38

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 May 3, 2023. 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	**CertainTeed, LLC - SimTek Fence** Polyethylene Fence Manufacturing Plant
II.A.2	**Blending/Transfer Operations** Blending Processes Transfer Processes
II.A.3	**Pulverizers and Grinder** Three (3) Pulverizers Control device: baghouse Capacity: 2,500 acfm each One (1) Grinder Control device: baghouse Capacity: 1,754 acfm

II.A.4	**Baghouse** Two (2) Baghouses Flow rate: 1,780 scfm each
II.A.5	**Cooling Tower** One (1) Cooling Tower Capacity: 105 gallons per minute TDS: 500 ppm
II.A.6	**Various Ovens** Twelve (12) Ovens Roto 1 - Capacity: 0.23 MMBtu/hr Roto 2 - Capacity: 1.89 MMBtu/hr Roto 3 - Capacity: 0.94 MMBtu/hr Roto 3M - Capacity: 2.19 MMBtu/hr Roto 4 and Roto 6 - Capacity: 1.87 MMBtu/hr each Roto 4M and Roto 6M - Capacity: 3.62 MMBtu/hr each Roto 5 - Capacity: 1.83 MMBtu/hr Roto 5M - Capacity: 2.92 MMBtu/hr Curing oven stack 1 and stack 2 - Capacities: four (4) ovens at 0.50 MMBtu/hr each (two (2) MMBtu/hr total) Fuel: natural gas

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	**Limitations and Requirements**
II.B.1.a	The owner/operator shall not allow visible emissions from the source or the associated control facilities to exceed 10% opacity. [R307-401-8]
II.B.1.a.1	Opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9. [R307-401-8]
II.B.2	**Fuel Requirements**
II.B.2.a	The owner/operator shall only use natural gas as fuel in the ovens. [R307-401-8]
II.B.3	**VOC & HAP Requirements**
II.B.3.a	The owner/operator shall not emit more than the following from evaporative sources on site: 3.94 tons per rolling 12-month period of VOCs 30 pounds per rolling 12-month period of formaldehyde [R307-401-8]

II.B.3.a.1	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: VOCs = [% VOCs by Weight/100] x [Density] x [Volume Consumed] HAP = [% HAP by Weight/100] x [Density] x [Volume Consumed] [R307-401-8]
II.B.3.a.2	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. [R307-401-8]
II.B.3.a.3	The owner/operator shall keep records each month of the following: 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). [R307-401-8]
II.B.4	**Baghouse Requirements**
II.B.4.a	The owner/operator shall control emissions from the pulverize area and the grinder area with two (2) baghouses. [R307-401-8]
II.B.4.b	The owner/operator shall not allow visible emissions from the baghouse to exceed 10% opacity. [R307-401-8]
II.B.4.c	The owner/operator shall install a manometer or magnehelic pressure gauge to measure the static pressure differential pressure across the baghouse. [R307-401-8]
II.B.4.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.4.c.2	The pressure gauge shall measure the static pressure differential in 1-inch water column increments or less. [R307-401-8]
II.B.4.d	The owner/operator shall maintain the static pressure differential across the baghouse between 3.0 and 5.0 inches of water column. [R307-401-8]
II.B.4.d.1	The owner/operator shall record the static pressure differential at least once per operating day while the baghouse is operating. [R307-401-8]

II.B.4.d.2	The owner/operator shall maintain the following records of the static pressure differential: A. Unit identification; B. Weekly static pressure differential drop readings; C. Date of reading. [R307-401-8]
II.B.4.e	At least once every 12 months, the owner/operator shall calibrate the pressure gauge in accordance with the manufacturer's instructions or replace the pressure gauge. [R307-401-8]
II.B.4.e.1	The owner/operator shall maintain records of the pressure gauge calibrations and replacements. [R307-401-8]
II.B.5	**Stack Height Requirements**
II.B.5.a	The owner/operator shall have or exceed the following stack heights measured above the ground: ROTO 1 47 feet ROTO 2 47 feet ROTO 3 47 feet ROTO 3M 47 feet ROTO 4 41 feet ROTO 4M 47 feet ROTO 5 41 feet ROTO 5M 47 feet ROTO 6 35 feet ROTO 6M 47 feet CURING OVEN STACK 1 38 feet CURING OVEN STACK 2 38 feet [R307-401-8, R307-410-4]

PERMIT HISTORY

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

Supersedes	AO DAQE-AN157930003-20 dated January 29, 2020
Is Derived From	NOI dated December 1, 2022

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_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