



Louisville Metro Air Pollution Control District
 701 West Ormsby Avenue, Suite 303
 Louisville, Kentucky 40203-3137



June 2, 2021

**Title V Construction Permit C-0036-1000-15-V(R3)
 Statement of Basis**

Source: Clariant Corporation-West Plant
 1227 South 12th Street
 Louisville, KY 40232

Owner: Clariant Corporation
 4000 Monroe Road
 Charlotte, NC 28205

Application Documents: See Table I-7

Effective Date: June 2, 2021

Expiration Date: June 30, 2022

Permitting Engineer: Jessica Murray

Permit Number: C-0036-1000-15-V(R3)

Plant ID: 0036

SIC: 2819

NAICS: 325188

Introduction:

This permit will be issued pursuant to District Regulation 2.03, Authorization to Construct or Operate; Demolition/Renovation Notices and Permit Requirements. Its purpose is to provide methods of determining continued compliance with all applicable requirements.

This construction permit revision allows for the reclassification of the condensers E610.40, E624.40, and E626.40 as inherent process equipment and for the flare, PU628, to be the primary control device.

Jefferson County is classified as an attainment area for lead (Pb), nitrogen dioxide (NO₂), carbon monoxide (CO), particulate matter less than 10 microns (PM₁₀), particulate matter less than 2.5 microns (PM_{2.5}), and sulfur dioxide (SO₂). Jefferson County is classified as a nonattainment area for ozone (O₃).

Application Type/Permit Activity:

- Initial Issuance
- Permit Revision
 - Administrative
 - Minor
 - Significant
- Permit Renewal

Compliance Summary:

- Compliance certification signed
- Compliance schedule included
- Source is out of compliance
- Source is operating in compliance

I. Source Information**1. Source Description:**

Clariant Corp. – Louisville West Plant manufactures customized precipitated catalysts and catalyst carriers.

2. Project Description:

The source has requested to construct a catalyst plant consisting of tank farm loading, support synthesis, catalyst production, solvent regeneration, by-product isolation, waste gas treatment, waste water treatment; and utilities. In Permit C-0036-1000-15-V(R1), the company proposed equipment additions and modifications to the proposed catalyst plant which included the addition of two new decanters P230.80 and P602.80, the removal of mobile temporary container V130.70, changing the capacity (increases and decreases) for several tanks, and new control IDs/Stack IDs for several pieces of equipment. In permit C-0036-1000-15-V(R2), the company proposed the addition of two new decanters P230.80 and P602.80, the removal of mobile temporary container V130.70, changing the capacity (increases and decreases) for several tanks, and new control IDs/Stack IDs for several pieces of equipment. This permit revision (R3) allows for the reclassification of the condensers E610.40, E624.40, and E626.40 as inherent process equipment and for the flare, PU628, to be the primary control device.

3. Site Determination:

Clariant Corporation is the parent company, operates two facilities in Louisville, the South plant at 4900 Crittenden Drive and the West plant at South 12th Street. Based on information obtained from the company and the criteria used by EPA to make single source determinations, the District has determined that both locations are separate sources. Both locations would have to meet the following three criteria in order to be considered one single source for Title V and PSD/NSR applicability:

- Same industrial grouping,
- Common ownership or control, and,
- Contiguous or adjacent locations.

Both locations have the same first two digit SIC code (28).

Both are 100% owned and operated by their parent company.

Neither location is contiguous or adjacent. Each plant acts independently of the other, operating separate production lines, with minimal transfer of material between plants that is commercially available from other suppliers. Furthermore, there are no Clariant Corporation dedicated transportation links between the plants.

4. **Emission Unit Summary:** This construction project consists of the following emission units.

TV-14-1013	
Emission Unit	Equipment Description
W62	Tank Farm
W63	Support Synthesis
W64	Catalyst Production
W65	Solvent Regeneration
W66	Co-Product Isolation
W67	Waste Gas Treatment
W68	Utilities
W69	Waste Water Treatment

4. **Fugitive Sources:**

There are fugitive PM/PM₁₀/PM_{2.5}, VOC, HAP, NO_x and TAC emissions from the manufacturing of customized precipitated catalysts and catalyst carriers.

6. **Permit Revisions:**

Revision	Issue Date	Public Notice Date	Type	Description
Initial	11/19/2014	9/14/2014	Initial	Initial permit issuance
R1	10/6/2015	8/29/2015	Signif.	Modifications and addition of equipment
R2	06/13/2016	05/06/2016	Signif.	Modifications and addition of equipment
R3	06/02/2021	05/01/2021	Signif.	Modifications of equipment. The condensers E610.40, E624.40, and E626.40 will be reclassified as inherent process equipment and the flare, PU628 will be the primary control device.

7. **Application and Related Documents**

Document Number	Date	Description
109752	4/1/2014	Public construction permit application
109753	4/2/2014	Confidential construction permit application
101834	6/8/2015	Public construction permit application

Document Number	Date	Description
109752	4/1/2014	Public construction permit application
109753	4/2/2014	Confidential construction permit application
101834	6/8/2015	Public construction permit application
101832	6/8/2015	Confidential construction permit application
97983	4/1/2016	Public construction permit application
97984	4/1/2016	Confidential construction permit application
182318	1/20/2021	Confidential version of the application
182319	1/20/2021	Public version of the application
198555	1/29/2021	Requested Range Letter for HEPA Filter
213467	7/14/2020	Emergency Generator and HEPA
213474	4/21/2021	Generator Engine Forms and Emission Calcs

8. Plantwide Emission Summary:

Pollutant	Actual Emissions (tpy) 2019 Data	Pollutant that triggered Major Source Status
CO	17.32	No
NO _x	51.24	*Yes
SO ₂	1.35	No
PM ₁₀	35.60	*Yes
VOC	5.35	*Yes
Total HAPs	3.48	*Yes
Single HAP		
Chromium Compounds	0.056	*Yes
Hexane	1.73	*Yes
Nickel Compounds	0.0011	*Yes

* The source has accepted synthetic minor limits for these pollutants.

9. Applicable Requirements:

PSD 40 CFR 60 SIP 40 CFR 63
 NSR 40 CFR 61 District-Origin Other

- 10. **MACT Requirements:** 40 CFR 63, Subpart ZZZZ – *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*

II. Regulatory Analysis

1. Acid Rain Requirements:

The source is not subject to the Acid Rain Program.

2. Stratospheric Ozone Protection Requirements:

This source does not manufacture, sell, or distribute any of the chemicals listed in title VI of the CAAA. Title VI of the CAAA regulates ozone depleting substances and requires a phase-out of their use. This rule applies to any facility that manufactures, sells, distributes, or otherwise uses any of the listed chemicals. The source’s use of listed chemicals is that in fire extinguishers, chillers, air conditioners and other HVAC equipment.

3. Prevention of Accidental Releases 112(r):

The source does manufacture, process, use, store, or otherwise handle one or more of the regulated substances listed in 40 CFR Part 68, Subpart F, and District Regulation 5.15, *Chemical Accident Prevention Provisions*, in a quantity in excess of the corresponding specified threshold amount.

4. 40 CFR Part 64 Applicability Determination:

The source is not a major source because the source has taken synthetic minor limits for all criteria pollutants. Therefore, 40 CFR 64 does not apply. 40 CFR 63 VVVVVV required Clariant West to obtain a Title V permit.

5. Basis of Regulation Applicability

a. **Applicable Regulations:**

Regulation	Title	Basis
2.05	Prevention of Significant Deterioration of Air Quality	Establishes requirements for the prevention of deterioration of air quality in regions of the country that currently meet the NAAQS

Regulation	Title	Basis
2.04	Construction or Modification of Major Sources in or Impacting Upon Non-Attainment Areas(Emission Offset Requirements)	Establishes requirements for the construction of stationary sources within areas currently not meeting the NAAQS
2.16	Title V Operating Permits	Establishes requirements for the operating of Title V permits
5.00	Definitions	Establishes definitions of terms used in the Strategic Toxic Air Reduction Program (STAR)
5.01	General Provisions	Establishes the requirements for Environmental Acceptability for Toxic Air Contaminants (TACs). (STAR)
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	Establishes the methodology for determining the benchmark ambient concentration of a toxic air contaminant (STAR)
5.21	Environmental Acceptability for Toxic Air Contaminants	Establishes the criteria for determining the environmental acceptability of emissions of toxic air contaminants (STAR)
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	Establishes the procedures for determining the maximum ambient concentration of a toxic air contaminant (STAR)
5.23	Categories of Toxic Air Contaminants	Establishes categories of toxic air contaminants. (STAR)
7.08	Standards of Performance for New Process Operations	Establishes emission standards for processes that emit PM which were installed after September 1, 1976.
7.12	Standard of Performance for New Storage Vessels for Volatile Organic Compounds	Establishes VOC standards for storage tanks constructed after April 19, 1972 with a capacity greater than 250 gallons
7.25	Standard of Performance for New Sources Using Volatile Organic Compounds	Establishes VOC standards for affected facilities constructed after June 13, 1979.

Regulation	Title	Basis
40 CFR 60, Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	Applies to stationary CI internal combustion engines that commence construction after July 11, 2005.
40 CFR 60, Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	Applies to storage tanks are greater than or equal to (75 m3) 19,812.9 gallons that were constructed, reconstructed, or modified after July 23, 1984.
40 CFR 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.	Applies to existing, new, and reconstructed stationary engines. The generators are stationary RICE located at an area source of HAP emissions, therefore 40 CFR 63 Subpart JJJJ applies.
40 CFR 63, Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	Applies to existing, new, and reconstructed stationary engines. The generators are stationary RICE located at an area source of HAP emissions, therefore 40 CFR 63 Subpart ZZZZ applies.

b. Plantwide

- i. Clariant Corp. – Louisville West Plant is a major source for PM/PM₁₀/PM_{2.5}, VOC, single HAP, and total HAPs. To preclude the requirements of Regulation 2.04, Construction or Modification of Major Sources In or Impacting Upon Non-Attainment Areas, and Regulation 2.05, Prevention of Significant Deterioration of Air Quality, the source is subject to a plant-wide limit of less than 100 tons during any consecutive 12-month period for PM/PM₁₀/PM_{2.5} and VOC. This project is not major for PSD or NSR since the facility has already accepted synthetic minor limits.
- ii. Pursuant to Regulation 2.16, section 4.1, Clariant Corp – Louisville West Plant is required to limit the plantwide emissions of any individual HAP to less than 10 tons during any consecutive 12-month period. For all HAPs combined, the source is required to limit

the plantwide emissions of all HAPs to less than 25 tons during any consecutive 12-month period.

- iii. Regulations 5.00 5.20, 5.21, and 5.23 (STAR Program) establish requirements for environmental acceptability of toxic air contaminants (TACs) and the requirement to comply with all applicable emission standards.
- iv. Regulation 2.03, section 6.1 requires sufficient monitoring, record keeping, and reporting to assure ongoing compliance with the terms and conditions of the permit. The owner or operator shall maintain all the required records for a minimum of 5 years and make the records readily available to the District upon request.

c. **Equipment – W62-W69 Emission Points**

Emission Point ID	Description	Applicable Regulation(s)	Control Device1
W62 - Tank Farm			
V100.70	Mobile Temporary Container, ² 5,283 gallons	7.12 (Insignificant Activity)	NA
C100.1	Dryer, 110 gph	7.25 (Insignificant Activity)	PU628
V100.30	Dryer Vessel, 110 gph		
V100.31	Dryer Vessel, 110 gph		
V101.1	Storage Tank (Submerged Fill) 7,836 gallons, E626.40	7.12 (Insignificant Activity)	PU628
V110.70	Mobile Temporary Container 5,283 gallons	STAR & 7.12	NA
C110.1	Dryer, 112 gph	STAR & 7.25	PU628
V110.30	Dryer Vessel, 112 gph		
V110.31	Dryer Vessel, 112 gph		
V131.1	Processing Tank, 758 gal	7.25 (Insignificant Activity)	NA
V132.1	Storage Tank, 4,043 gal	7.12 (Insignificant Activity)	NA
V136.1	Processing Tank, 758 gal	7.25 (Insignificant Activity)	PU628
V137.1	Dry Storage Tank 1,475 gal	7.12 (Insignificant Activity)	PU628
V140.70	Mobile Temporary Container, 5,283 gallons	STAR & 7.12	NA
C140.1	Dryer, 110 gph	STAR, 7.25	PU628
V140.30	Dryer Vessel, 110 gph		

1 Shell and Tube Condensers, E610.40, E624.40, and E626.40, are now only considered inherent process equipment per the application sent in 1/20/21.

2 ISO containers (V100.70, V110.70, and V140.70) will be filled offsite and will be filled offsite and will only be used onsite to transfer material out of the containers; therefore, submerged fill is not applicable.

Emission Point ID	Description	Applicable Regulation(s)	Control Device1
VI40.31	Dryer Vessel, 110 gph		PU628
V150.1	Storage Tank 1, ³ 15,648 gal, E624.40	STAR	C627.3, C627.4, C627.5, & PU628
V151.1	Storage Tank II, 15,648 gal, E624.40	STAR	
V160.1	Vessel, 7,785 gallons, E624.40	STAR, 7.25	
V161.1	Storage Tank, 7,785 gallons, E624.40	STAR & 7.12	
W63 – Support Synthesis			
PU203a/PU203 b	Two Bag Emptying Units	7.08 (Insignificant Activity)	NA
R200.1	Reactor 1, E626.40	7.08 & 7.25	PU628
R201.1	Reactor 2, E626.40		
R220.1	Reactor, E626.40	STAR & 7.25	PU628
P230.80	Decanter, E626.40	STAR & 7.25	
V231.1	Re-suspension Storage Tank 1 ⁴ , 2,358 gallons, E626.40	STAR & 7.25	PU628
V232.1	Re-suspension Storage Tank 2 2,358gallons, E626.40	STAR & 7.25	
V234.1	SRS Transfer Tank, 1,340 gal, E626.40	STAR & 7.25	
D240.1/ E240.40	Dryer with Heat Exchanger, E626.40	STAR, 7.25, & 7.08	F628.50 & PU628
V240.30	Transfer Vessel 238 gallons, E626.40	STAR & 7.25	PU628
V244.1	Blender, E626.40	STAR, 7.25 & 7.08	F628.50 & PU628
F244.51	Vibrating Sieve	STAR, 7.25 & 7.08	V244.30 & PU628
244.90	Container/Drum Filling Unit		
244.91	Container/Drum Filling Unit		
PU244	Drum Emptying Unit		V244.31 & PU628
W64 – Catalyst Production			
PU300.80	Container Emptying Unit – Line 1, E624.40	STAR, 7.25 & 7.08	C627.3, C627.4, C627.5, & PU628
PU305.80	Container Emptying Unit – Line 2, E624.40		
R300.1	Reactor – Line 1, E624.40		
R305.1	Reactor – Line 2, E624.40		
R310.1	Reactor I – Line 1, E610.40	STAR & 7.25	C627.3, C627.4, C627.5, & PU628
R315.1	Reactor I – Line 2, E610.40		
F320.1	Filter – Line 1, E624.40		

3 Storage Tanks contain a non-VOC raw material; therefore, Regulation 7.12 is not applicable.

4 Recycled Storage Tanks are identified as process tanks instead of storage tanks since these tanks are washing/slurry tanks with agitation that are filled and emptied each batch; therefore, these tanks are subject to Regulation 7.25 instead of Regulation 7.12.

Emission Point ID	Description	Applicable Regulation(s)	Control Device1
F325.1	Filter – Line 2, E624.40		C627.4, C627.5, & PU628
R311.1	Reactor II – Line 1, E610.40		C627.3, C627.4, C627.5, & PU628
R316.1	Reactor II – Line 2, E610.40		C627.3, C627.4, C627.5, & PU628
V321.1	Recycled Storage Tank with agitation – Line 1 2,355 gal, E624.40		
V326.1	Recycled Storage Tank with agitation – Line 2 2,355 gal, E624.40		
V322.1	Recycled Storage Tank – Line 1 3,207 gallons, E624.40		
V323.1	SRC Transfer Tank – Line 1, 1,334 gallons, E624.40		
V327.1	Recycled Storage Tank – Line 2 3,207 gallons, E624.40		
V328.1	SRC Transfer Tank – Line 2 1,334 gallons, E624.40		
D330.1/E330.40	Dryer with Heat Exchanger – Line 1, E624.40		STAR, 7.25, & 7.08
V330.30	Transfer Vessel 239 gallons, E624.40	5.00, 5.01, 5.20, 5.21, 5.22, 5.23, & 7.25	C627.3, C627.4, C627.5, & PU628
D335.1/E335.40	Dryer with Heat Exchanger – Line 2, E624.40	STAR, 7.25, & 7.08	F628.50, C627.3, C627.4, C627.5, & PU628
V335.30	Transfer Vessel 239 gallons, E624.40	STAR & 7.25	C627.3, C627.4, C627.5, & PU628
V332.1	Blender – Line 1, E624.40	STAR, 7.25, & 7.08	F628.50, C627.3, C627.4, C627.5, & PU628
V337.1	Blender – Line 2, E624.40		F628.50, C627.3, C627.4, C627.5, & PU628
F332.51	Vibrating Sieve – Line 1		V332.30 & PU628

Emission Point ID	Description	Applicable Regulation(s)	Control Device1
F337.51	Vibrating Sieve – Line 2		V337.30 & PU628
PU332.81	Drum Filling Unit – Line 1		V332.30 & PU628
PU337.81	Drum Filling Unit – Line 2		V337.30 & PU628
332.90	Off Spec Drum Filling Unit – Line 1		V332.30 & PU628
337.90	Off Spec Drum Filling Unit – Line 2		V337.30 & PU628
PU332.82	Drum Emptying Unit – Line 1		V332.31 & PU628
PU337.82	Drum Emptying Unit – Line 2		V332.31 & PU628
W65- Solvent Regeneration			
V400.1	SRS Storage Tank (Submerged Fill) 20,296 gal, E626.40	STAR, 7.12, & 40 CFR 60 Subpart Kb	PU628
E403.41/ C403.10/ E403.40/ E403.42	Reboiler with Column, Overhead Interchange and Condenser, E626.40	STAR & 7.25	
V403.30	Reflux Vessel, E626.40		
E403.43/ C403.20/ E403.44	Reboiler with Column and Condenser, E626.40	STAR,	
V403.31	Reflux Vessel		
V404.1	Storage Tank (Submerged Fill) 19,628 gallons	STAR & 7.12	
C406.1/C406.2	Dryer	STAR & 7.25	PU628
V406.30	Dryer Vessel	STAR & 7.25	PU628
V407.1	Storage Tank 2,629 gallons	STAR &, 7.12	NA
V410.1	SRC Storage Tank I (Submerged Fill) 20,248 gal, E624.40	STAR, 7.12, & 40 CFR 60 Subpart Kb	C627.3, C627.4, C627.5, & PU628
V420.1	SRC Storage Tank II (Submerged Fill) 20,248 gal, E624.40		
C413.10/ E413.40/ E413.41	1 st Stage Distillation Column and Falling Film Evaporator with Condenser, E624.40	STAR & 7.25	
V413.30	Reflux Drum, 383 gallons, E624.40	STAR & 7.25	
C414.10 /E414.40/ E414.41	2 nd Stage Distillation Column and Falling Film Evaporator with Condenser, E624.40	STAR & 7.25	C627.3, C627.4, C627.5, & PU628
V414.30	Reflux Drum, 180 gallons, E624.40		
C415.10/ E415.40/ E415.41	3 rd Stage Distillation Column and Falling Film Evaporator with Condenser, E624.40		
V415.30	Reflux Drum, 90 gallons, E624.40		
V447.1	Storage Tank (Submerged Fill) 20,278 gallons, E624.40	STAR, 7.12, & 40 CFR 60 Subpart	

Emission Point ID	Description	Applicable Regulation(s)	Control Device1
V448.1	Storage Tank (Submerged Fill) 20,278 gallons, E624.40	Kb	
V427.1	Storage Tank (Submerged Fill) 7,862 gallons, E624.40		
V428.1	Storage Tank (Submerged Fill) 7,862 gallons, E624.40		
V437.1	Storage Tank/Mixing Vessel ³ 1,982 gallons, E624.40	STAR & 7.25	
V417.1	Storage Tank, 5,285 gallons, E624.40	STAR & 7.12	
V417.2	Storage Tank, 5,285 gallons, E624.40	STAR & 7.12	
W66 – Co-Product Isolation			
V600.1	SRC Storage (Surge/Transfer Vessel with Agitation) and Cooling Tank, 6,835 gallons, E624.40	STAR & 7.25	C627.3, C627.4, C627.5, & PU628
V601.1	Tank, 3,246 gallons, E624.40		
P602.80	Decanter, E624.40		
V602.1	Tank1, 3,246 gallons, E624.40		
V603.1	Tank 2, 3,252 gallons, E624.40		
V608.1	SRC Transfer Tank, 1,309 gal, E624.40		
D606.1/ E606.40	Dryer with Heat Exchanger, E624.40	STAR, 7.25, & 7.08	F628.50, C627.3, C627.4, C627.5, & PU628
V606.30	Transfer Vessel 680 gallons, E624.40	STAR & 7.25	C627.3, C627.4, C627.5, & PU628
PU607	Bag Filling Unit	STAR, 7.25, & 7.08	V332.30 & PU628
W67 – Waste gas Treatment			
V610.1	Recovered Solvent Storage (Transfer Vessel) Tank, 1,500 gal	STAR & 7.25	C627.3, C627.4, C627.5, & PU628
V624.1	Recovered Solvent Storage (Transfer Vessel) Tank, 1,500 gal		
V626.1	Recovered Solvent Storage (Transfer Vessel) Tank, 1,500 gal		PU628
W68 - Utilities			
E011.1/E011.2	Cooling Tower (Insignificant Activity)	7.08	NA
V690.1	Blow-Down Tank		NA

Emission Point ID	Description	Applicable Regulation(s)	Control Device1
PU075	Emergency Generator, Kohler, Model 250REOZJE, Tier 3 Engine, 255 KW, 342 HP, Displacement 9 liters (Insignificant Activity)	40 CFR 60 Subpart IIII 40 CFR 63 Subpart ZZZZ	NA
	Emergency Generator Tank, 472 gallons (Insignificant Activity)	Regulation 1.02, Appendix A, Section 3.9.2	NA
	Emergency Generator, Mitsubishi, model G25LTA2, 25 kW, 38.4 HP	40 CFR 60 Subpart JJJJ, 40 CFR 63 Subpart ZZZZ	NA
	Emergency Generator, Kohler, model 100REOZJF, 100 kW, 158 HP, 209 gal	40 CFR 60 Subpart IIII, 40 CFR 63 Subpart ZZZZ	NA
P-0001	Fire Pump, Clarke, 86 HP, Displacement 4.5 Liters (Insignificant Activity)	40 CFR 60 Subpart IIII 40 CFR 63 Subpart ZZZZ	NA
T-0001	Fire Pump Tank, 185 gallons (Insignificant Activity)	Regulation 1.02, Appendix A, Section 3.9.2	NA
W69 – Waste Water Treatment			
V691.1	Emergency Drainage Tank, 12,764 gallons	STAR	NA
V650.1	Phase Separator, 3,600 gal	STAR & 7.25	NA
V650.30	Phase Separator, 15 gallons	STAR & 7.25	
V651.1	Waste Water Tank 1, 8,000 gallons	STAR & 7.25	NA
V651.2	Waste Water Tank 2, 8,000 gallons	STAR & 7.25	NA
NA	Valves and Flanges	STAR, 7.25	NA

Control Device			
Control ID	Description	Control Efficiency	Stack ID
F628.50	HEPA Filter	99.97% PM	ST628.190
C627.3	Eductor	99.5% HCl	ST628.190
C627.4	Recirculated Packed Bed Scrubber (Stage 1)		ST628.190
C627.5	Recirculated Packed Bed Scrubber (Stage 2)		ST628.190
V244.30	Normag - Absorber	95% PM	ST628.190
V244.31	Normag - Absorber	95% PM	ST628.190
V332.30	Normag - Absorber	95% PM	ST628.190
V332.31	Normag - Absorber	95% PM	ST628.190
V607.3	Normag - Absorber	95% PM	ST628.190

Control Device			
Control ID	Description	Control Efficiency	Stack ID
PU628	Zeeco – Natural Gas Flare to control VOCs, Hexane, and Toluene (BACT)	99.9% VOC ⁵	ST628.190

d. **Standards/Operating Limits**

i. **HAP**

40 CFR 63 Subpart ZZZZ applies to the emergency generator and the fire pump. Pursuant to 40 CFR 63.6590(c)(1), the source must meet the requirements of 40 CFR 63 Subpart ZZZZ by meeting requirements of 40 CFR part 60 subpart III.

ii. **Opacity**

Regulation 7.08, section 3.1.1 establishes a standard for opacity to not equal or exceed 20%.

iii. **PM/PM₁₀/PM_{2.5}**

- 1) Regulation 7.08, section 3.1.2 establishes PM standards for process equipment. Per Table 1 to Regulation 7.08, the maximum allowable emission rate is 2.34 lb PM/hr for equipment with a process weight rate of less than or equal to 1,000 pounds per hour.

iv. **VOC**

- 1) For equipment V131.1, Valves/Flanges, V651.1, and V651.2; Regulation 7.25 establishes a plantwide VOC limit of 5 tons per year for all affected facilities, unless Best Available Control Technology (BACT) level of control is utilized to reduce the VOC emissions.
- 2) For the equipment V160.1, R200.1, R201.1, R220.1, PU230.80, V231.1, V232.1, V234.1, D240.1/E240.40, V240.30, V244.1, PU300.80, PU305.80, R300.1, R305.1, R310.1, R315.1, F320.1, F325.1, R311.1, R316.1, V321.1, V323.1, V326.1, V322.1, V327.1, V328.1, D330.1/E330.40, V330.30, D335.1/E335.40, V335.30, V332.1, V337.1, E403.41/C403.10/E403.40/E403.42, V403.30, E403.43/C403.20/E403.44, V403.31, C413.10/

⁵ The flare (PU628) has been determined to represent Best Available Control Technology (BACT) for controlling volatile organic compounds for Regulation 7.25. Its efficiency was reported as 99.9% from the stack test performed October 8th, 2020.

E413.40/E413.41, V413.30, C414.10/E414.40/E414.41, V414.30, C415.10/E415.40/E415.41, V415.30, V437.1, V600.1, V601.1, P602.80, V602.1, V603.1, V608.1, D606.1/E606.40, V606.30, V100.30, V100.31, V110.30, V110.31, V140.30, V140.31, C100.1, C110.1, V136.1, C140.1, F244.51, 244.90, 244.91, PU244, F332.51, F337.51, PU332.81, PU337.81, 332.90, 337.90, PU332.80, PU337.80, C406.1/C406.2, V406.30, PU607, V610.1, V624.1, and V626.1; Regulation 7.25 requires BACT. For this equipment, the flare PU628 is considered BACT; the owner or operator shall ensure that the control efficiency of the flare not fall below 99.9%.⁶Regulation 7.12 establishes VOC standards for storage tanks with a capacity greater than 250 gallons. For storage vessels (V132.1, V137.1, V161.1, V417.1, V417.2 and V407.1), the source shall not store materials with an as stored vapor pressure of greater than or equal to 1.5 psia.

- 3) Regulation 7.12, section 3.3 requires that storage vessels (V101.1, V400.1, V404.1, V410.1, V420.1, V427.1, V428.1, V447.1, and V448.1) be equipped with a permanent submerged fill pipe. All of these storage vessels are equipped with submerged fill.
- 4) Regulation 7.12, section 4.1 establishes VOC operating requirements for storage tanks with a capacity greater than 250 gallons. For all storage tanks subject to Regulation 7.12, the owner or operator shall ensure that there are no visible holes, tears, or other openings in the seal or any seal fabric.
- 5) 40 CFR 60 Subpart Kb establishes operating requirements for storage tanks with a capacity greater than 75 m³ that are used to store volatile organic liquids that were constructed, reconstructed, or modified after July 23, 1984.

v. **TAC**

- 1) Regulations 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23 (STAR Program) establish requirements for environmental acceptability of toxic air contaminants (TACs) and the requirement to comply with all applicable emission

⁶ The facility submitted a BACT analysis dated June 8, 2015, August 7, 2015, April 11, 2016 and January 20, 2021. The latest submittal demonstrated that venting to flare PU628 is considered BACT. A stack test was conducted on October 2020 that showed the flare PU628 to have a control efficiency of 99.9%. The District accepted the BACT determination.

standards. Clariant submitted potential emissions calculation with their application for all TACs associated with this project. The potential controlled TAC emissions are de minimis for this project as described in Regulation 5.21 Section 2. The following TACs were identified in the application for this project:

TAC	Abbreviation	TAC Category
Hexane	C ₆ H ₁₄	4
Hydrochloric acid (hydrogen chloride)	HCl	2
Toluene	C ₇ H ₈	2

- 2) The source is required to be environmentally acceptable for all TACs in accordance with Regulation 5.01, 5.21, and 5.23. The source shall not increase the TAC content in a raw material or substitute any raw materials or additional TACs for those identified in the initial permit application for the processes or equipment that would result in an increase in the quantity of a TAC above de minimis levels or those previously demonstrated to be environmentally acceptable without prior notification to, and approval by, the District.
- 3) The level of controls needed to meet the TAC de minimis levels in Regulation 5.21 are listed in the table below (1st indicates first control device needed, etc.). The starred (*) emission units can meet the de minimis values without a control device. The hyphenated (-) emission units do not contain these pollutants.

Emission Point	HCl	Hexane	Toluene
W62 - Tank Farm			
C110.1	*	-	-
V110.30	*	-	-
V110.31	*	-	-
V140.70	-	-	*
C140.1	-	-	*
V140.30	-	-	*
V140.31	-	-	*
V150.1	-	*	-
V151.1	-	*	-
V160.1	-	*	*
V161.1	-	*	*
W63 – Support Synthesis			

Emission Point	HCl	Hexane	Toluene
R220.1	*	-	-
P230.80	*	-	-
V231.1	*	-	-
V232.1	*	-	-
V234.1	*	-	-
D240.1/E240.40	*	-	-
V240.30	*	-	-
V244.1	*	-	-
F244.51	*	-	-
244.90	*	-	-
244.91	*	-	-
PU244	*	-	-
W64 – Catalyst Production			
PU300.80	*	-	-
PU305.80	*	-	-
R300.1	*	-	-
R305.1	*	-	-
R310.1	*	-	-
R315.1	*	*	-
F320.1	*	*	*
F325.1	*	*	*
R311.1	*	*	*
R316.1	*	*	*
V321.1	-	*	*
V326.1	-	*	*
V322.1	*	-	-
V323.1	*	*	*
V327.1	*	-	-
V328.1	*	*	*
D330.1/E330.40	*	*	*
V330.30	*	*	*
D335.1/E335.40	*	*	*
V335.30	*	*	*
V332.1	*	*	-
V337.1	*	*	-
F332.51	*	*	-
F337.51	*	*	-
PU332.81	*	*	-
PU337.81	*	*	-
332.90	*	*	-
337.90	*	*	-
PU332.82	*	*	-
PU337.82	*	*	-

Emission Point	HCl	Hexane	Toluene
W65- Solvent Regeneration			
V400.1	*	-	-
E403.41/ C403.10/ E403.40/	*	-	-
V403.30	*	-	-
E403.43/C403.20/E403.44	*	-	-
V403.31	*	-	-
V404.1	*	-	-
C406.1/C406.2	*	-	-
V406.30	*	-	-
V407.1	*	-	-
V410.1	*	*	*
V420.1	*	*	*
C413.10/E413.40/E413.41	C627.3, .4, .5	*	*
V413.30	*	*	*
C414.10/E414.40/E414.41	C627.3, .4, .5	*	*
V414.30	*	*	*
C415.10/E415.40/E415.41	C627.3, .4, .5	*	*
V415.30	*	*	*
V447.1	*	*	*
V448.1	*	*	*
V427.1	*	*	*
V428.1	*	*	*
V437.1	*	*	*
V417.1	-	*	*
V417.2	-	*	*
W66 – By-Product Isolation			
V600.1	C627.3, .4, .5	*	-
V601.1	*	*	*
P602.80	*	*	*
V602.1	*	*	-
V603.1	*	*	-
V608.1	*	*	*
D606.1/E606.40	*	*	-
V606.30	*	-	-
PU607	*	*	-
W67 – Waste gas Treatment			
V610.1	*	*	*
V624.1	*	*	*
V626.1	*	-	-
W69 – Waste Water Treatment			
V691.1	-	*	-
V650.1	*	-	*
V650.30	*	-	*
V651.1	*	-	*

Emission Point	HCl	Hexane	Toluene
V651.2	*	-	*
Valves and Flanges	*	*	*

III. Other Requirements

1. Temporary Sources:

The source did not request to operate any temporary facilities.

2. Short Term Activities:

The source did not report any short term activities.

3. Emissions Trading:

The source is not subject to emission trading.

4. Alternative Operating Scenarios:

The source did not request any alternative operating scenarios.

5. Compliance History:

Incident Date	Description	Penalty	Status
06/11/2015	Visible NOx plume	\$14,250	In compliance
08/31/2015	Visible NOx plume		In compliance
10/27/2015	Visible NOx plume		In compliance
08/22/2017 11/09/2017	Visible NOx plume	\$3000	In compliance
04/13/2017	TAC emissions exceed environmentally acceptable (EA) levels	\$7500	In compliance
04/13/2017	TAC emissions exceed environmentally acceptable (EA) levels		In compliance
01/09/2018 06/10/2018	Visible NOx plume		In compliance
12/04/2018 12/25/2018	Visible NOx plume	\$3750	In compliance
07/31/2019	Failure to perform a stack test	\$40,500	In compliance
01/01/2019 - 12/31/2019	Compliance with Title V Permit	\$326,000	Penalty assessed

6. Calculation Methodology

Generally, emissions are calculated by multiplying the throughput (ton, MMCF, gallons, etc) or hours of operation of the equipment by the appropriate emission

factor and accounting for any control devices unless otherwise approved in writing by the District. Approved emission factors determined by future stack test can replace the emission factors below:

Emission Point ID	Description	Acceptable Emission Factor Sources
W62 - Tank Farm		
V100.70	Mobile Temporary Container	AP-42 Chapter 7.1
C100.1	Dryer	Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA - 453/R-93-017, February 1994
V100.30	Dryer Vessel	
V100.31	Dryer Vessel	
V101.1	Storage Tank (Submerged Fill)	AP-42 Chapter 7.1
V110.70	Mobile Temporary Container	AP-42 Chapter 7.1
C110.1	Dryer	Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA - 453/R-93-017, February 1994
V110.30	Dryer Vessel	
V110.31	Dryer Vessel	
V131.1	Processing Tank	AP-42 Chapter 7.1
V132.1	Storage Tank	AP-42 Chapter 7.1
V136.1	Processing Tank	AP-42 Chapter 7.1
V137.1	Storage Tank	AP-42 Chapter 7.1
V140.70	Mobile Temporary Container	AP-42 Chapter 7.1
C140.1	Dryer	Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA - 453/R-93-017, February 1994
V140.30	Dryer Vessel	
V140.31	Dryer Vessel	
V150.1	Storage Tank I	AP-42 Chapter 7.1
V151.1	Storage Tank II	AP-42 Chapter 7.1
V160.1	Vessel	Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA - 453/R-93-017, February 1994
V161.1	Storage Tank	AP-42 Chapter 7.1
PU203a/PU203b	Bag Emptying Unit	1% Loss PM/PM ₁₀ /PM _{2.5}
R200.1	Reactor 1	Vapor Displacement & Vessel Heating Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA - 453/R-93-017, February 1994

Emission Point ID	Description	Acceptable Emission Factor Sources
R201.1	Reactor 2	1% Loss PM/PM ₁₀ /PM _{2.5} Vapor Displacement & Vessel Heating Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA-453/R-93-017, February 1994
R220.1	Reactor	Vapor Displacement & Vessel Heating Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA-453/R-93-017, February 1994
P230.80	Decanter	Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA-453/R-93-017, February 1994
V231.1	Re-suspension Storage Tank 1	
V232.1	Re-suspension Storage Tank 2	
V234.1	SRS Transfer Tank	
D240.1/E240.40	Dryer with Heat Exchanger	1% Loss PM/PM ₁₀ /PM _{2.5}
V240.30	Transfer Vessel	Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA-453/R-93-017, February 1994
V244.1	Blender	1% Loss PM/PM ₁₀ /PM _{2.5} Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA-453/R-93-017, February 1994
F244.51	Vibrating Sieve	0.5% Loss PM/PM ₁₀ /PM _{2.5} Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA-453/R-93-017, February 1994
244.90	Container/Drum Filling Unit	1% Loss PM/PM ₁₀ /PM _{2.5} Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA-453/R-93-017, February 1994
244.91	Container/Drum Filling Unit	
PU244	Drum Emptying Unit	
W64 – Catalyst Production		
PU300.80	Container Emptying Unit – Line 1	1% Loss PM/PM ₁₀ /PM _{2.5} Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA-453/R-93-017, February 1994
PU305.80	Container Emptying Unit – Line 2	

Emission Point ID	Description	Acceptable Emission Factor Sources
R300.1	Reactor – Line 1	1% Loss PM/PM ₁₀ /PM _{2.5} Vapor Displacement & Vessel Heating Calculations from EPA Document, “Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document,” EPA-453/R-93-017, February 1994
R305.1	Reactor – Line 2	
R310.1	Reactor I – Line 1	Vapor Displacement & Vessel Heating Calculations from EPA Document, “Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document,” EPA-453/R-93-017, February 1994
R315.1	Reactor I – Line 2	
F320.1	Filter – Line 1	Vapor Displacement Calculations from EPA Document, “Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document,” EPA-453/R-93-017, February 1994
F325.1	Filter – Line 2	
R311.1	Reactor II – Line 1	Vapor Displacement & Vessel Heating Calculations from EPA Document, “Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document,” EPA-453/R-93-017, February 1994
R316.1	Reactor II – Line 2	
V321.1	Recycled Storage Tank with agitation – Line 1	AP-42 Chapter 7.1
V326.1	Recycled Storage Tank with agitation – Line 2	AP-42 Chapter 7.1
V322.1	Recycled Storage Tank – Line 1	AP-42 Chapter 7.1
V323.1	SRC Transfer Tank – Line 1	Vapor Displacement Calculations from EPA Document, “Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document,” EPA-453/R-93-017, February 1994
V327.1	Recycled Storage Tank – Line 2	
V328.1	SRC Transfer Tank – Line 2	
D330.1/E330.40	Dryer with Heat Exchanger – Line 1	1% Loss PM/PM ₁₀ /PM _{2.5}
V330.30	Transfer Vessel	Vapor Displacement Calculations from EPA Document, “Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document,” EPA-453/R-93-017, February 1994
D335.1/E335.40	Dryer with Heat Exchanger – Line 2	1% Loss PM/PM ₁₀ /PM _{2.5}

Emission Point ID	Description	Acceptable Emission Factor Sources	
V335.30	Transfer Vessel	Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA-453/R-93-017, February 1994	
V332.1	Blender – Line 1	1% Loss PM/PM ₁₀ /PM _{2.5} Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA-453/R-93-017, February 1994	
V337.1	Blender – Line 2		
F332.51	Vibrating Sieve – Line 1	0.5% Loss PM/PM ₁₀ /PM _{2.5} Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA-453/R-93-017, February 1994	
F337.51	Vibrating Sieve – Line 2		
PU332.81	Drum Filling Unit – Line 1	1% Loss PM/PM ₁₀ /PM _{2.5} Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA-453/R-93-017, February 1994	
PU337.81	Drum Filling Unit – Line 2		
332.90	Off Spec Drum Filling Unit – Line 1		
337.90	Off Spec Drum Filling Unit – Line 2		
PU332.82	Drum Emptying Unit – Line 1		
PU337.82	Drum Emptying Unit – Line 2		
W65- Solvent Regeneration			
V400.1	SRS Storage Tank (Submerged Fill)		Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA-453/R-93-017, February 1994 or AP-42 Chapter 7.1
E403.41/ C403.10/ E403.40/ E403.42	Reboiler with Column, Overhead Interchange and Condenser	1 kg VOC/hr per Manufacturer Information	
V403.30	Reflux Vessel	Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA-453/R-93-017, February 1994	
E403.43/ C403.20/ E403.44	Reboiler with Column and Condenser	1 kg VOC/hr per Manufacturer Information	

Emission Point ID	Description	Acceptable Emission Factor Sources
V403.31	Reflux Vessel	Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA-453/R-93-017, February 1994
V404.1	Storage Tank	AP-42 Chapter 7.1
C406.1/ C406.2	Dryer	Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA-453/R-93-017, February 1994
V406.30	Dryer Vessel	
V407.1	Storage Tank	Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA-453/R-93-017, February 1994 or AP-42 Chapter 7.1
V410.1	SRC Storage Tank I (Submerged Fill)	
V420.1	SRC Storage Tank II (Submerged Fill)	
C413.10/ E413.40/ E413.41	1 st Stage Distillation Column and Falling Film Evaporator with Condenser	AP-42 Emission Factor 3.3 lb VOC/ton (Table 4.7-1)
V413.30	Reflux Drum	Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA-453/R-93-017, February 1994
C414.10/ E414.40/ E414.41	2 nd Stage Distillation Column and Falling Film Evaporator with Condenser	AP-42 Emission Factor 3.3 lb VOC/ton (Table 4.7-1)
V414.30	Reflux Drum	Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA-453/R-93-017, February 1994
C415.10/ E415.40/ E415.41	3 rd Stage Distillation Column and Falling Film Evaporator with Condenser	AP-42 Emission Factor 3.3 lb VOC/ton (Table 4.7-1)
V415.30	Reflux Drum	Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA-453/R-93-017, February 1994
V447.1	Storage Tank	AP-42 Chapter 7.1
V448.1	Storage Tank	AP-42 Chapter 7.1
V427.1	Storage Tank	AP-42 Chapter 7.1
V428.1	Storage Tank	AP-42 Chapter 7.1

Emission Point ID	Description	Acceptable Emission Factor Sources
V437.1	Recycle Storage Tank/Mixing Vessel	Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA-453/R-93-017, February 1994
V417.1	Storage Tank	AP-42 Chapter 7.1
V417.2	Storage Tank	AP-42 Chapter 7.1
W66 – Co-Product Isolation		
V600.1	SRC Storage (Surge/Transfer Vessel with Agitation) and Cooling Tank	Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA-453/R-93-017, February 1994
V601.1	Tank	
P602.80	Decanter	
V602.1	Tank1	
V603.1	Tank 2	
V608.1	SRC Transfer Tank	
D606.1/ E606.40	Dryer with Heat Exchanger	1% Loss PM/PM ₁₀ /PM _{2.5}
V606.30	Transfer Vessel	Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA-453/R-93-017, February 1994
PU607	Big-Bag Filling Unit	1% Loss PM/PM ₁₀ /PM _{2.5}
W67 – Waste gas Treatment		
V610.1	Recovered Solvent Storage Tank	Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA-453/R-93-017, February 1994
V624.1	Recovered Solvent Storage Tank	
V626.1	Recovered Solvent Storage Tank	
W68 - Utilities		
E011.1/E011.2	Cooling Tower	AP-42 Chapter 13.4, Table 13.4-1
PU075	Emergency Generator, Kohler, Tier 3 Engine, 255 KW, 342 HP	Manufacturer Certification for PM, NO _x , CO and VOC AP-42 Chapter 3.3 for SO ₂ , CO ₂ and HAP
P-0001	Fire Pump, Clarke, 86 HP	Manufacturer Certification for PM, NO _x , CO and VOC AP-42 Chapter 3.3 for SO ₂ , CO ₂ and HAP
W69 – Waste Water Treatment		
V691.1	Emergency Drainage Tank	AP-42 Chapter 7.1
V650.1	Phase Separator	

Emission Point ID	Description	Acceptable Emission Factor Sources
V650.30	Phase Separator	Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA-453/R-93-017, February 1994
V651.1	Waste Water Tank 1	Vapor Displacement Calculations from EPA Document, "Control Volatile Organic Compound Emissions from Batch Processes – Alternative Control Techniques Information Document," EPA-453/R-93-017, February 1994 or AP-42 Chapter 7.1
V651.2	Waste Water Tank 2	
Fugitives		SOCMI Default-Zero Emission Rates
PU628	Natural Gas Combustion Flare	AP-42 Chapter 13-5

7. Insignificant Activities

Insignificant Activities		
Description	Quantity	Basis (Regulation 1.02)
V100.70, Mobile Temporary Container, 5,283 gallons	1	Section 1.38.1.2.1
C100.2/C100.3, Dryer, 110 gph	1	Section 1.38.1.2.1
V101.1, Storage Tank, 6,787 gallons	1	Section 1.38.1.2.1
V131.1, Processing Tank, 775 gallons	1	Section 1.38.1.2.1
V132.1, Storage Tank, 3,453 gallons	1	Section 1.38.1.2.1
V136.1, Processing Tank, 775 gallons	1	Section 1.38.1.2.1
V137.1, Dry Storage Tank2, 2,205 gallons	1	Section 1.38.1.2.1
PU203a/PU203b, Bag Emptying Unit	1	Section 1.38.1.2.1
E011.1/E011.2, Cooling Tower	1	Section 1.38.1.2.1
PU075: 1. Emergency Generator, Kohler, Model 250REOZJE, Tier 3 Engine, 255 KW, 342 HP, Displacement 9 liters 2. Emergency Generator, Mitsubishi, model G25LTA2, 25 kW, 38.4 HP 3. Emergency Generator, Kohler, model 100REOZJF, 100 kW, 158 HP, 209 gal	1	Section 1.38.1.2.1
PU075 Emergency Generator Tank, 472 gallons	1	Section 3.9.2
P-0001 Fire Pump, Clarke, 86 HP, Displacement 4.5 Liters	1	Section 1.38.1.2.1
T-0001 Fire Pump Tank, 185 gallons	1	Section 3.9.2