



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



**March 02, 2018**

**Title V Statement of Basis**

**Owner:** Rohm and Haas Chemicals LLC  
**Source:** Rohm and Haas – Louisville Plant

**Plant Location:** 4300 Camp Ground Road, Louisville, KY 40216

**Date Application Received:** 22 April 1997

**Public Comment Date:** 8/10/2017

**Date of Proposed Permit:** 8/10/2017

**District Engineer:** Chris Gerstle

**Permit No:** 157-97-TV (R4)

**Plant ID:** 0189

**SIC Code:** 2821

**NAICS:** 325211

**Introduction:**

This permit will be issued pursuant to: (1) District Regulation 2.16, (2) Title 40 of the Code of Federal Regulations Part 70, and (3) Title V of the Clean Air Act Amendments of 1990. Its purpose is to identify and consolidate existing District and Federal air requirements and to provide methods of determining continued compliance with these requirements.

Jefferson County is classified as an attainment area for lead (Pb), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), 1 hr and 8 hr ozone (O<sub>3</sub>), and particulate matter less than 10 microns (PM<sub>10</sub>); unclassifiable for the 2012 standard for particulate matter less than 2.5 microns (PM<sub>2.5</sub>) and partial non-attainment area for sulfur dioxide (SO<sub>2</sub>).

**Application Type/Permit Activity:**

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

**Compliance Summary:**

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

**I. Source Information**

1. **Product/Process Description:** The source produces various coatings and resins.
2. **Process Description:** The source produces various coatings and resins. The source produces steam for plantwide use with gas-fired and liquid waste-fired boilers.
3. **Site Determination:** There are no other facilities that are contiguous or adjacent and under common control.
4. **Emission Unit Summary**
  - A. **KAC PRODUCTION UNIT: Production of coatings and resins**
    - i. U-KAC-Tanks1 Emission Unit
    - ii. U-KAC-Tanks2 Emission Unit
    - iii. U-KAC-Tanks3 Emission Unit
    - iv. U-KAC-Tanks4 Emission Unit
    - v. U-KAC-Reactor Emission Unit
    - vi. U-KAC-Load Emission Unit
    - vii. U-KAC-Powder Emission Unit
    - viii. U-KAC-DryPack Emission Unit
    - ix. U-KAC-Misc Emission Unit
    - x. U-KAC-D-PKG Emission Unit
  - B. **KB PRODUCTION UNIT: Methyl Methacrylate Distillation**
    - i. U-KB-Columns+ Emission Unit
    - ii. U-KB-Tanks1 Emission Unit
  - C. **KVK PRODUCTION UNIT: Plastic Additives**
    - i. U-KVK-Tanks1 Emission Unit
    - ii. U-KVK-Tanks2 Emission Unit
    - iii. U-KVK-G&HReact Emission Unit
    - iv. U-KVK-Misc Emission Unit
  - D. **KV-1 PRODUCTION UNIT: Plastic Additives**
    - i. U-KV1-Feed1 Emission Unit
    - ii. U-KV1-Feed2 Emission Unit
  - E. **KVP-2 PRODUCTION UNIT: Plastic Additives Pelletizing System**
    - i. U-KVP2-PELL Emission Unit
    - ii. U-KVP2-PKG Emission Unit
  - F. **KV-2 PRODUCTION UNIT: Plastic Additives**
    - i. U-KV2-Feed Emission Unit
    - ii. U-KV2-Dryer Emission Unit
    - iii. U-KV2-50#bag Emission Unit
  - G. **KV-PA PRODUCTION UNIT: Plastic Additives**
    - i. U-KVPA-Feed Emission Unit
    - ii. U-KVPA-Dry Emission Unit

iii. U-KVPA-Pack Emission Unit

H. **PLANT MISCELLANEOUS PRODUCTION UNIT: Miscellaneous**

U-PLANT-Misc Emission Unit

I. **UTILITIES PRODUCTION UNIT: Utilities**

i. U-UTIL-Steam Emission Unit

ii. U-UTIL-WW Emission Unit

J. **IA1: Cold Cleaners group**

K. **IA2: Existing Emergency Generators**

5. **Fugitive Sources:** Fugitive emissions of dust from any part of the plant are subject to Regulation 1.14, *Control of Fugitive Particulate Emissions*.

6. **Permit Revisions**

Revision	Permit No.	Issue Date	Public Notice Date	Change Type	Change Scope	Description
Initial	157-97-TV	2/28/07	9/03/06	Initial	Entire Permit	Notes 1, 2, 3
R1	157-97-TV (R1)	3/30/09	N/A	Admin	U-UTIL	Incorporated Construction Permits 254-05-C(R1), 522-07-C, and 525-08-C
R2	157-97-TV (R2)	7/21/11	5/18/11	Admin	Entire Permit	Notes 4, 5
R3	157-97-TV (R3)	8/19/14	5/12/14	Renewal	Entire Permit	5 year Renewal; incorporated STAR requirements, Construction Permits 523-07-C(R1), 449-90-C(R2), 105-09-C, 32-10-C, 378-06-C(R1), 31532-11-C, 31533-11-C, and 31534-11-C, included repurposed tanks. Notes 6, 7, 8, 9, 10
			6/28/14	Significant	U-KAC-DryPack page 57 and U-KAC-D-PKG page 71	Changed the duration of the Method 9 test from 3 hours to 30 minutes.
				Admin	1) U-KVP2-PELL, S.2.a.iii.; 2) U-KV2-50#bag, Equipment Description, Standards, Reporting and SOB	Clarified the monitoring requirement for the VOC concentration; corrected the process collector equipment description; corrected the description in all the related standards, monitoring/record keeping, reporting requirements, and comments; corrected the PM standard for the Emission Points 03-571 and 03-572 to match Construction Permit 35996-12-C; and updated SOB to match the PM lb/hr standard

Revision	Permit No.	Issue Date	Public Notice Date	Change Type	Change Scope	Description
R4	157-97-TV (R4)	03/02/18	8/10/17	Significant	U-UTIL-Steam, Boiler 100, S1.g.i.6)	Corrected a TAC standard;
					U-UTIL-Steam, Boiler 100, S1.h.[i., ii., vi., vii., viii., x.3)]	Updated permit language based upon most recent comprehensive performance test, Added 40 CFR 63 Subpart EEE limits that were left out by mistake; Changed minimum combustion chamber temperature language
					U-UTIL-Steam, Boiler 100, S4.b.[iv. – vii.]	Added testing language specific to 40 CFR 63 Subpart EEE
					Removed Appendix C	Note 11
					STAR	Formaldehyde was found in water samples, but based upon Tier 4 modeling, the emissions meet EA levels.
					Removed 40 CFR 61 Subpart V, 40 CFR 63 Subpart OO, 40 CFR 63 Subpart PP	The facility decided to no longer receive off-site waste
				Admin	Entire Permit	Corrected typographical errors; updated Abbreviations and Acronyms, Preamble, & General Conditions. Note 11
					U-UTIL-Steam, Boiler 100, S1.h.[iv., v., ix.]	Changed “TBD” to the correct revision date; Added additional regulator reference.
					U-UTIL-Steam, Boiler 100, S2.c.iii.2) S2.h.ii.6)(b) S2.h.[i., ii., iii.]	Corrected permit references; Consolidated permit language
					U-UTIL-Steam Comments 8, 11, 13, 19	Updated Comments
					KB PRODUCTION UNIT Columns+ S1.a.vi., S2.a.vi – viii., S3.a.v., Comments 4, 11,	Incorporated Construction Permit 523-07-C(R2)

Revision	Permit No.	Issue Date	Public Notice Date	Change Type	Change Scope	Description
					12, 13 Tanks 1 S1.a.vii., S2.a.iv., S3.a.ii., Comments 2, 7	
					U-KVP2-PKG	Note 12
					U-KVP2-PELL	Incorporated Construction Permit 378-06-C (R2)

Notes:

- 1) The District incorrectly changed some limits for Boiler 100. These limits have been changed back to match the draft Title V and Construction Permit 449-90-C, dated February 13, 2002.
- 2) The District made the changes indicated in the response to comments that were inadvertently missed.
- 3) The District corrected some additional typographical errors.
- 4) The following equipment was permanently taken out of service on the following dates. The District also corrected additional typographical errors.
  - 03/24/2009: U-KU-Misc- (06-416 and 06-531), U-KU-Storage4- (08-500, 08-510, 08-520, 08-530, 08-540, 08-550, 08-560, 08-570, 08-580, 08-590, 08-660, 08-665, 08-670, 08-675, 08-680, 08-685) and U-KVK-Tanks1-03-105
  - 06/30/2009: U-KV3-Dryer System- (17-300, 17-330, 17-250, 17-256, 17-116, 17-477, 17-235), U-KV3-Misc-17-150, U-KV3-Tanks1- (17-200, 17-272, 17-478, 17-155, 17-158, 17-205, 17-240, 17-241 and 17-262), U-KV3-Misc- (17-220, 17-221, 17-224, 17-376, 17-390, 17-392, 17-462, 17-Pkg, 17-S&G), U-KV3-Tanks2- (17-185 and 17-246), U-KVK-E&FReact- (05-500, 05-508, 05-510, 05-515, 05-518 and 05-546), U-KVK-Misc- (05-501, 05-520, 05-523, 05-524, 05-533, 05-542, 05-545 and 05-562)
  - 10/06/2009: U-KB-Columns+- (03-762), U-KU-Load-05-479, U-KU-Storage1-05-402, U-KU-Storage2-66-172, U-KU-Storage4-08-355, U-KU-MISC- (03-233, 05-135 and 05-181), U-KU-Storage1- (05-140, 05-150, 05-405, 05-410, 05-415, 05-420, 05-425, 05-430, 05-452, 05-458, 05-467, 05-471, 05-473, 05-475 and 05-477), U-KU-Storage2- (05-121, 05-215, 05-217, 05-220, 06-533, 06-645, 08-260, 08-262, 08-264 and 08-266), U-KU-Storage3- (08-400, 08-401, 08-402, 08-403 and 08-404), U-KU-Storage5- (05-202 and 08-200), U-KU-Storage6- (08-204, 08-230, 08-231, 08-232, 08-233, 08-234, 08-235, 08-236, 08-237, 08-238, 08-239, 08-244, 08-245, 08-246, 08-247, 08-248, 08-249, 08-250, 08-251, 08-252, 08-253, 08-258, 08-259, 08-261, 08-263, 08-265 and 08-267), and U-KU-Storage7- (05-155, 06-150, 08-350, 08-351, 08-352, 08-353, 08-354, 08-470, 08-471 and 08-472)
  - 02/01/2010: U-KU-Load- (07-100, 07-110), U-KU-Misc- (03-715, 05-191, 05-334, 05-346, 05-349, 06-290, 06-438, 06-459, 06-500, 06-510, 05-561, 06-570, 06-610, 08-220, 08-227, 58-175, 66-170, Drum, Used Drum), U-KU-Reactors- (05-255, 05-266), U-KU-Storage1- (05-230, 05-402, 05-450, 05-454, 05-456, 05-465, 05-469, 06-306), U-KU-Storage2- (05-226, 05-245, 06-307, 06-424, 08-205), U-KU-Storage5- (05-175, 05-204, 06-224), U-KU-Storage6- (05-124, 05-207, 06-536), U-KU-Storage8- (05-240, 05-250, 05-275, 05-280, 05-310, 05-320, 05-330, 06-401, 06-403, 06-431, 06-433, 06-518, 06-521, 06-528, 06-530, 06-540, 06-550, 08-222), U-KV3R-Tanks1- (17-650, 17-802, 17-803, 17-805, 17-820, 17-825, 17-869, 17-920), U-KV3R-Tanks2- (17-365, 17-870, 17-930), U-KV3R-Tanks3- (17-625, 17-647, 17-655, 17-665, 17-670, 17-705, 17-875, 17-880)
  - 07/01/2010: U-KV3R-I&JReac- (17-601, 17-900, 17-630, 17-860, 17-855, BD Area, Rail), U-KV3R-Tanks2-17-721, U-KU-Misc- (06-361, 06-364), U-KU-Reactors- (05-128, 05-232, 05-285, 05-290, 05-300, 05-305, 06-300, 06-330, 06-400, 06-430), and U-KU-Storage5-05-120

- 5) 40 CFR 63 Subpart JJJ removed as company is no longer subject to 40 CFR 63 Subpart JJJ, per 40 CFR 63.1310(f)(9) per company letter from March 8, 2010 stating that the company did not anticipate making any thermoplastic products in the future.
- 6) The District removed the following equipment that was deemed trivial activities: U-KAC-Powder-14-593, U-KAC-D-PKG-KACD-vac, U-KV1-Dryer-05-770, U-KV2-Dryer-(03-392, 03-260), U-KVPA-Dry-09-650, and U-KVP2-PKG-11-272.
- 7) The District removed the following equipment permanently taken out of service:
  - 8/24/2011: U-KAC-MISC-14-395
  - 10/06/2011: U-KAC-DryPack- (14-295, 14-337), U-KAC-Tanks2-14-660, U-KAC-Tanks4- (14-116, 14-119), U-KV3R-Tanks1-03-156, U-KV3-Tanks1- (17-100, 17-103, 17-105), U-KV3-Tanks2- (17-135, 17-136)
  - 02/22/2013: U-KV1-Dryer- (05-570, 05-600, 05-740, 05-770) and U-KV1-Pack-Bag
  - 05/08/2013: U-KVP1-PELL- (05-776 and 05-781)
  - 01/31/2014: U-PLANT-Misc- (Print 1, Print 2, Print 5, Print 6), and U-KU-Storage3-17-530
  - 03/06/2014: U-PPLANT-Misc – (Print 3, Print 4, Print 7, Print 8), U-KV2-50#bag 03-570, and U-KVK-Misc (66-510 and 66-513)
  - 03/26/2014: U-KB-Tanks1 (03-800 and 03-940)
- 8) The following tanks were repurposed and put back into service:
  - U-KVK-Tanks2- (05-450, 05-452, 05-454, 05-456, 05-458, 05-465, 05-467, 05-469, 05-471, 05-473, 05-475, 05-477.
  - U-KVK-Misc- (05-215, 06-150)
- 9) The following tanks were moved to different emission units:
  - 05-692 from U-KV1-Feed2 to U-KVPA-Feed
  - 05-670 from KV1-Dryer to KV1-Feed1, there are no emission points left in KV1-Dryer and the entire emission unit has been removed from the Title V Permit
- 10) Appendix A includes CAM requirements. Additional appendices have been added to the permit: Appendix D, Protocol for Performance Test; Appendix E, Regulation 7.25 VOC Emission Points that do not have a BACT Analysis; Appendix F, Control Device Efficiencies and Determination Methods;
- 11) Reserved for future use since the source is no longer accepting offsite waste.
- 12)
- 13) The District removed the following equipment permanently taken out of service:
  - 1/15/2015: U-KVP2-Pellet Staging Hopper (05-810)
  - 4/22/2016: IA2, 500 HP propane fired emergency generator (66-GEN)
  - 5/11/2016: U-KV1-Pack, KV1 Bulk Bag Filling Station (05-874)
- 14) STAR language was removed from EU U-KV1-Feed1 and U-KV1-Feed2 because there are no TACs emitted from this emission unit.

## 7. Construction Permit History

Permit No.	Effective	Description
449-90-C(R2)	7/11/14	One (1) 248.1 MMBtu/hr liquid waste derived fuel, natural gas, and fuel oil fired indirect heat exchanger designated as Boiler #100 (E-UTIL-60-100)
523-07-C(R2)	12/19/14	KB Distillation Columns (E-KB-03-810) and Process Condenser (03-761) controlled by either the Regenerative Thermal Oxidizer (C-KAC-14-723) or the Alternate Thermal Oxidizer (C-KAC-14-726). One (1) barge unloading/line clearing operation (E-KB-BargeLine) used for unloading MMA from barge to an existing tank for KB Distillation Columns (E-KB-03-810).
378-06-C(R2)	7/19/16	E-KVP2-(Bulk Dump Station (11-115), 50# Bag Dump Station (11-124), Pelletizer (11-154), Flow Aid System (11-184), Pellet Rework Hopper System (11-194), Pack-Out Hopper System (11-210), and Rework System (11-236)) all points controlled by Fabric Filter (11-250)

## 8. Permit Application Documents

Document Number	Date Received	Description
<b>Application Documents for Permit Renewal (R3)</b>		
10176	12/15/09	Application for modification due to 40 CFR 63 Subpart EEE (Hazardous Waste Combustors MACT) to Title V and 449-90-C
31688, 31689, 31690, 31691	8/29/11	Title V renewal
36057	2/23/12	Application for Revision to Permit 449-90-C
36050	2/23/12	Application for Revision to Permit 523-07-C
36277	3/02/12	Addition information for Application for Revision to Permit 449-90-C
41818	7/25/12	Updated Title V forms
59982	10/11/13	Updated Title V forms for 35996-12-C
63501	3/28/14	Updated Title V forms for diesel engines and to change the name of emission unit U-MAINT to U-MISC
64129	4/17/14	Updated Title V forms for CAM Plans
<b>Application Documents for Permit Revision (R4)</b>		
66583	8/18/14	Application for incorporation of Construction Permit 523-07-C(R1)
67280	9/29/14	EP E-KB-03-810 for Barge Unloading Line Clearing
75483	2/04/16	Formaldehyde Environmental Acceptability Demonstration modeling files
75143	2/05/16	Formaldehyde Environmental Acceptability Demonstration
77534	5/28/16	Revise potential emissions from KVP2 Pelletizer (E-KVP2-11-154)

Document Number	Date Received	Description
77789	5/28/16	Potential emissions calculations from KVP2 Pelletizer
77629	6/06/16	Revised Environmental Acceptability Analysis
80273	11/01/16	Off-Site Waste and Recovery Operation MACT Removal
81571	2/01/17	Kentucky Secretary of State Certificate of Authority

**9. Emission Summary**

Pollutant	District Calculated Actual Emissions 2015 Data (tpy)	Major Source Status (based on PTE)
CO	18.85	Yes
NO <sub>x</sub>	182.33	Yes
PM/PM <sub>10</sub>	5.12	Yes
SO <sub>2</sub>	37.93	Yes
VOC	15.68	Yes
Ethyl Acrylate	0.50	Yes*
Methyl methacrylate	4.86	Yes*
Styrene	0.12	Yes*
Toluene	3.32	Yes*
<b>Total HAPs</b>	9.95	Yes*
<b>GHG</b>	27,646	Yes**

\*Note: The source accepted limits on single and total HAP emissions in order to be a synthetic minor source on October 31, 2005; before this date the source was major.

\*\*Note: The GHG CO<sub>2</sub>e in metric tons from ghgdata.epa.gov.

**10. Applicable Requirements**

PSD       Part 60       SIP       Part 63  
 NSR       Part 61       District-Origin       Other

**11. MACT Requirements<sup>1</sup>**

This source was major for HAPs before October 31, 2005 and is subject to the following MACT regulations:

40 CFR 63 Subpart A	General Provisions
40 CFR 63 Subpart EEE	National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors
40 CFR 63 Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

<sup>1</sup> November 2016 the source applied to remove the requirements and conditions associated with 40 CFR 63 Subpart DD because the facility decided to no longer receive off-site waste. The following regulations that were incorporated by reference no longer apply: 40 CFR 61 Subpart V, 40 CFR 63 Subpart OO, and 40 CFR 63 Subpart PP.



40 CFR 63 Subpart CCCCCC National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities

**12. Referenced non-MACT Federal Regulations in Permit:**

40 CFR 60 Subpart A General Provisions  
 40 CFR 60 Subpart Db Standards of Performance for Industrial Commercial-Institutional Steam Generating Units  
 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  
 40 CFR 64 Compliance Assurance Monitoring for Major Stationary Sources

**II. Regulatory Analysis**

1. **Acid Rain Requirements:** The source is not subject to the Acid Rain Program.
2. **Stratospheric Ozone Protection Requirements:** 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. This source does not manufacture, sell, or distribute 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 not 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. If the source becomes subject to 40 CFR 68 and Regulation 5.15, the source shall comply with the Risk Management Program and Regulation 5.15 and submit a Risk Management Plan to:
 

RMP Reporting Center  
 P.O. Box 3346  
 Merrifield, VA 22116-3346
4. **40 CFR Part 64 Applicability Determination:** The source is major for VOC and a control device is needed to achieve compliance with District Regulation 7.25 for Emission Points E-KV2-03-330, E-KB-03-810, and E-KVPA-09-125. In accordance with 40 CFR 64, Compliance Assurance Monitoring for Major Stationary Sources, the source was required to propose a CAM plan for VOC, based on current process and control device requirements and practices. The revised CAM plan was received by the District on April 17, 2014.

## 5. Basis of Regulation Applicability

### A. Plantwide

Rohm & Haas is a major source for CO, NO<sub>x</sub>, SO<sub>2</sub>, PM/PM<sub>10</sub>, VOC, methyl methacrylate, styrene, toluene, combined HAPs, and CO<sub>2e</sub> (Greenhouse Gases). Regulation 2.16-*Title V Operating Permits* establishes requirements for major sources.

The following HAP emission limits were taken to avoid applicability of 40 CFR 63 Subpart FFFF Miscellaneous Organic NESHAP (MON). The limits will assure that the source remains a synthetic minor source for HAPs.

- Each single plantwide HAP emissions to less than 10 tons per 12 consecutive month period.
- Total plantwide HAP emissions to less than 25 tons per 12 consecutive month period.

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

The TAC emissions from the combustion of natural gas are considered to be “de minimis emissions” by the District. This includes all of the emissions from a process or process equipment for which the only emissions are the products of combustion of natural gas, such as from a natural gas-fired boiler or turbine, but does not include the other emissions from a process or process equipment that are not the products of the combustion of natural gas. (Regulation 5.21, section 2.7)

Based upon the June 6, 2016 revised Environmental Acceptability Demonstration, potential TAC emissions were either de minimis or compliant with STAR EA goals yielding a cumulative maximum cancer risk of 4.81 for industrial property and 3.38 for non-industrial property.

Regulation 2.16, sections 4.1.9.1 and 4.1.9.2 requires sufficient monitoring and record keeping 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.

Regulation 2.16, section 4.3.5, requires stationary sources for which a Title V is issued to submit an annual compliance certification by April 15. In addition, as required by Regulation 2.16, section 4.1.9.3, the source shall submit compliance reports at least every six months to show compliance with the permit. Compliance reports and compliance certifications shall be signed by a responsible official and shall include a certification statement per Regulation 2.16, section 3.5.11.

Regulation 2.16, section 4.3.1 establishes testing requirements to assure compliance with the terms and conditions of the permit. Thus, an EPA Reference Method performance test shall be performed every 10 years to determine the emission rate and control efficiency.

**B. Applicable Regulations**

<b>Regulation</b>	<b>Title</b>	<b>Type</b>
1.05	Compliance with Emission Standards and Maintenance Requirements	SIP
2.01	General Application	SIP
2.02	Air Pollution Regulation Requirements and Exemptions	SIP
2.03	Authorization to Construct or Operate; Demolition/Renovation Notices and Permit Requirements	SIP
2.04	Construction or Modification or Major Sources In or Impacting Upon Non-Attainment Areas (Emission Offset Requirements)	SIP
2.05	Prevention of Significant Deterioration of Air Quality	SIP
2.07	Public Notification for Title V, PSD, and Offset Permits; SIP Revisions; and Use of Emission Reduction Credits	SIP
2.08	Emissions Fees, Permit Fees, Permit Renewal Procedures, and Additional Program Fees	Local
2.09	Causes for Permit Modification, Revocation, or Suspension	SIP
2.10	Stack Height Considerations	SIP
2.11	Air Quality Model Usage	SIP
2.16	Title V Operating Permits	SIP
4.01	General Provisions for Emergency Episodes	SIP
4.02	Episode Criteria	SIP
4.03	General Abatement Requirements	SIP
4.07	Episode Reporting Requirements	SIP
5.00	Standards for Toxic Air Contaminants and Hazardous Air Pollutants	Local
5.01	General Provisions	SIP
5.02	Federal Emission Standards for Hazardous Air Pollutants Incorporated by Reference	Local
5.14	Hazardous Air Pollutants and Source Categories	Local
5.15	Chemical Accident Prevention Provisions	Local
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	Local
5.21	Environmental Acceptability for Toxic Air Contaminants	Local
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	Local
5.23	Categories of Toxic Air Contaminants	Local
6.01	General Provisions (for <i>Existing Affected Facilities</i> )	SIP
6.02	Emission Monitoring for Existing Sources	SIP

<b>Regulation</b>	<b>Title</b>	<b>Type</b>
6.09	Standards of Performance for Existing Process Operations	SIP
6.13	Standard of Performance for Existing Storage Vessels for Volatile Organic Compounds	SIP
6.18	Standards of Performance for Solvent Metal Cleaning Equipment	SIP
6.22	Standard of Performance for Existing Volatile Organic Materials Loading Facilities	SIP
6.24	Standard of Performance for Existing Sources Using Organic Materials	SIP
6.26	Standard of Performance for Existing Volatile Organic Compound Water Separators	SIP
6.42	Reasonably Available Control Technology Requirements for Major Volatile Organic Compound and Nitrogen Oxides Emitting Facilities	SIP
6.40	Standards of Performance for Gasoline Transfer to Motor Vehicles (Stage II Vapor Recovery)	SIP
6.43	Volatile Organic Compound Emission Reduction Requirements	SIP
7.01	General Provisions (for <i>New Affected Facilities</i> )	SIP
7.02	Federal New Source Performance Standards Incorporated by Reference	Local
7.06	Standards of Performance for New Indirect Heat Exchangers	SIP
7.08	Standards of Performance for New Process Operations	SIP
7.12	Standard of Performance for New Storage Vessels for Volatile Organic Compounds	SIP
7.15	Standards of Performance for Gasoline Transfer to New Service Station Storage Tanks (Stage I Vapor Recovery)	SIP
7.22	Standard of Performance for New Volatile Organic Materials Loading Facilities	SIP
7.25	Standard of Performance for New Sources Using Volatile Organic Compounds	SIP
7.36	Standard of Performance of New Volatile Organic Compound Water Separators	SIP

C. **Basis for Applicability**

<b>Regulation</b>	<b>Basis for Applicability</b>
1.05	Establishes daily record keeping requirements for sources emitting 100 tons per year or more of VOC and all Control Technique Guidance (CTG) sources to demonstrate compliance with applicable portions of Regulation 6 and 7.
2.03	Establishes requirements for Permits to Construct and Operate
2.04	Establishes requirements for the prevention of deterioration of air quality in regions of the country that currently do not meet the NAAQS

<b>Regulation</b>	<b>Basis for Applicability</b>
2.16	Title V source
5.00	Establishes definitions of terms used in the Strategic Toxic Air Reduction Program.
5.01	Establishes general provisions for process equipment from which a toxic air contaminant is or may be emitted.
5.02	Adopts and Incorporates by Reference of National Emission Standards for Hazardous Air Pollutants
5.20	Establishes the methodology for determining the benchmark ambient concentration of a toxic air contaminant.
5.21	Establishes the criteria for determining the environmental acceptability of emissions of toxic air contaminants.
5.22	Establishes the procedures for determining the maximum ambient concentration of a toxic air contaminant.
5.23	Establishes categories of toxic air contaminants.
6.09	Applies to each process operation that is not otherwise regulated by any other portion of Regulation 6 and was in existence or had a construction permit issued by the District by September 1, 1976.
6.13	Applies to VOC storage tanks greater than 250 gallon capacity which were installed before September 1, 1976.
6.18	Applies to cold cleaners.
6.22	Applies to loading facilities which load more than 200 gallons of "volatile organic materials" into tank trucks, trailer, or railroad tank cars in any one day, commenced before September 1, 1976.
6.24	Establishes VOC standards for affected facilities constructed before June 13, 1979.
6.26	Applies to any compartment of any vessel or device operated for the recovery of VOC compounds that contains 200 gallons a day or more of any VOCs from any equipment which processes, refines, stores, or handles hydrocarbons with a Reid vapor pressure of 0.5 psia or greater that was in being or under construction prior to September 1, 1976.
6.40	Applies to the refueling of motor vehicles at a gasoline dispensing facility.
6.42	Applies to the NOx emissions from all NOx-emitting facilities located at all major NOx-emitting stationary sources.
6.43	Applies to storage tanks 58109, 58140, and 58108 (section 18).
7.01	Applies to new facilities
7.02	Adopts of Federal New Source Performance Standards
7.06	Applies to each indirect heat exchanger having input capacity of more than one million BTU per hour commenced after September 1, 1976.
7.08	Applies to equipment installed after September 1, 1976 subject to the PM emission standard.
7.12	Applies to storage tanks with a capacity greater than 250 gallons constructed after April 19, 1972
7.15	Applies to the transfer of VOC from transport tanks into storage tanks constructed after June 13, 1979

<b>Regulation</b>	<b>Basis for Applicability</b>
7.22	Applies to loading facilities which load more than 200 gallons of “volatile organic materials” into tank trucks, trailer, or railroad tank cars in any one day, commencing after June 13, 1979.
7.25	Applies to affected facility constructed after June 13, 1979 for VOC control.
7.36	Applies to each oil-effluent water separator that recovers 200 gallons a day or more of an volatile organic compound from any equipment which processes, refines, stores, or handles hydrocarbons with a Reid vapor pressure of 0.5 pounds or greater commenced after April 19, 1972.
40 CFR 60 Subpart A	General Provisions
40 CFR 60 Subpart Db	Applies to each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 MMBtu/hr).
40 CFR 60 Subpart Kb	Applies to storage vessels of volatile organic liquids which have a design capacity of 19,800 gal or greater, construction commenced after July 23, 1984, and a maximum true vapor pressure 15.0 kPa or greater.
40 CFR 63 Subpart A	Regulates specific categories of stationary sources that emit (or have the potential to emit) one or more hazardous air pollutants.
40 CFR 63 Subpart EEE	Applies to all hazardous waste combustors.
40 CFR 63, Subpart ZZZZ	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.
40 CFR 63 Subpart CCCCC	Applies to gasoline storage tanks located at an area source of HAP emissions
40 CFR 64	Applies to each pollutant specific emission unit that is subject to an emission limitation or standard; uses a control device to achieve compliance; and has pre-control emissions that exceed or are equivalent to the major source threshold.  Applies because the KB Distillation Columns and KV2 Drying System are subject to emission limitations, use control devices to achieve compliance and have pre-control emissions that exceed the major source threshold.

**D. Emission Unit U-KAC-Tanks1**

**i. Emission Points**

<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
14-122	KAC Storage Tank, 13,500 gal 1962	1.05, STAR, 6.13
14-212	KAC Storage Tank (with Condenser/14-214),	

Emission Point	Description	Applicable Regulations
	5,800 gal 1972	
14-535	KAC Storage Tank, 9,000 gal 1962	
14-246	KAC Weigh Tank (with Condenser/14-245), 1,500 gal 1972	1.05, STAR, 6.24
14-254	KAC Process Tank (with Condenser/14-253), 750 gal 1972	

ii. **Standards/Operating Limits**

1) **HAP**

The emissions from 14-122 and 14-535 shall be vented to the Regenerative Thermal Oxidizer, as required by Construction Permit 263-05-C.

2) **TAC**

The District determined on March 13, 2013 that uncontrolled potential individual TAC emissions of toluene were de minimis.

3) **VOC**

(a) Per Regulation 6.13, there are no equipment standards that apply to Emission Points 14-122, 14-212, and 14-535, due to the vapor pressure as stored being less than 1.5 psia.

(b) Regulation 6.24 limits the pound per hour and pound per day emissions of Class II and Class III solvents for Emission Points 14-246 and 14-254, unless the emissions are reduced by at least 85%. (The source submitted a one-time demonstration on August 1, 2003 that shows the potential VOC emissions cannot exceed the emission standards from Regulation 6.24 for Class II and Class III solvents for Emission Points 14-246 and 14-254 uncontrolled. Therefore, there are no monitoring, recordkeeping, or reporting requirements for these emission points.)

iii. **Monitoring and Record Keeping**

**HAP**

As required by Construction Permit 263-05-C, records shall be maintained of periods of time when the RTO was not operated.

**E. Emission Unit U-KAC-Tanks2**

**i. Emission Points**

<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
14-134	KAC Storage Tank, 30,000 gal 1973	1.05, STAR, 7.12
14-142	KAC Storage Tank, 30,000 gal 1973	
14-152	KAC Storage Tank, 30,000 gal 1973	
14-160	KAC Storage Tank, 30,000 gal 1973	
14-682	KAC Storage Tank, 5,200 gal 1973	
14-684	KAC Storage Tank, 5,000 gal 1973	
14-685	KAC Storage Tank, 4,500 gal 1974	
14-687	KAC Storage Tank, 4,950 gal 1974	
14-688	KAC Storage Tank, 4,950 gal 1974	
14-689	KAC Storage Tank, 8,800 gal 1978	
14-690	KAC Storage Tank, 6,700 gal 1980	
14-691	KAC Storage Tank, 7,500 gal 1981	
14-695	KAC Re-claimed Wastewater Tank, 300 gal 1985	
14-696	KAC Re-claimed Wastewater Tank, 300 gal 1985	

**ii. Standards/Operating Limits**

**1) TAC**

The District determined on March 13, 2013 that uncontrolled potential individual TAC emissions of toluene were de minimis.

**2) VOC**

(a) Regulation 7.12, section 3.3 requires submerged fill if the materials have an as stored vapor pressure of 1.5 psia or greater.

(b) Regulation 7.12 applies due to the size of the tanks, however, since the vapor pressure as stored is less than 1.5 psia there are no applicable emission or equipment standards.

**F. Emission Unit U-KAC-Tanks3**

**i. Emission Points**

<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
14-126	KAC Storage Tank, 13,500 gal 1962	1.05, STAR, 6.13
14-346	KAC Storage Tank, 13,000 gal 1962	
14-352	KAC Storage Tank, 13,000 gal 1962	
14-370	KAC Feed Tank - North with process condenser 14-385, 6,500 gal 1972	
14-376	KAC Feed Tank - South with process condenser 14-389, 6,500 gal 1972	



<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
14-525	KAC Storage Tank, 5,500 gal 1962	
14-290	KAC Blend Tank with process condenser 14-294, 14,000 gal 1972	1.05, STAR, 6.24

ii. **Standards/Operating Limits**

1) **TAC**

The District determined on March 13, 2013 that uncontrolled potential individual TAC emissions of toluene were de minimis.

2) **VOC**

(a) Per Construction Permits 254-05-C(R1) and 187-04-C, Emission Points 14-126, 14-370, 14-376, and 14-525 must be equipped with a permanent submerged fill pipe or equivalent. The use of the Regenerative Thermal Oxidizer (C-KAC-14-723) shall be considered to be equivalent.

(b) Per Construction Permit 254-05-C(R1), Emission Points 14-346 and 14-352 must be equipped with a permanent submerged fill pipe or equivalent. The use of operating with a low level interlock shall be considered to be equivalent.

(c) Regulation 6.24 limits the pound per hour and pound per day emissions of Class II and Class III solvents for Emission Point 14-290, unless the emissions are reduced by at least 85%. Per Construction Permit 263-05-C the emissions from this emission point shall be controlled by the Regenerative Thermal Oxidizer (C-KAC-14-723).

G. **Emission Unit U-KAC-Tanks4**

i. **Emission Points**

<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
14-190	KAC Storage Tank, 2,100 gal 1976	1.05, STAR, 7.12
14-780	KAC Storage Tank, 15,000 gal 1987	
14-790	KAC Storage Tank, 10,000 gal 1987	

ii. **Standards/Operating Limits**

1) **TAC**

The District determined on March 13, 2013 that uncontrolled potential individual TAC emissions of toluene and xylene were de minimis.

2) **VOC**

Regulation 7.12 applies due to the size of the tanks, however, since the vapor pressure as stored is less than 1.5 psia there are no applicable emission or equipment standards.

H. **Emission Unit U-KAC-Reactor**i. **Emission Points**

<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
14-236	KAC Weigh Tank 1972	1.05, STAR, 6.24
14-262	KAC Reactor (with condenser) 1972	
14-400	KAC Separator 1972	
14-510	KAC Separator System 1990	1.05, STAR, 7.25
14-540	KAC Pelletizer 1989	

ii. **Standards/Operating Limits**1) **TAC**

The District determined on March 13, 2013 that uncontrolled potential individual TAC emissions of toluene and xylene were de minimis.

2) **VOC**

- (a) Per Regulation 6.24, Emission Points 14-236, 14-262, and 14-400 are limited to VOC emissions of less than 40 lbs/day and 8 lbs/hr for Class II solvents and less than 3000 lbs/day and 450 lbs/hr for Class III solvents, unless the emissions are reduced by at least 85%.
- (b) Per Regulation 7.25, emissions from Emission Points 14-510 and 14-540 must be vented to the Regenerative Thermal Oxidizer (C-KAC-14-723). In addition, Emission Points 14-236, 14-262, and 14-400 shall also be vented to the RTO. (The regenerative thermal oxidizer is considered BACT for Regulation 7.25. Compliance with the 12.37 tons per 12 consecutive month period, which is the controlled potential VOC emissions, is demonstrated by monitoring the oxidizer and calculating the VOC emissions.)
- (c) Per Regulation 2.05, Emission Points 14-236, 14-262, 14-400, 14-510, and 14-540 are limited to combined VOC emissions of less than 12.37 tons per 12 consecutive month period in order to avoid PSD.

**I. Emission Unit U-KAC-Load**

**i. Emission Points**

<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
14-151 and 14-130	KAC R/C Load/Unload Rack East and West 1973	1.05, STAR, 6.22
14-366	KAC Recycle Solvent Load Spot 0 1973	
14-390	KAC T/T Load/Unload Rack Spots 1, 2, 3 1972	
14-530	KAC T/T Load/Unload Rack Brick Pad 1973	

**ii. Standards/Operating Limits**

**1) TAC**

The District determined on March 13, 2013 that uncontrolled potential individual TAC emissions of toluene and xylene were de minimis.

**1) VOC**

Per Regulation 6.22, “volatile organic material” loading into any tank truck, trailer, or railroad car must be accomplished by submerged fill, bottom loading, or other equivalent methods approved by the District. (Volatile organic materials (VOMs) are any VOCs having a true vapor pressure of 1.5 psia or greater under actual storage conditions. There are no standards if the source loads less than 200 gallons per day of “volatile organic material” in Regulation 6.22.) For Emission Point 14-390 all loading is accomplished by using submerged fill.

**J. Emission Unit U-KAC-Powder**

**i. Emission Points**

<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
14-430	KAC Dryer 1972	2.05, 6.09
14-445	KAC Pellet Transfer System 1973	
14-484	KAC Grinder and Yield Recovery System 1973	

**ii. Standards/Operating Limits**

**1) Opacity**

Regulation 6.09, section 3.1 establishes opacity standards.

**2) PM**

(a) In accordance with Regulation 6.09, Table 1, PM standard for Emission Point 14-445 is 2.58 lb/hr for process throughput of 1000 lb/hr or less:

- (b) In accordance with Regulation 6.09, Table 1, PM emission standard for Emission Points (14-430 and 14-484 combined) is  

$$E = 4.10(1.765)^{0.67} = 6.0 \text{ lb/hr}$$
- (c) Per Regulation 2.05, Emission Points 14-430 and 14-484 are limited to combined PM emissions of less than or equal to 25 tons per 12 consecutive month period in order to avoid PSD.
- (d) Per Regulation 2.05, Emission Points 14-430 and 14-484 are limited to combined PM<sub>10</sub> emissions of less than or equal to 15 tons per 12 consecutive month period in order to avoid PSD.

**K. Emission Unit U-KAC-DryPack**

**i. Emission Points**

<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
14-429	KAC Rework Drum/Bag Dump Hopper 1998	2.05, 7.08
14-499	KAC Rework Transfer System 1998	
14-570	KAC Rework Tote Dump Hopper 1998	
14-453	KAC Dry Packaging Area Spot Ventilation 1996	7.08
14-497	KAC Bulk Packaging System 1995	

**ii. Standards/Operating Limits**

**1) Opacity**

Regulation 7.08, section 3.1 establishes opacity standards.

**2) PM**

- (a) In accordance with Regulation 7.08, Table 1, the PM emission standard for Emission Points (14-497 and 14-453) is 2.34 lb/hr each for process throughput of 1000 lb/hr or less.
- (b) Per Regulation 7.08 and Construction Permits 58-98-C and 59-98-C, PM emission standard for Emission Points (14-429, 14-499, and 14-570) is 1.0 lb/hr each.
- (c) Per Regulation 2.05, PM emissions are limited to 1.0 lb/hr each for Emission Points (14-429, 14-499, and 14-570). (The potential uncontrolled PM emissions are over 25 tons for Emission Points 14-429, 14-499, and 14-570. These emission limits ensure PSD avoidance.)

L. **Emission Unit U-KAC-Misc**i. **Emission Points**

<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
14-063	KAC Oil/Water Separator, 5,000 gal 1972	1.05, STAR, 6.26
14-175	KAC Wastewater Equalization Tank, 42,000 gal 1991	STAR
14-238	KAC Weigh Tank, 55 gal 1992	
14-181	KAC Wastewater Stripper 1992	1.05, STAR, 7.25
14-258	KAC Reactor 1989	
14-286	KAC Process Tank, 1,000 gal 1995	
14-705	KAC Product Loading Station 1990	
14-706	KAC Product Loading Station 1990	

ii. **Standards/Operating Limits**1) **TAC**

It was determined on March 13, 2013 that uncontrolled potential individual TAC emissions of toluene and xylene were de minimis.

2) **VOC**

(a) Per Regulation 7.25 and Construction Permit 101-90-C, Emission Point 14-181 is limited to VOC emissions of 2.0 lb/hr and 1.0 tpy.

(b) Per Regulation 7.25 and Construction Permit 187-04-C, Emission Point 14-258 is limited to 5.0 tpy (The source submitted a BACT analysis dated May 2, 2002, which demonstrated that the potential VOC emissions cannot exceed the limits).

(c) Per Regulation 7.25 and Construction Permit 232-02-C, Emission Point 14-286 is limited to 1.4 tpy. (The source submitted a BACT analysis dated July 3, 2001, which demonstrated that the potential VOC emissions cannot exceed the limits.)

(d) Per Construction Permit 263-05-C, emissions from Emission Points 14-258, 14-705, and 14-706 must be vented to the RTO.

(e) Per Regulation 7.25, Emission Points 14-705 and 14-706 is limited to 1.0 tpy total. (The source submitted a BACT analysis dated April 17, 1997, which demonstrated that the potential VOC emissions cannot exceed the limits.)

- (f) Per Regulation 6.26, Emission Point 14-063 shall not recover 200 gallons a day or more of any volatile organic compounds from any equipment which processes, refines, stores, or handles hydrocarbons with a Reid vapor pressure of 0.5 pounds or greater, unless the emissions of all hydrocarbon vapors and gases are reduced 90% by weight.

**M. Emission Unit U-KAC-D-PKG**

**i. Emission Points**

<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
19-195	KAC-D Product Transfer Receiver #1 2000	2.05, 7.08
19-215	KAC-D Product Transfer Receiver #3 2000	
19-265	KAC-D Rework Bag/Drum Dump Station 2000	
19-285	KAC-D Tote Dump Station 2000	
19-375	Packaging System 2000	

**ii. Standards/Operating Limits**

**1) Opacity**

Regulation 7.08, section 3.1 establishes opacity standards.

**2) PM**

- (a) In accordance with Regulation 7.08, Table 1, PM emission standard for Emission Points 19-195, 19-215, 19-265, 19-285, and 19-375 combined is  

$$E = 3.59(1.440)^{0.62} = 4.5 \text{ lb/hr}$$
- (b) Per Regulation 2.05, Emission Points 19-195, 19-215, 19-265, 19-285, and 19-375 are limited to combined PM emissions of less than or equal to 25 tons per 12 consecutive month period in order to avoid PSD.
- (c) Per Regulation 2.05, Emission Points 19-195, 19-215, 19-265, 19-285, and 19-375 are limited to combined PM<sub>10</sub> emissions of less than or equal to 15 tons per 12 consecutive month period in order to avoid PSD.
- (d) In accordance with Regulation 7.08, Table 1, PM emission standard for Emission Point 19-375 is 2.34 lb/hr for process throughput of 1000 lb/hr or less.

N. **Emission Unit U-KB-Columns+**i. **Emission Points**

<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
03-810	KB Distillation Columns (and process condenser 03-761) 1966	1.05, 2.04, STAR, 6.24, 40 CFR 64
04-500	KB Load Rack 2006	1.05, STAR, 6.22
04-516	KB Load Rack 1966	
57-101-89	KB Railcar Load Rack 2000	1.05, 2.04, STAR, 7.22
58-325	KB Storage Tank 1,000,000 gal, 1997	1.05, 2.04, STAR, 7.02, 7.12, 40 CFR 60 Subpart Kb
BargeLine	Barge unloading/line clearing operation (E-KB-BargeLine) used for unloading MMA from barge to an existing tank for KB Distillation Columns. 2015	7.25

ii. **Standards/Operating Limits**1) **TAC**

It was determined on March 13, 2013 that potential individual TAC emissions of ethyl acrylate and methyl methacrylate were de minimis controlled. The limits ensure that the emissions do not exceed de minimis levels.

2) **VOC**

(a) Regulation 6.24 limits the pound per hour and pound per day emissions of Class II and Class III solvents for Emission Point 03-810, unless the emissions are reduced by at least 85%. If the source is venting the emissions to the Regenerative Thermal Oxidizer (RTO) (C-KAC-14-723) or to the Alternative Thermal Oxidizer (ATO) (C-KAC-14-726), the RTO or ATO is assumed to attain at least an average thermal efficiency of 95% VOC destruction efficiency and to meet the reduction requirements of 85%. The most recent stack test (as of the issuance of 157-97-TV (R4)) was performed on the Regenerative Thermal Oxidizer on May 23-27, 2016 and demonstrated a destruction efficiency of 99.7% at 1520°F. The Alternative Thermal Oxidizer was tested during the same period and demonstrated a destruction efficiency of 99.97% at 1467°F.

(b) Regulations 6.22 and 7.22 apply to Emission Points 04-516, 04-500, and 57-101-89. VOM loading into any tank truck, trailer, or railroad car must be accomplished by submerged fill, bottom loading, or

other equivalent methods approved by the District. These loading facilities have submerged fill.

- (c) Regulation 7.12 requires that Emission Point 58-325 shall have no visible holes, tears, or other openings in the seal and all openings have covers, lids, or seals.
- (d) 40 CFR 60 Subpart Kb requires that Emission Point 58-325 be equipped with a fixed roof in combination with an internal floating roof meeting certain specifications.
- (e) Per Construction Permit 263-05-C, emissions from Emission Points 03-810, 04-516, and 04-500, shall be vented to the Regenerative Thermal Oxidizer (C-KAC-14-723).
- (f) Per Construction Permit 523-07-C(R2), Emission Point 03-810 is allowed to bypass both RTO and ATO no more than 72 minutes each calendar day. Emission Point 03-810 is equipped with a process condenser (03-761) that operates whenever this emission point is in operation. The calendar day starts at 00:00:00 AM and running to 23:59:59 PM.
- (g) Per Regulation 2.04 and Construction Permit 182-04-C, VOC emissions from Emission Points 03-810, 04-516, 57-101-89, 58-325, 03-770, 03-771, 03-785, 03-801, 03-850, 03-851, 03-860, 03-880, 03-881, 03-930, 03-931, 04-521, 04-525, 04-880, 13-800, 58-101, 58-108, 58-109, and 58-140, shall be limited to less than 40 tons per 12 consecutive month period in order to avoid PSD/Non-attainment NSR.
- (h) The barge unloading/line clearing (E-KB-BargeLine) is determined to be an insignificant activity per PTE. Therefore it is de minimis for STAR Program. However, this unit is subject to the 5 tons per 12-month plantwide VOC limit per Regulation 7.25. A BACT determination is required to be performed for any future construction/modification subject to Regulation 7.25 for any emissions outside of the 5 tpy limit.

iii. **Monitoring and Record Keeping**

**VOC**

40 CFR 60 Subpart Kb requires that Emission Point 58-325 be visually inspected and records must be kept of the Volatile Organic



Liquids (VOL) stored, the period of the storage, the vapor pressure of the VOL stored, and inspections.

iv. **Reporting**

**VOC**

For Emission Point 58-325, 40 CFR 60 Subpart Kb requires that the owner or operator report visual inspections, any holes or tears found in the seal, and certification of control equipment.

O. **Emission Unit U-KB-Tanks1**

i. **Emission Points**

<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
03-770	KB Mix Tank #1, 500 gal 1966	1.05, 2.04, STAR, 6.24
03-785	KB Mix Tank #3, 500 gal 1974	
03-771	KB Storage Tank, 500 gal 1962	1.05, 2.04, STAR, 6.13
03-801	KB Decant Tank, 6,600 gal 1962	
03-850	KB Rundown Tank, 10,000 gal 1966	
03-851	KB Rundown Tank, 10,000 gal 1966	
03-860	KB Rundown Tank, 10,000 gal 1966	
03-880	KB Decant Tank, 6,600 gal 1962	
03-881	KB Decant Tank, 6,600 gal 1962	
03-930	KB Rundown Tank, 7,200 gal 1962	
03-931	KB Rundown Tank, 7,200 gal 1962	
04-521	KB Storage Tank, 32,600 gal 1966	
04-525	KB Storage Tank, 32,600 gal 1966	
04-880	KB Storage Tank, 30,000 gal 1962	
13-800	KB Storage Tank, 96,600 gal 1970	
58-101	KB Storage Tank, 1,470,000 gal 1962	1.05, 2.04, STAR, 6.13, 6.43
58-108	KB Storage Tank, 1,470,000 gal 1966	
58-109	KB Storage Tank, 1,470,000 gal 1966	
58-140	KB Storage Tank, 1,470,000 gal 1960	
03-792	KB Transfer System for Tank (14-785) 2000	7.08

ii. **Standards/Operating Limits**

1) **Opacity**

Regulation 7.08, section 3.1 establishes opacity standards for Emission Point 03-792.

2) **PM**

In accordance with Regulation 7.08, Table 1, PM emission standard for Emission Point 03-792 is 2.34 lb/hr for process throughput of 1000 lb/hr or less. (The source submitted a one-time demonstration on August 1, 2003 that shows the potential uncontrolled PM emissions cannot exceed the PM emission standard.)

3) **TAC**

The District determined on March 13, 2013 that potential uncontrolled individual TAC emissions of methyl methacrylate were de minimis.

4) **VOC**

- (a) For Emission Points 03-771, 03-800, 03-801, 03-850, 03-851, 03-860, 03-880, 03-881, 03-930, 03-931, 03-940, 04-521, 04-525, 04-880, 13-800, 58-101, 58-108, 58-109, and 58-140, Regulation 6.13 applies due to the size of the tanks, however since the vapor pressure as stored is less than 1.5 psia there are no applicable standards in the regulation.
- (b) Per Regulation 6.13, Emission Points 04-521, 04-525, and 04-880 must be equipped with a permanent submerged fill pipe or equivalent.
- (c) Regulation 6.24 limits the pound per hour and pound per day emissions of Class II and Class III solvents for Emission Points 03-770 and 03-785, unless the emissions are reduced by at least 85%. (The source submitted a one-time demonstration on August 1, 2003 that shows the potential VOC emissions cannot exceed the emission standards from Regulation 6.24 for Class II and Class III solvents for Emission Points 03-770 and 03-785. Therefore, there are no monitoring, recordkeeping, or reporting requirements for these emission points.)
- (d) Regulation 6.43 requires Emission Points 58-108, 58-109, and 58-140 to be equipped with an internal floating roof with certain specifications.
- (e) Per Construction Permits 263-05-C and 264-05-C, Emission Points 03-801, 03-850, 03-851, 03-860, 03-880, 03-881, 03-930, 03-931, 04-521, 04-525, 04-880, and 13-800, shall vent the emissions to the Regenerative Thermal Oxidizer (C-KAC-14-723) or the Alternative Thermal Oxidizer (ATO).
- (f) Per Regulation 2.04 and Construction Permit 182-04-C, Emission Points 03-810, 04-516, 57-101-89, 58-325, 03-770, 03-771, 03-785, 03-801, 03-850, 03-851, 03-860, 03-880, 03-881, 03-930, 03-931, 04-521, 04-525, 04-880, 13-800, 58-101, 58-108, 58-109, and 58-140, shall limit the VOC emissions to less than 40 tons per 12 consecutive month period in order to avoid PSD/Non-attainment NSR.

iii. **Monitoring and Record Keeping**

**VOC**

Regulation 6.43 requires records of the total pounds filled per tank monthly to be kept for Emission Points 58-108, 58-109, and 58-140.

P. **Emission Unit U-KVK-Tanks1**

i. **Emission Points**

<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
03-106	KVK "G" Process Tank, 1,500 gal 1973	1.05, STAR, 6.24
03-118	KVK "G" Process Tank, 750 gal 1973	
03-120	KVK "G" Process Tank, 750 gal 1973	
03-206	KVK "H" Process Tank, 500 gal 1973	
03-207	KVK "H" Process Tank, 750 gal 1973	
03-209	KVK "H" Process Tank, 750 gal 1973	
03-217	KVK "H" Process Tank, 1,800 gal 1973	
03-220	KVK Process Tank, 25,000 gal 1973	1.05, STAR, 7.12
03-205	KVK Weigh Tank, 15,000 gal 1973	

ii. **Standards/Operating Limits**

1) **TAC**

The District determined on March 13, 2013 that potential uncontrolled individual TAC emissions of acetophenone, 1,3-butadiene, cumene, ethyl acrylate, ethylbenzene, methyl methacrylate, naphthalene, styrene, toluene, and xylene, were *de minimis*. Formaldehyde may be present in the equipment in this emission unit, but emissions are *de minimis* uncontrolled.

2) **VOC**

(a) Regulation 6.24 limits the pound per hour and pound per day emissions of Class II and Class III solvents for Emission Points 03-106, 03-118, 03-120, 03-206, 03-207, 03-209, 03-217, and 03-220, unless the emissions are reduced by at least 85%.

(b) Regulation 7.12 applies to Emission Point 03-205 due to the size of the tank, however, since the vapor pressure as stored is less than 1.5 psia there are no applicable emission or equipment standards.

**Q. Emission Unit U-KVK-Tanks2**

**i. Emission Points**

<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
05-203	KVK Storage Tank, 12,143 gal 1972	1.05, STAR, 6.13
05-435	KVK Product Storage Tank, 40,000 gal 1966	
05-440	KVK Product Storage Tank, 40,000 gal 1966	
05-445	KVK Product Storage Tank, 40,000 gal 1966	
05-450	KVK Product Storage Tank, 60,000 gal 1970	
05-452	KVK Product Storage Tank, 60,000 gal 1970	
05-454	KVK Product Storage Tank, 40,000 gal 1970	
05-456	KVK Product Storage Tank, 40,000 gal 1970	
05-458	KVK Product Storage Tank, 40,000 gal 1970	
05-465	KVK Product Storage Tank, 30,000 gal 1970	
05-467	KVK Product Storage Tank, 30,000 gal 1970	
05-469	KVK Product Storage Tank, 30,000 gal 1970	
05-471	KVK Product Storage Tank, 100,000 gal 1972	
05-473	KVK Product Storage Tank, 30,000 gal 1976	
05-475	KVK Product Storage Tank, 30,000 gal 1976	
05-477	KVK Product Storage Tank, 30,000 gal 1976	

**ii. Standards/Operating Limits**

**1) TAC**

The District determined on March 13, 2013 that potential uncontrolled individual TAC emissions of acetophenone, 1,3-butadiene, cumene, ethyl acrylate, ethylbenzene, methyl methacrylate, naphthalene, styrene, toluene, and xylene, were de minimis.

**2) VOC**

(a) For Emission Points 05-435, 05-440, 05-445, 05-450, 05-452, 05-454, 05-456, 05-458, 05-465, 05-467, 05-469, 05-471, 05-473, 05-475, and 05-477, Regulation 6.13 requires that the owner or operator not store materials with an as stored vapor pressure of greater than or equal to 1.5 psia.

(b) Per Regulation 6.13, Emission Point 05-203 must be equipped with a permanent submerged fill pipe or equivalent.

R. **Emission Unit U-KVK-G&HReact**

i. **Emission Points**

<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
03-100	KVK "G" Reactor 1973	1.05, STAR, 6.24
03-115	KVK "G" Mix/Feed Tank 1974	
03-200	KVK "H" Reactor 1973	
03-215	KVK "H" Mix/Feed Tank, 12,400 gal 1973	
03-112	"G" Mix Tank, 100 gal 1988	STAR, 7.25
03-210	"H" Mix Tank, 100 gal 1988	

ii. **Standards/Operating Limits**

1) **TAC**

The District determined on March 13, 2013 that potential uncontrolled individual TAC emissions of ethyl acrylate and methyl methacrylate were de minimis. On February 5, 2016 a revised EA demo was submitted to the District showing that allowable uncontrolled emissions of formaldehyde met the EA levels.

2) **VOC**

(a) Regulation 6.24 limits the pound per hour and pound per day emissions of Class II and Class III solvents for Emission Points 03-100, 03-115, 03-200, and 03-215, unless the emissions are reduced by at least 85%.

(b) Per Regulation 7.25, VOC emissions from Emission Points (03-112, 03-210, 02-010, 02-020, 02-030, 02-040, 02-050, 02-060, 02-070, 02-080, 03-134, 05-690, 05-691, 17-166, 03-290, 03-291, 03-296, 03-300, 09-102, and BargeLine are limited to less than 5.0 tons per 12 consecutive month period. (A BACT determination is required to be performed for any future construction/modification subject to Regulation 7.25 for any emissions outside of the 5 tpy limit.)

iii. **Monitoring and Record Keeping**

1) **VOC**

Emissions Calculation Methodology:

The VOC storage tank emissions are based upon the VOC content of the stored material and the amount of material in the tank. The emissions from the other equipment are based upon the VOC content of the materials used.

S. **Emission Unit U-KVK-Misc**i. **Emission Points**

<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
05-460	KVK Load Racks 1-4 (East of Bldg 14) 1965	1.05, STAR, 6.22
05-461	KVK Rail Car Load Spots (Load Spot and Spare Spot) 1965	
03-126	KVK Storage Tank, 60,000 gal 1977	1.05, STAR, 6.24
17-164	KVK 164 Storage Tank, 40,000 gal 1966	
05-215	KVK BMA Storage Tank, 15,000 gal 1983	1.05, STAR, 7.12
06-150	Styrene Storage Tank, 34,000 gal 1999	
66-226	WWTP Storage Tank, 2,000 gal 1990	
Rail	KVK Rail Car Loading 1976	1.05, STAR, 7.22
02-010	KVK Product Storage Tank, 60,000 gal 2001	1.05, STAR, 7.25
02-020	KVK Product Storage Tank, 60,000 gal 2001	
02-030	KVK Product Storage Tank, 60,000 gal 2001	
02-040	KVK Product Storage Tank, 60,000 gal 2001	
02-050	KVK Product Storage Tank, 60,000 gal 2001	
02-060	KVK Product Storage Tank, 60,000 gal 2001	
02-070	KVK Product Storage Tank, 60,000 gal 2001	
02-080	KVK Product Storage Tank, 60,000 gal 2001	
03-134	KVK Process Tank, 20 gal 2000	
03-126	KVK Storage Tank, 60,000 gal 1977	
03-132	KVK Storage Tank, 150 gal 1990	

ii. **Standards/Operating Limits**1) **TAC**

The District determined on March 13, 2013 that potential uncontrolled individual TAC emissions of acetophenone, 1,3-butadiene, cumene, ethyl acrylate, ethylbenzene, methyl methacrylate, naphthalene, styrene, toluene, and xylene, were de minimis.

2) **VOC**

- (a) Regulation 6.24 limits the pound per hour and pound per day emissions of Class II and Class III solvents for Emission Points 03-126 and 17-164, unless the emissions are reduced by at least 85%. (The source submitted a one-time demonstration on August 1, 2003 that shows the potential VOC emissions cannot exceed the emission standards from Regulation 6.24 for Class II and Class III solvents for Emission Points 03-126 and 17-164. Therefore, there are no monitoring, recordkeeping, or reporting requirements for these emission points.)

- (b) Per Regulation 7.25, the VOC emissions from Emission Points 03-112, 03-210, 02-010, 02-020, 02-030, 02-040, 02-050, 02-060, 02-070, 02-080, 03-134, 05-690, 05-691, 17-166, 03-290, 03-291, 03-296, 03-300, 09-102, and BargeLine shall be limited to less than 5.0 ton per 12 consecutive month period. (A BACT determination is required to be performed for any future construction/modification subject to Regulation 7.25 for any emissions outside of the 5 tpy limit.)
- (c) Regulations 6.22 and 7.22 apply to Emission Points (05-460, 05-461, and Rail). VOM loading into any tank truck, trailer, or railroad car must be accomplished by submerged fill, bottom loading, or other equivalent methods approved by the District.
- (d) For Emission Points 05-460, 05-461, and Rail, there are no standards if the source loads less than 200 gallons per day of VOM, per Regulations 6.22 and 7.22. These loading facilities have submerged fill.
- (e) For Emission Points 05-215, 06-150, and 66-226, Regulation 7.12 requires that the owner or operator not store materials with an as stored vapor pressure of greater than or equal to 1.5 psia.

**T. Emission Unit U-KV1-Feed1**

**i. Emission Points**

<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
05-670	KV1 Storage Tank, 10,000 gal 1966	1.05, STAR, 6.13
05-678	KV1 North Storage Tank, 5,000 gal 1975	1.05, STAR, 7.12
05-679	KV1 South Storage Tank, 14,000 gal 1975	
17-160	KV1 Storage Tank, 25,000 gal 1983	
17-167	KV1 Storage Tank, 544 gal 1984	

**ii. Standards/Operating Limits**

**VOC**

- 1) For Emission Point 05-670, Regulation 6.13 requires that the owner or operator not store materials with an as stored vapor pressure of greater than or equal to 1.5 psia.
- 2) For Emission Points 05-678, 05-679, 17-160 and 17-167, Regulation 7.12 requires that the owner or operator not store materials with an as stored vapor pressure of greater than or equal to 1.5 psia.

U. **Emission Unit U-KV1-Feed2**

i. **Emission Points**

Emission Point	Description	Applicable Regulations
05-690	KV1 Feed Tank, 14,000 gal 1986	1.05, STAR, 7.25
05-691	KV1 Feed Tank, 14,000 gal 1986	
17-166	KV1 Vibrating Filter 1984	

ii. **Standards/Operating Limits**

**VOC**

Per Regulation 7.25, VOC emissions from Emission Points (03-112, 03-210, 02-010, 02-020, 02-030, 02-040, 02-050, 02-060, 02-070, 02-080, 03-134, 05-690, 05-691, 17-166, 03-290, 03-291, 03-296, 03-300, 09-102, and BargeLine) are limited to less than 5.0 ton per 12 consecutive month period. (A BACT determination is required to be performed for any future construction/modification subject to Regulation 7.25 for any emissions outside of the 5 tpy limit.)

V. **Emission Unit U-KVP2-PELL**

i. **Emission Points**

Emission Point	Description	Applicable Regulations
11-115	KVP2 Bulk Dump Station 1986	2.05, 7.08
11-124	KVP2 50# Bag Dump Station 1986	
11-184	KVP2 Flow Aid System 1986	
11-194	KVP2 Pellet Rework Hopper System 1986	
11-210	KVP2 Pack-out Hopper System 1986	
11-236	KVP2 Rework System 1986	
11-154	KVP2 Pelletizer System (Installed prior to Dec 17, 1987) and associated collector (11-250) 1986	1.05, 2.05, STAR, 7.08, 7.25

ii. **Standards/Operating Limits**

1) **Opacity**

Regulation 7.08, section 3.1 establishes opacity standard for Emission Points 11-115, 11-124, 11-154, 11-184, 11-194, 11-210, and 11-236.

2) **PM**

(a) In accordance with Regulation 7.08, PM emission standards for each Emission Point (11-115, 11-124, 11-154, 11-210, and 11-236) are calculated by the following equation. (The District determined on March 13, 2013 that the potential uncontrolled PM emissions cannot exceed the PM emission standard.)

$$E = 3.59(2.50)^{0.62} = 6.34 \text{ lb/hr}$$



- (b) In accordance with Regulation 7.08, Table 1, the PM emission standard for Emission Points 11-184 and 11-194 is 2.34 lb/hr each for process throughput of 1000 lb/hr or less. (The District determined on March 13, 2013 that the potential uncontrolled PM emissions cannot exceed the PM emission standard.)
- (c) Per Regulation 2.05, PM<sub>10</sub> emissions from Emission Points 11-115, 11-124, 11-130, 11-154, 11-184, 11-190, 11-194, 11-210, and 11-236 combined, shall not equal or exceed 15 tons per 12 consecutive month period.

3) **TAC**

- (a) It was determined on March 13, 2013 that potential uncontrolled individual TAC emissions of ethyl acrylate, ethylbenzene, methyl methacrylate, and styrene were de minimis.
- (b) The District determined as part of Construction Permit 378-06-C (R2), dated July 19, 2016, cumene emissions from Emission Point 11-154 shall not exceed 2,691 pounds per 12 consecutive month period.
- (c) The District determined as part of Construction Permit 378-06-C (R2), dated July 19, 2016, formaldehyde emissions from Emission Point 11-154 shall not exceed 2,365 pounds per 12 consecutive month period.

4) **VOC**

Per Regulation 7.25 and Construction Permit 378-06-C(R2), VOC emissions are limited to 18.1 lb/hr and 36.6 tons per 12 consecutive month period for Emission Point 11-154.

W. **Emission Unit U-KVP2-PKG**

i. **Emission Points**

<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
11-130	KVP2 Filter Vent Receiver 1986	2.05, 7.08
11-190	KVP2 Rework System 1986	

ii. **Standards/Operating Limits**

1) **Opacity**

Regulation 7.08, section 3.1 establishes opacity standards.

2) **PM**

- (a) In accordance with Regulation 7.08, Table 1, the PM emission standard for Emission Point 11-190 is 2.34 lb/hr for process throughput of 1000 lb/hr or less. (The District determined on March 13, 2013 that the potential uncontrolled PM emissions cannot exceed the PM emission standard.)
- (b) In accordance with Regulation 7.08, Table 1, PM standard for Emission Point 11-130 is calculated by the following formula. (The District determined on March 13, 2013 that the potential uncontrolled PM emissions cannot exceed the PM emission standard.)  

$$E = 3.59(2.50)^{0.62} = 6.34 \text{ lb/hr}$$
- (c) Per Regulation 2.05, PM<sub>10</sub> emissions from Emission Points 11-115, 11-124, 11-130, 11-154, 11-184, 11-190, 11-194, 11-210, and 11-236 combined, shall not equal or exceed 15 tons per 12 consecutive month period.

X. **Emission Unit U-KV2-Dryer**

i. **Emission Points**

<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
03-280	KV2 Flow Aid Transfer System Bag Dump Station 1998	7.08
03-297	KV2 Storage Tank, 750 gal 1988	1.05, STAR, 7.12
03-330	KV2 Drying System (Installed prior to Dec 17, 1987); and associated process collector (03-334 and 03-368) associated process safety dust collector (03-350)	1.05, 2.05, STAR, 7.08, 7.25, 40 CFR 64
03-330	KV2 Drying System (Installed prior to Dec 17, 1987); and associated process collector (03-334 and 03-368) associated process safety dust collector (03-350)	
03-429	KV2 Reclaim Transfer System to Reclaim Transfer Dust Collector 1990	7.08
03-436	KV2 Reclaim System Dump Station 1990	
03-662	KV2 Bulk Packaging Machine 1978	
03-690	KV2 Storage Silo 2005	2.05, 7.08

ii. **Standards/Operating Limits**1) **Opacity**

Regulation 7.08, section 3.1 establishes opacity standards for Emission Points 03-260, 03-280, 03-330, 03-429, 03-436, 03-662, and 03-690.

2) **PM**

(a) In accordance with Regulation 7.08, Table 1, the PM emission standard for Emission Points 03-260 and 03-662 is 2.34 lb/hr each for process throughput of 1000 lb/hr or less. (The District determined on March 13, 2013 that the potential uncontrolled PM emissions cannot exceed the PM emission standard.)

(b) In accordance with Regulation 7.08, Table 1, the PM standard for Emission Points 03-429 and 03-436 is calculated by the following formula. (The District determined on March 13, 2013 that the potential uncontrolled PM emissions cannot exceed the PM emission standard.)

$$E = 3.59(2.50)^{0.62} = 6.34 \text{ lb/hr}$$

(c) In accordance with Regulation 7.08, Table 1, PM standard for Emission Point 03-330 is calculated by the following formula. (The District determined on March 13, 2013 that the potential uncontrolled PM emissions cannot exceed the PM emission standard.)

$$E = 3.59(10.00)^{0.62} = 14.97 \text{ lb/hr}$$

(d) In accordance with Regulation 7.08, Table 1, PM standard for Emission Point 03-280 is calculated by the following formula. (The District determined on March 13, 2013 that the potential uncontrolled PM emissions cannot exceed the PM emission standard.)

$$E = 3.59(0.594)^{0.62} = 2.60 \text{ lb/hr}$$

(e) In accordance with Regulation 7.08, Table 1, PM standard for Emission Point 03-690 is:

$$E = 3.59(17.992)^{0.62} = 21.54 \text{ lb/hr}$$

(f) Per Regulation 2.05, Emission Point 03-690 is limited to PM emissions of less than or equal to 25 tons per 12 consecutive month period in order to avoid PSD.

(g) Per Regulation 2.05, Emission Point 03-690 is limited to PM<sub>10</sub> emissions of less than or equal to 15

tons per 12 consecutive month period in order to avoid PSD.

3) **TAC**

The District determined on March 13, 2013 that potential uncontrolled individual TAC emissions of acetophenone, ethyl acrylate, ethylbenzene, methyl methacrylate, styrene, toluene, and xylene, were de minimis. On February 5, 2016 a revised EA demo was submitted to the District showing that controlled emissions of formaldehyde met the EA levels.

4) **VOC**

- (a) Per Regulation 7.25 and Construction Permit 160-91-C, VOC emissions from Emission Point 03-330 are required to be controlled by the thermal oxidizer, except for when the VOC emissions bypass the control device then the VOC emissions are limited to 188 lb/hr and 10.6 tons per 12 consecutive month period. Additionally, for Emission Point 03-330, the vent gas stream shall not bypass the thermal oxidizer while feeding emulsion for more than forty-five (45) minutes in any one twenty-four (24) hour day.
- (b) Per Regulation 2.05, Emission Point 03-330 is limited to VOC emissions of 10.6 tons per 12 consecutive month period in order to avoid PSD.
- (c) For Emission Point 03-297, Regulation 7.12 requires that the owner or operator not store materials with an as stored vapor pressure of greater than or equal to 1.5 psia.

Y. **Emission Unit U-KV2-Feed**

i. **Emission Points**

<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
03-290	KV2 Feed Tank, 25,000 gal 1986	1.05, STAR, 7.25
03-291	KV2 Feed Tank, 25,000 gal 1986	
03-296	KV2 Filter 1995	
03-300	KV2 Blend Tank, 36,000 gal 1979	
03-308	KV2 Storage Tank, 40,000 gal 1977	1.05, STAR, 6.24
03-309	KV2 Storage Tank, 40,000 gal 1977	

ii. **Standards/Operating Limits**

**VOC**

- 1) Per Regulation 7.25, for Emission Points 03-112, 03-210,

02-010, 02-020, 02-030, 02-040, 02-050, 02-060, 02-070, 02-080, 03-134, 05-690, 05-691, 17-166, 03-290, 03-291, 03-296, 03-300, 09-102 and BargeLine, the owner or operator shall limit the VOC emissions to less than 5.0 ton per 12 consecutive month period. (A BACT determination is required to be performed for any future construction/modification subject to Regulation 7.25 for any emissions outside of the 5 tpy limit.)

- 2) Regulation 6.24 limits the pound per hour and pound per day emissions of Class II and Class III solvents for Emission Points 03-308 and 03-309, unless the emissions are reduced by at least 85%.

**TAC**

Formaldehyde may be present in the equipment in this emission unit, but emissions are de minimis uncontrolled.

**Z. Emission Unit U-KV2-50#bag**

**i. Emission Points**

<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
03-616	KV2 Bag Packing Conveyor 1977	7.08
Bag-03-571	KV2 50# Packaging Machine #2 1985	2.05, 7.08
Bag-03-572	KV2 50# Packaging Machine #3 1985	

**ii. Standards/Operating Limits**

**1) Opacity**

Regulation 7.08, section 3.1 establishes opacity standards.

**2) PM**

(a) In accordance with Regulation 7.08, Table 1, PM emission standard for Emission Point 03-616 is 2.34 lb/hr for process throughput of 1000 lb/hr or less.(The District determined on March 13, 2013 that the potential uncontrolled PM emissions cannot exceed the PM emission standard.)

(b) In accordance with Construction Permit 35996-12-C, the PM standard for each Emission Point Bag-03-571, and Bag-03-572 is 12.52 lb/hr.

(c) Per Regulation 2.05, Emission Points Bag 03-571 and Bag 03-572 combined are limited to PM emissions of less than or equal to 25 tons per 12 consecutive month period in order to avoid PSD.

- (d) Per Regulation 2.05, Emission Points Bag 03-571 and Bag 03-572 combined are limited to PM<sub>10</sub> emissions of less than or equal to 15 tons per 12 consecutive month period in order to avoid PSD.

**AA. Emission Unit U-KVPA-Feed**

**i. Emission Points**

<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
05-692	KV1 Storage Tank, 25,000 gal 1985	1.05, STAR, 7.12
09-101	KVPA Storage Tank, 3,000 gal 1996	
09-100	KVPA Storage Tank, 30,000 gal 1996	

**ii. Standards/Operating Limits**

**VOC**

Regulation 7.12 prohibits storage of materials with an as stored vapor pressure of greater than or equal to 1.5 psia in the storage vessels.

**TAC**

Formaldehyde may be present in the equipment in this emission unit, but emissions are de minimis uncontrolled.

**BB. Emission Unit U-KVPA-Dry**

**i. Emission Points**

<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
09-125	KVPA Drying Chamber with associated dust collector (09-129) 1996	1.05, 2.05, STAR, 7.08, 7.25, 40 CFR 64
09-102	KVPA Filter 1996	1.05, STAR, 7.25

**ii. Standards/Operating Limits**

**1) VOC**

- (a) Per Regulation 7.25, for Emission Points 03-112, 03-210, 02-010, 02-020, 02-030, 02-040, 02-050, 02-060, 02-070, 02-080, 03-134, 05-690, 05-691, 17-166, 03-290, 03-291, 03-296, 03-300, 09-102 and BargeLine, the owner or operator shall limit the VOC emissions to less than 5.0 ton per 12 consecutive month period. (A BACT determination is required to be performed for any future construction/modification subject to Regulation 7.25 for any emissions outside of the 5 tpy limit.)

- (b) Per Construction Permit 86-95-C the following is required:
  - (i) The KVPA vent gas stream shall not bypass the thermal oxidizer while feeding emulsion for more than forty-five (45) minutes in any one twenty-four (24) hour day.
  - (ii) The vent gas stream shall be burned at a minimum of 1300 °F for a minimum of 0.5 seconds.
  - (iii) The destruction of VOCs shall meet or exceed 98.50% during normal operation or the destruction efficiency demonstrated during the most recent performance test.
  - (iv) The VOC feed rate in the stream to the thermal oxidizer may not exceed 57.86 lb/hr or alternatively, a rate established during a performance test.
- (c) Per Regulations 2.05, 7.25, and Construction Permit 86-95-C, VOC emissions from Emission Point 09-125 shall be limited to less than 5.0 lb/hr and 8.0 tons per 12 consecutive month period.

2) **Opacity**

Regulation 7.08, section 3.1 establishes opacity standards for Emission Point 09-125.

3) **PM**

In accordance with Regulation 7.08, Table 1, PM standard for Emission Point 09-125 is:

$$E = 3.59(12.516)^{0.62} = 17.2 \text{ lb/hr}$$

4) **TAC**

On February 5, 2016 a revised EA demo was submitted to the District showing that controlled emissions of formaldehyde met the EA goals.

CC. **Emission Unit U-KVPA-Pack**

i. **Emission Points**

Emission Point	Description	Applicable Regulations
09-231	KVPA Buffer Bin 1996	2.05, 7.08
09-236	KVPA Rework Hopper and 50# dump stations 1996	
09-50#	KVPA 50# Pkg including 50# Baggers and various misc pick up locations on 50# Pkg system 1996	

Emission Point	Description	Applicable Regulations
09-Bulk	KVPA Bulk System including Bulk Bagging Machine and various misc. pick up locations in Bulk System 1996	

ii. **Standards/Operating Limits**

1) **Opacity**

Regulation 7.08, section 3.1 establishes opacity standards.

2) **PM**

(a) In accordance with Regulation 7.08, Table 1, PM standard for each Emission Point (09-231, 09-50#, and 09-Bulk) is:

$$E = 3.59(8.795)^{0.62} = 13.82 \text{ lb/hr}$$

(b) In accordance with Regulation 7.08, Table 1, PM standard for Emission Point 09-236 is:

$$E = 3.59(2.50)^{0.62} = 6.34 \text{ lb/hr}$$

(c) Per Regulation 2.05, Emission Points 09-231, 09-50#, and 09-Bulk combined are limited to PM emissions of less than or equal to 11.5 tons per 12 consecutive month period in order to avoid PSD.

(d) Per Regulation 2.05, Emission Point 09-231, 09-50#, and 09-Bulk combined are limited to PM<sub>10</sub> emissions of less than or equal to 11.5 tons per 12 consecutive month period in order to avoid PSD.

DD. **Emission Unit U-PLANT-Misc**

i. **Emission Points**

Emission Point	Description	Applicable Regulations
71202A	Vehicle Gasoline Pump Tank 1,000 gal 1980	STAR, 6.40, 7.15, 40 CFR 63 Subpart CCCCCC

ii. **Standards/Operating Limits**

1) **TAC**

The gasoline fueling process is de minimis for STAR as defined in Regulation 5.21, section 2.6.

2) **VOC**

(a) Per Regulation 7.15 and 40 CFR 63 Subpart CCCCCC, the owner or operator shall install, maintain, and operate the following devices on the storage tank: submerged fill pipe, vent line



restrictions, vapor balance system, and vapor tight connections. In addition, the equipment shall be maintained with no defects and with vapor-tight seals and covers.

- (b) The owner or operator shall not exceed 10,000 gallons of gasoline based upon calculating the average volume of gasoline dispensed per month over the consecutive 12 month period, in order to be exempted from Regulation 6.40, except for the recordkeeping and reporting requirements.

iii. **Monitoring and Record Keeping**

**VOC**

Regulation 6.40 and 40 CFR 63.11116(b) require that the owner or operator shall keep a record of the amount of throughput of gasoline per month to determine compliance with limits.

iv. **Reporting**

**VOC**

Regulation 6.40 requires that the owner or operator shall submit a report by April 15<sup>th</sup> every year showing that they are still exempt from Regulation 6.40.

EE. **Emission Unit U-UTIL-Steam**

i. **Emission Points**

<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
60-100	Boiler #100; 248.1 MM Btu/hr; natural gas, LWDF, and No. 2 fuel oil-fired 1992	2.04, 2.05, STAR, 6.42, 7.01, 7.02, 7.06, 40 CFR 60 Subpart Db, 40 CFR 63 Subpart EEE
60-500	Boiler #500; 248.1 MM Btu/hr; natural gas-fired, with No. 2 fuel oil backup 1997	STAR, 6.42, 7.02, 7.06, 40 CFR 60 Subpart Db
64-130	Tanker Load Rack 1983	STAR, 7.22, 40 CFR 63 Subpart DD
64-137	Tank Car Load Rack 1986	
64-140	Fuel Storage Tank, 31,900 gal 1943	STAR, 6.13
64-141	Fuel Storage Tank, 31,900 gal 1943	
64-250	Fuel Storage Tank, 12,000 gal 1962	
64-142	Fuel Storage Tank, 7,200 gal 1960	6.13

ii. **Standards/Operating Limits**

1) **40 CFR 63 Subpart EEE**

- (a) 40 CFR 63 Subpart EEE limits the total LWDF feed rate and combustion air flowrate for Emission Point 06-100 to the maximum amount demonstrated

during the most recent testing that has been submitted and approved by the District. (The most recent test, as of the issuance of permit 157-97-TV (R4), was conducted on October 29 and 30, 2013 and March 4 and 5, 2014 and showed a maximum LWDF feed rate of 15,219 lb/hr and a maximum combustion air flow rate (based on measured flow) of 183,900 lb/hr or a maximum combustion air flow rate (based on calculated flow) of 178,000 lb/hr. All are based on hourly rolling averages.)

- (b) Per 40 CFR 63 Subpart EEE, the owner or operator shall install, maintain, and properly operate an automatic waste feed shut down device for Emission Point 60-100.
- (c) 40 CFR 63 Subpart EEE requires CO emissions from Emission Point 60-100 to be limited to 100 ppmv in the stack gas on an hourly rolling average basis corrected to 7% oxygen dry gas basis when combusting LWDF.
- (d) Per 40 CFR 63 Subpart EEE and 40 CFR 266 Subpart H, the owner or operator may elect not to comply with the standards in Subpart EEE and instead comply with the standards in Subpart H.
- (e) The adjusted Tier I feed rates screening limits for cadmium, chromium, lead and total chlorides were all calculated based upon a dispersion modeling factor of  $0.1617 (\mu\text{g}/\text{m}^3)/(\text{g}/\text{s})$  and appendices IV and V to Part 266.
- (f) Construction Permit 449-90-C(R2) prohibits burning of polychlorinated biphenyls, dioxins, and materials manufactured for chemical warfare in Emission Point 60-100.
- (g) 40 CFR 63 Subpart EEE requires that the boiler meet a destruction and removal efficiency (DRE) of 99.99% when burning liquid waste derived fuels (LWDF).

2) **CO**

See condition number 7(c) below.

3) **NO<sub>x</sub>**

40 CFR 60 Subpart Db establishes NO<sub>x</sub> emission limits based on the fuel combusted.

- (a) In accordance with Regulation 2.05, the source netted out of PSD with a NO<sub>x</sub> emission limit of 453.3 tons per 12 consecutive month limit for Emission Point 60-100.
  - (b) The NO<sub>x</sub> RACT Plan establishes NO<sub>x</sub> emission standards on a rolling 30-day average basis for Emission Points 60-100 and 60-500.
- 4) **Opacity**
- (a) Regulation 7.06, section 4.2 establishes opacity standards for Emission Points 60-100 and 60-500.
  - (b) 40 CFR 60 Subpart Db establishes opacity standards for Emission Points 60-100 and 60-500.
- 5) **PM**
- (a) In accordance with 40 CFR 60 Subpart Db and Regulation 7.06, section 4.1.4, PM emissions are limited to 0.10 pounds per million BTU actual total heat input for Emission Point 60-100.  

$$E = 1.919(248.1)^{-0.535} = 0.10 \text{ lb/mmBTU}$$
  - (b) In accordance with Regulation 2.05 and Construction Permit 449-90-C(R2), the source netted out of PSD with a PM emission limit of 108.7 tons per 12 consecutive month limit for Emission Point 60-100.
  - (c) In accordance with 40 CFR 60 Subpart Db and Regulation 7.06, section 4.1.2 (total heat capacity greater than 250 mmBTU – all boilers installed after 1976 combined), PM emissions are limited to 0.10 pounds per million BTU for Emission Point 60-500.
- 6) **SO<sub>2</sub>**
- (a) In accordance with Regulation 7.06, section 5.1.3.1, SO<sub>2</sub> emissions are limited to 0.80 pounds per million BTU actual total heat input for Emission Point 60-100.  

$$E = 7.7223(248.1)^{-0.4106} = 0.80 \text{ lb/mmBTU}$$
  - (b) In accordance with Regulation 7.06, section 5.1.2, SO<sub>2</sub> emission are limited to 0.8 pounds per million BTU actual total heat input for combustion of gaseous fuels for Emission Point 06-500.
  - (c) 40 CFR 60 Subpart Db limits the sulfur content of the fuel oil combusted.

- (d) In accordance with Regulation 2.05 the source netted out of PSD with a SO<sub>2</sub> emission limit of 529.8 tons per 12 consecutive month limit for Emission Point 60-100.

7) **VOC**

- (a) Regulation 6.13 requires Emission Points 64-140 and 64-141, and 64-250 to be equipped with a permanent submerged fill pipe.
- (b) Per Regulation 6.13, Emission Point 64-142 is limited to storing materials with a vapor pressure of less than 1.5 psia.
- (c) Regulation 7.22 applies to Emission Points 64-130 and 64-137. VOM loading into any tank truck, trailer, or railroad car must be accomplished by submerged fill, bottom loading, or other equivalent methods approved by the District. In addition, for Emission Points 64-130 and 64-137 the owner or operator shall not load such materials unless such facility is equipped with a device which reduces the emissions of all hydrocarbon vapors and gases by at least 90% by weight, and which is properly installed, in good working order, and in operation.
- (d) In accordance with Regulation 2.05, the source netted out of PSD with a VOC emission limit of 13.0 tons per 12 consecutive month limit for Emission Point 60-100.

8) **TAC**

- (a) The District determined as part of Construction Permit 449-90-C (R2), arsenic and arsenic compounds emissions shall not exceed 56 pounds per 12 consecutive month period.
- (b) The District determined as part of Construction Permit 449-90-C (R2), cadmium and cadmium compounds emissions shall not exceed 159.8 pounds per 12 consecutive month period.
- (c) The District determined as part of Construction Permit 449-90-C (R2), hexavalent chromium emissions shall not exceed 94.1 pounds per 12 consecutive month period.
- (d) The District determined as part of Construction Permit 449-90-C (R2), nickel and nickel compounds emissions shall not exceed 2,465 pounds per 12 consecutive month period.

- (e) The District determined as part of Construction Permit 449-90-C (R2), lead compounds emissions shall not exceed 15,902 pounds per 12 consecutive month period.
- (f) The District determined as part of Construction Permit 449-90-C (R2), trivalent chromium emissions shall not exceed 110,634 pounds per 12 consecutive month period.

iii. **Monitoring and Record Keeping**

1) **40 CFR 63 Subpart EEE**

40 CFR 63 Subpart EEE requires that CEMS, continuous recording equipment, and parameter monitors be installed, calibrated, tested, and operated according to certain specifications for Emission Point 60-100.

2) **NO<sub>x</sub>**

40 CFR 60 Subpart Db requires that the owner or operator maintain records each steam generating unit operating day for Emission Point 60-100 of the average hourly nitrogen oxides emission rates, the 30-day average nitrogen oxides emission rates, identification of when the 30-day average has been exceeded, any modification to the continuous monitoring system, and results of the daily CEMS drift tests and quarterly accuracy assessments.

3) **Opacity**

40 CFR 60 Subpart Db requires that the owner or operator keep records of all COMS output for Emission Point 60-100.

4) **PM**

40 CFR 60 Subpart Db requires that the owner or operator conduct a stack test once per five year permit term on Emission Point 60-500 if a fuel besides natural gas is used.

5) **SO<sub>2</sub>**

40 CFR 60 Subpart Db requires that the owner or operator obtain and maintain at the affected facility fuel receipts from the fuel supplier which certify that the oil meets the definition of distillate oil (except for fuel nitrogen content) for Emission Points 60-100 and 60-500.

iv. **Reporting**

**NO<sub>x</sub>**

40 CFR 60 Subpart Db requires the owner or operator to submit a report on any excursions from the limits and quarterly reports of continuous monitoring data.

v. **Testing**

1) **RCRA Testing for Emission Point 60-100**

RCRA requires periodic testing. PM testing conducted for RCRA will be submitted or PM performance test will be conducted within 10 years of the last test, whichever comes first.

2) **Comprehensive Performance Testing for Emission Point 60-100**

40 CFR 63 Subpart EEE requires that the owner or operator document compliance with the required DRE efficiency once per five year permit term for Emission Point 60-100.

3) **PM Testing for Emission Point 60-500**

A stack test for PM must be conducted on Emission Point 60-500 once per five year permit term if a fuel besides natural gas is used to demonstrate compliance with 40 CFR 60.43b(b).

FF. **Emission Unit U-UTIL-WW**

i. **Emission Points**

Emission Point	Description	Applicable Regulations
66-160	Plant Separator 1987	6.43, 7.36
66-167	Plant WW Surge Tank, 515,000 gal 1961	STAR

ii. **Standards/Operating Limits**

1) **TAC**

The District determined on March 13, 2013 that potential uncontrolled individual TAC emissions of acetophenone, 1,3-butadiene, cumene, ethyl acrylate, ethylbenzene, methyl methacrylate, naphthalene, styrene, toluene, and xylene, were de minimis.

2) **VOC**

(a) Per Regulation 7.36, the owner or operator shall not recover 200 gallons a day or more of any volatile organic compounds from any equipment which processes, refines, stores, or handles hydrocarbons with a Reid vapor pressure of 0.5 psia or greater, unless the emissions of all hydrocarbon vapors and gases are reduced 90% by weight.

(b) Per Regulation 6.43, the owner or operator shall equip this equipment with a gutter and downspout type weir overflow.

### 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:** N/A
4. **Operational Flexibility:** The source did not request any operational flexibility for the emission points.
5. **Compliance History**

Incident Date(s)	Regulations Violated	Result
9/9/92	1.07, 1.09, 1.13	Settled
11/2/92	6.24	Board Order
5/10/93	1.13	Settled
6/30/93	2.03	Settled
9/26/93	1.13	Settled
5/8/98	1.09	Settled
5/12/99	7.02	Settled
9/26/00	6.24	Board Order
12/15/06	1.13	Settled
4/11/07	1.07, 2.16	Settled
5/29/08	1.07, 2.16	Board Order
7/2/08	1.07, 2.16	Board Order
6/13/10	2.16	Board Order
8/30/12	1.07, 2.16	Board Order

#### 6. Calculation Methodology

Rohm and Haas - Louisville Plant uses a variety of methods to estimate air emissions. Most of the emission estimates are based on established calculation methodologies for common Rohm and Haas processes and emissions-generating activities (previously called SARACALC), which are based on EPA's AP-42. The calculation methods include:

##### A. Working losses from tanks

Working losses are determined by methods based on EPA's AP-42:

##### B. Breathing losses from tanks

Breathing losses for all major raw material storage tanks are estimated by using Rohm and Haas Company's SARACALC method 4A or 4B, which are based on Chapter 12, "Storage of Organic Liquids" from the AP-42 version published in September 1992.

##### C. Material balances for process vents

Rohm and Haas applies this method to the vents in KV-2, and the KVP2 pelletizer. In these processes, Rohm and Haas measures the residual VOC content in the wet product following the polymerization step and prior to drying. In some cases, Rohm and Haas measures the residual in the powder

product following the drying step. . Rohm and Haas assumes that the difference between the residual VOC's in the wet product and dry product exit the process vent.

**D. Fugitive losses**

Fugitive losses due to equipment leaks are monitored plantwide according to Permit 157-97-TV (R4) (Title V), Appendix A for those components regulated under the Synthetic Minor HAP LDAR requirements. Most components are monitored quarterly (units on a rotating 3-month cycle) using EPA Method 21 of 40 CFR Part 60, Appendix A, or are monitored at the frequency specified in Appendix A of the 157-97-TV (R4) permit. The monitoring results are uploaded to a LeakDAS database, which is then used to calculate emissions using the SOCFI equation set, rectangular calculation method, and no peg value. Fugitive emissions are incorporated in unit totals.

**E. Stream testing**

Stack tests were performed to determine some control device efficiencies. Stack tests have been conducted for the KV-2 thermal oxidizer, KAC thermal oxidizers (RTO and ATO used for sources plantwide), and for Boiler 100 combustion efficiencies. Stack testing for particulate matter (PM) was performed for KAC and KVPA. Boiler 100 has a continuous emission monitor for NO<sub>x</sub> and CO. Boiler 500 has a continuous emission monitor for NO<sub>x</sub>.

**F. EPA emission factors**

EPA AP-42 factors are used for combustion emissions for all but NO<sub>x</sub> and CO emissions in Boiler 100.

**G. Vendor control efficiency information**

Vendor control efficiencies are applied to estimates of control equipment inlet loadings to estimate most of the particulate emissions and for flare KVPA thermal oxidizer emission estimates.

**H. Engineering judgment**

Engineering judgment is applied to determine some emissions. The cement industry loading factor is used to estimate particulate emissions coming from our process systems without any performance data (i.e.KV2 and KVP solids handling sources) and entering particulate control equipment.

**7. Insignificant Activities**

Equipment	Quantity	PTE (tpy)	Reg. Basis
Emergency relief vents, stacks, and ventilating systems (not otherwise regulated)	39	0	Regulation 1.02, Appendix A



Equipment	Quantity	PTE (tpy)	Reg. Basis
Lab ventilating and exhausting systems for nonradioactive materials	11	0.01 VOC	Regulation 1.02, Appendix A
Portable Diesel or Gasoline Storage Tank <500 gal	1	0.005 VOC	Regulation 1.02, Appendix A
Storage Tanks containing fuel or lubricating oils with v.p. <10 mmHg at 20°C	2	0.015 VOC	Regulation 1.02, Appendix A
VOC Storage Tanks 250 gallons or less	2	0.12 VOC	Regulation 1.02, Appendix A
Pressurized VOC Storage Vessels	2	0.035 VOC	Regulation 1.02, Appendix A
Diesel or fuel oil storage tanks that are not used for distribution, sale or resale, and that have less than two times the capacity of the vessel in annual turnover of the fluid contained	4	0.02 VOC	Regulation 1.02, Appendix A
Periodic filter change-outs for non-water-based product	22 (approximate number of filters in non-water based service)	0.3 VOC	Regulation 1.02
Whitewater sewer system	2	See Individual units	Regulation 1.02
Whitewater sewer – KVK unit	1	0.35 VOC	Regulation 1.02
Whitewater sewer – Dryers unit	1	0.85 VOC	Regulation 1.02
Process wastewater – KAC unit	1	0.12 VOC	Regulation 1.02
Process wastewater – KVK unit	1	0.11 VOC	Regulation 1.02
Process wastewater – Dryers unit	1	0.92 VOC	Regulation 1.02
KB Transfer System for Tank (14-785) E-KB-03-792 (U-KB-Tanks1)	1	0.008 PM	Regulation 1.02

- 1) Insignificant Activities identified in District Regulation 1.02 Appendix A may be subject to size or production rate disclosure requirements.
- 2) Insignificant Activities identified in District Regulation 1.02 Appendix A shall comply with generally applicable requirements.
- 3) Activities identified in Regulation 1.02, Appendix A, may not require a permit and may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that

continue to apply to the source and must be included in the permit.

- 4) Emissions from Insignificant Activities shall be reported in conjunction with the reporting of annual emissions of the facility as required by the District.
- 5) In lieu of recording annual throughputs and calculating actual annual emissions, the owner or operator may elect to report the pollutant Potential To Emit (PTE) quantity listed in the Insignificant Activities table, as the annual emission for each piece of equipment.
- 6) The Insignificant Activities Table is correct as of the date the permit was proposed for review by U.S. EPA, Region 4.
- 7) The owner or operator shall submit an updated list of Insignificant Activities whenever changes in equipment located at the facility occur that cause changes to the plant wide emissions.

**8. IA Emission Units with Applicable Regulations**

**A. Emission Unit IA1**

**i. Emission Points**

<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
PW	Three (3) Cold Solvent Parts Washers with secondary reservoirs, post 1979	6.18

**ii. Standards/Operating Limits**

**VOC**

Per Regulation 6.18, the owner or operator shall install, maintain, and operate the control equipment for Emission Points PW, shall observe specific operating requirements, and shall not operate a cold cleaner using a solvent with a vapor pressure that exceeds 1.0 mm Hg (0.019 psi) measured at 20°C (68°F).

**B. Emission Unit IA2**

**i. Emission Points**

<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulations</b>
B97-GEN	Building 97 emergency generator (Cummins, installed 1988, 1.9 MMBtu/hr)	5.02, 40 CFR 63 Subpart ZZZZ
Bldg2ge	Building 2 emergency generator (Cummins, installed 1999, 50 KW-hr)	
FWpump1	Fire Water Pump – Detroit Diesel(Clarke, installed 1987, 0.67 MMBtu/hr)	
FWpump2	Fire Water Pump – Detroit Diesel (Clarke, installed 1990, 0.67 MMBtu/hr)	
FWpump4	Fire Water Pump (installed 1986, 0.67 MMBtu/hr)	

ii. **Standards/Operating Limits**

**HAP**

- (a) Per 40 CFR 63 Subpart ZZZZ, the owner or operator shall limit the operation of these units to one hundred (100) hours in any calendar year during non-emergency events for the purpose of maintenance checks and readiness testing. The owner or operator may operate the emergency stationary RICE up to fifty (50) hours in any calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. There are no time limits for the use in emergency generators.
- (b) Per 40 CFR 63 Subpart ZZZZ, the owner or operator of the emergency generator shall perform maintenance as required in Table 2(d) of Subpart ZZZZ.

iii. **Monitoring and Record keeping**

**HAP**

- (a) Per 40 CFR 63 Subpart ZZZZ, the owner or operator shall install a non-resettable hour meter if one is not already installed, minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, and has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to the subpart.
- (b) Per 40 CFR 63 Subpart ZZZZ, the owner or operator shall keep a copy of each notification and report submitted to comply with the subpart, records of the occurrence and duration of each malfunction of operation, records of performance tests and performance evaluations, records of required maintenance, and actions taken during periods of malfunction to minimize emissions.

iv. **Reporting**

**HAP**

Per 40 CFR 63 Subpart ZZZZ, the owner or operator shall report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.