

**Bay Area Air Quality Management District**

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**Permit Evaluation  
and  
Statement of Basis  
for  
MAJOR FACILITY REVIEW PERMIT**

for  
**Valero Logistics Operations, L.P.  
Facility #B5574**

**Facility Address:**  
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December, 2005

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## **Title V Statement of Basis**

### **A. Background**

This facility is subject to the Operating Permit requirements of Title V of the federal Clean Air Act, Part 70 of Volume 40 of the Code of Federal Regulations (CFR), and BAAQMD Regulation 2, Rule 6, Major Facility Review because it is a major facility as defined by BAAQMD Regulation 2-6-212. It is a major facility because it has the “potential to emit,” as defined by BAAQMD Regulation 2-6-218, of more than 100 tons per year of a regulated air pollutant.

Major Facility Operating permits (Title V permits) must meet specifications contained in 40 CFR Part 70 as contained in BAAQMD Regulation 2, Rule 6. The permits must contain all applicable requirements (as defined in BAAQMD Regulation 2-6-202), monitoring requirements, recordkeeping requirements, and reporting requirements. The permit holders must submit reports of all monitoring at least every six months and compliance certifications at least every year.

In the Bay Area, state and District requirements are also applicable requirements and are included in the permit. These requirements can be federally enforceable or non-federally enforceable. All applicable requirements are contained in Sections I through VI of the permit.

The District issued the initial Title V permit for the assets owned by Valero Logistics Operations on December 1, 2003 in the B2626 Title V permit for Valero Refining Company – California and in the A0901 Title V permit for the Valero Benicia Asphalt Plant. The District transferred the assets from facilities B2626 and A0901 to facility B5574 in 2004 via Application 7980.

Since this permit is simply a transfer of asset ownership, without any changes in overall emissions, applicable requirements or monitoring, the District is not soliciting public comment on this permit. The District solicited comment on the B2626 and A0901 permits in July of 2003 and the final permits were issued December 1, 2003. The permits were reopened and the District solicited comments in March, 2004. The current permits were issued December 16, 2004.

This statement of basis concerns only the assets owned by Valero Logistics Operations. A comprehensive statement of basis was prepared for the initial issuance of the B2626 and A0901 permits. They are available on request.

There is no increase in facility emissions due to the change of ownership reflected in this permit. Emissions included in this permit have been identically reduced from the B2626 and A0901 permits.

### **B. Facility Description**

Valero Logistics Operations owns 16 hydrocarbon liquid storage tanks that are integrated into the overall petroleum refinery and asphalt plant facilities.

#### General Description of an Oil Refinery:

An oil refinery is an intermediary between crude oil and a refined product. It takes dirty, low-value oil from the ground and distills it under atmospheric pressure into its primary components: gases (light ends), gasoline components, kerosene and diesels (middle distillates), heavy distillates, and heavy bottoms. The heavy bottoms go on to a vacuum distillation unit to be distilled again, this time under a vacuum, to salvage any light ends or middle distillates that did not get separated under atmospheric pressure; the heaviest bottoms continue on to a coker or an asphalt plant.

Other product components are processed by downstream units to be cleaned (hydrotreated), cracked (catalytic or hydrocracking), reformed (catalytic reforming), or alkylated (alkylation) to form gasoline and high-octane blending components, or to have sulfur or other impurities removed to make over-the-road diesel (low sulfur) or off-road diesel (higher sulfur). Depending on the process units in a refinery and the crude oil input, an oil refinery can produce a wide range of salable products: many different grades of gasoline and gasoline blend stocks, several grades of diesel, kerosene, jet and aviation fuel, fuel oil, bunker fuels, waxes, solvents, sulfur, coke, asphalt, or chemical plant feedstock.

The Valero Benicia Asphalt Plant is a small-scale petroleum refinery that primarily produces asphalt from crude oil. The by-products – naphtha, kerosene, and gas oil – are transferred to the adjacent Valero fuel refinery or sold to other companies for the production of other petroleum products.

The processes used at the asphalt plant are: distillation, vacuum distillation, blending, organic liquid storage, asphalt storage, organic liquid loading, and asphalt loading.

A more detailed description of petroleum refinery processes and the resulting air emissions may be found in Chapter 5 of EPA's publication AP-42, Compilation of Air Pollutant Emission Factors. This document may be found at:

<http://www.epa.gov/ttn/chief/ap42/ch05/>

The principal sources of air emissions from refineries are:

- Combustion units (furnaces, boilers, and cogeneration facilities)
- FCC (Fluidized Catalytic Cracking)
- Storage tanks
- Fugitive emissions from pipe fittings, pumps, and compressors
- Sulfur plants
- Wastewater treatment facilities

Valero Logistics Operations owns 16 hydrocarbon liquid storage tanks that are integrated into the overall petroleum refinery and asphalt plant facilities. Storage tank emissions are controlled

through the use of add on control and or fitting loss control. Fugitive emissions have been controlled through the use of inspection and maintenance frequencies.

### **C. Permit Content**

The legal and factual basis for the permit follows. The permit sections are described in the order presented in the permit.

#### **I. Standard Conditions**

This section contains administrative requirements and conditions that apply to all facilities. If the Title IV (Acid Rain) requirements for certain fossil-fuel fired electrical generating facilities or the accidental release (40 CFR § 68) programs apply, the section will contain a standard condition pertaining to these programs. Many of these conditions derive from 40 CFR § 70.6, Permit Content, which dictates certain standard conditions that must be placed in the permit. The language that the District has developed for many of these requirements has been adopted into the BAAQMD Manual of Procedures, Volume II, Part 3, Section 4, and therefore must appear in the permit.

The standard conditions also contain references to BAAQMD Regulation 1 and Regulation 2. These are the District's General Provisions and Permitting rules.

Condition I.J has been added to clarify that the capacity limits shown in Table II-A are enforceable limits.

#### **II. Equipment**

This section of the permit lists all permitted or significant sources. Each source is identified by an S and a number (e.g., S24 or S-24).

Permitted sources are those sources that require a BAAQMD operating permit pursuant to BAAQMD Rule 2-1-302. The Permitted sources are shown in the Permit Table II A.

The exempt sources may or may not have a source number. The exempt sources are shown in the Permit Table II B.

Significant sources are those sources that have a potential to emit of more than 2 tons of a "regulated air pollutant," as defined in BAAQMD Rule 2-6-222, per year or 400 pounds of a "hazardous air pollutant," as defined in BAAQMD Rule 2-6-210, per year.

There are no abatement devices owned by Valero Logistics Operations. Two exempt tanks S-70/71 have vents that are routed to A-40/41 vapor recovery compressors. However, these abatement devices are not owned by Valero Logistics Operations and therefore are shown in Table IIC for completeness only. (See the B2626 permit for details of A-40/41)

The equipment section is considered to be part of the facility description. It contains information that is necessary for applicability determinations, such as the contents or sizes of tanks. This information is part of the factual basis of the permit.

Each of the permitted sources has previously been issued a permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits. These permits are issued in accordance with state law and the District's regulations. The capacities in the permitted sources table are the maximum allowable capacities for each source, pursuant to Standard Condition I.J and Regulation 2-1-403.

The District permit applications not included in this proposed permit are as follows:

- Application 5846: Valero Improvement Project. This Application was granted an Authority to Construct in July 2003.

### **III. Generally Applicable Requirements**

This section of the permit lists requirements that generally apply to all sources at a facility including insignificant sources and portable equipment that may not require a District permit. If a generally applicable requirement applies specifically to a source that is permitted or significant, the standard will also appear in Section IV and the monitoring for that requirement will appear in Sections IV and VII of the permit. Parts of this section apply to all facilities (e.g., particulate, architectural coating, odorous substance, and sandblasting standards). In addition, standards that apply to insignificant or unpermitted sources at a facility (e.g., refrigeration units that use more than 50 pounds of an ozone-depleting compound) are placed in this section.

Unpermitted sources are exempt from normal District permits pursuant to an exemption in BAAQMD Regulation 2, Rule 1. They may, however, be specifically described in a Title V permit if they are considered *significant sources* pursuant to the definition in BAAQMD Rule 2-6-239.

### **IV. Source-Specific Applicable Requirements**

#### **General Information**

This section of the permit lists the applicable requirements that apply to permitted or significant sources. These applicable requirements are contained in tables that pertain to one or more sources that have the same requirements. The order of the requirements is:

- District Rules
- SIP Rules (if any) are listed following the corresponding District rules. SIP rules are District rules that have been approved by EPA for inclusion in the California State Implementation Plan. SIP rules are "federally enforceable" and a "Y" (yes) indication will appear in the "Federally Enforceable" column. If the SIP rule is the current District rule, separate citation of the SIP rule is not necessary and the "Federally Enforceable" column will have a "Y" for "yes". If the SIP rule is not the current District rule, the SIP rule or the necessary portion of

the SIP rule is cited separately after the District rule. The SIP portion will be federally enforceable; the non-SIP version will not be federally enforceable, unless EPA has approved it through another program.

- Other District requirements, such as the Manual of Procedures, as appropriate.
- Federal requirements (other than SIP provisions)
- BAAQMD permit conditions. The complete text of BAAQMD permit conditions is found in Section VI of the permit.
- Federal permit conditions. The complete text of Federal permit conditions, if any, is found in Section VI of the permit.

Section IV of the permit contains citations to all of the applicable requirements. The text of the requirements is found in the regulations, which are readily available on the District's or EPA's websites, or in the permit conditions, which are found in Section VI of the permit. All monitoring requirements are cited in Section IV. Section VII is a cross-reference between the limits and monitoring requirements. A discussion of monitoring is included in Section C.VII of this permit evaluation/statement of basis.

All tables of applicable requirements in Section IV are derived from the appropriate tables in the A0901 and B2626 permits. Here is a summary of these tables:

| <b><u>Table</u></b> | <b><u>Permit</u></b> | <b><u>Title</u></b>                                     | <b><u>Covered Sources<br/>(in existing permit)</u></b>     | <b><u>B5574 Sources</u></b>                                 |
|---------------------|----------------------|---|--|---|
| IV-B                | A0901                | Crude Storage Tanks                                     | S-1, S-2, S-4, S-23  | S-1, S-2, S-4, S-23 (TK-1A, TK-1B, TK-10A, TK-10B)          |
| IV-J1               | B2626                | External Floating Roof Tank with Permit Conditions      | S-57   | S-57 (TK-1701)  |
| IV-J2               | B2626                | External Floating Roof Tank                             | S-58   | S-58 (TK-1702)  |
| IV-J3               | B2626                | External Floating Roof Tanks                            | S-59, S-60, S-61, S-62, S-86                               | S-59, S-60, S-61, S-62 (TK-1703, TK-1704, TK-1705, TK-1706) |
| IV-J4               | B2626                | External Floating Roof Tanks                            | S-63, S-66, S-68   | S-68 (TK-1716)  |
| IV-J5               | B2626                | External Floating Roof Tanks                            | S-64, S-73, S-74, S-74, S-76, S-77, S-78, S-79, S-80, S-82 | S-74 (TK-1734)  |
| IV-J6               | B2626                | External Floating Roof Tanks                            | S-72, S-83, S-84, S-92                                     | S-72 (TK-1720)  |
| IV-J15              | B2626                | Exempt Fixed Roof Tanks with Vapor Recovery to Fuel Gas | S-65, S-69, S-70, S-71                                     | S-70, S-71 (TK-1718, TK-1719)                               |
| IV-J33              | B2626                | External Floating Roof Tanks – Benzene Wastewater       | S-67, S-81, S-104  | S-67 (TK-1715)  |

### **Fugitive Emissions**

Valero Logistics Operations owns 16 storage tanks. The ownership of these assets has been specifically detailed to include the tank steel shell and the associated parts and equipment located inside the tank shell. This ownership includes the tank roof, associated primary and secondary seals, and attached instrumentation and control devices located inside the tank shell. All piping and equipment located outside the tank shell is owned by the refinery or asphalt plant owners. As a consequence, organic emissions due to equipment leaks, as defined in BAAQMD Regulation 8, Rule 18, are not attributable to the Valero Logistics Operations assets. Therefore, Regulation 8, Rule 18 citations are retained in the B2626 and A0901 permits and are not shown on the tables in Section IV of this B5574 permit.

### **Complex Permit Issues and Applicability Determinations**

#### **Throughput Limits.**

Sources that were modified or constructed since the District began issuing new source review permits (March 7, 1979) will have permits that contain throughput limits, and these limits are reflected in the Title V permit. These limits have previously undergone District review, and are considered to be the legally binding “emission level” for purposes of 2-234.1 and 2-1-234.2. By contrast, for older sources that have never been through preconstruction review (commonly referred to as “grandfathered” sources), an “increase” in “emission level” is addressed in 2-1-234.3. A grandfathered (pre March 7, 1979) source is not subject to preconstruction review unless its emission level increases above the highest of either: 1) the design capacity of the source, 3) the capacity listed in a permit to operate, or 3) highest capacity demonstrated prior to March 2000. However, if the throughput capacity of a grandfathered source is limited by upstream or downstream equipment (i.e., is “bottlenecked”), then the relaxing of that limitation (“debottlenecking”) is considered a modification. Table IIA in the permit shows the new source review sources and the grandfathered sources.

In some instances, the District has established throughput reporting thresholds in the Title V permit for grandfathered sources. As discussed above, these reporting thresholds serve to provide inform the District that further investigation is appropriate into whether a modification has occurred. These thresholds have been established in instances where there is a factual basis for at least estimating the level at which a 2-1-234.3 definition is triggered. Rather than attempting to establish limits definitive of a modification – an exercise that would have been beyond the District’s resource capabilities at this time – thresholds for grandfathered sources were established at levels indicative that further investigation into whether a modification has occurred is appropriate. . If the District’s investigation shows that a modification had occurred, then the facility would then be expected to apply for a preconstruction permit addressing the modification and the District would consider whether an enforcement action was appropriate.

When the District first proposed the Title V permit, the throughput limits contained therein were expressed as presumptively indicating that a modification had occurred. In conjunction with that proposal, the District noted that these presumptive limits were intended to facilitate implementation of the NSR program, but that the District had in most cases not done sufficient



research to characterize the limits as definitively representing the NSR baseline. The “presumptive” approach was viewed by the District as a useful first step towards defining NSR baselines while acknowledging that the limits established through this process may need further refinement.

Comments on the initial proposal from both the refineries and citizen groups criticized the presumptive approach. Accordingly, the District, in re-proposing the permit, changed the characterization of the grandfathered source limits to that of a reporting threshold. Consequently, a violation of the permit will have occurred if the threshold is exceeded but not reported. However, exceedance of the threshold does not create a presumption that a modification has occurred. Conversely, compliance with the threshold does not create a presumption that there has been no modification. The reporting thresholds will provide the District with information helpful to implementation of the NSR program that the facility previously did not have an affirmative obligation to submit. Establishing these thresholds is thus a step forward in implementing NSR at grandfathered sources, and language in the permit makes clear that compliance with the thresholds in no way provides the facility with an argument that a modification has not occurred. Where factually supportable, the District is establishing these reporting thresholds pursuant to its authority in 2-1-403.

## **V. Schedule of Compliance**

A schedule of compliance is required in all Title V permits pursuant to BAAQMD Regulation 2-6-409.10 which provides that a major facility review permit shall contain the following information and provisions:

“409.10 A schedule of compliance containing the following elements:

- 10.1 A statement that the facility shall continue to comply with all applicable requirements with which it is currently in compliance;
- 10.2 A statement that the facility shall meet all applicable requirements on a timely basis as requirements become effective during the permit term; and
- 10.3 If the facility is out of compliance with an applicable requirement at the time of issuance, revision, or reopening, the schedule of compliance shall contain a plan by which the facility will achieve compliance. The plan shall contain deadlines for each item in the plan. The schedule of compliance shall also contain a requirement for submission of progress reports by the facility at least every six months. The progress reports shall contain the dates by which each item in the plan was achieved and an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.”

Since the District has not determined that the facility is out of compliance with an applicable requirement, the schedule of compliance for this permit contains only sections 2-6-409.10.1 and 2-6-409.10.2.

The BAAQMD Compliance and Enforcement Division conducts an ongoing review of compliance and has no records of compliance problems at this facility during the past year.

**VI. Permit Conditions**

The permit conditions shown in Section VI of the permit are intended to be identical to the permit conditions for the covered sources in the A0901 and B2626 permits. These permit conditions are the following:

| BAAQMD Condition ID | Title (if applicable)          | Sources  |
|---------------------|--------------------------------|--|
| 1240 (current)      | Asphalt Plant Conditions       | S-1, S-2, S-4, S-23  |
| 8564 (current)      | N/A                            | S-57   |
| 20820 (future)      | Valero Improvement Project     | S-57, S-58, S-59, S-60, S-61, S-62                                     |
| 20762 (current)     | Exempt Material Vapor Pressure | S-57, S-58, S-59, S-60, S-61, S-62, S-67, S-68, S-70, S-71, S-72, S-74 |

“Current” conditions apply now. “Future” conditions are for sources with a planned modification covered by an approved Authority to Construct.

Only Condition 8564 covers a single source owned by Valero Logistics Operations. However, Part 3 of condition 8564 covers fugitive emissions on facilities associated, but not owned by Valero Logistics Operations.

The other three conditions listed above cover both sources owned and not owned by Valero Logistics Operations. Condition 20762 is a general condition applying to all B2626 Refinery tanks. It remains unchanged. The other three conditions are split into two parts – those covering assets owned by Valero Logistics Operations and those not owned by Valero Logistics Operations.

In addition, future condition 20820 covers the Valero VIP Project that has limited scope definition at this time. While the VIP Project was conceptualized to include modifications to some of the tanks owned by Valero Logistics Operations, the project scope is not firm for these sources and consequently, this future permit condition 20820 is not included in the permit. Once the scope is defined, the portions of permit condition 20820 related to the B5574 tanks will be added to the permit.

Since permit conditions cover sources not owned by Valero Logistics Operations, the original conditions will remain suitably modified for the original plants. The new B5574 conditions are summarized below:

| Original Condition ID | New B5574 Condition ID | Sources                            |
|-----------------------|------------------------|------------------------------------|
| 1240                  | 21738                  | S-1, S-2, S-4, S-23                |
| 8564                  | 22333                  | S-57                               |
| 20820                 | 21740                  | S-57, S-58, S-59, S-60, S-61, S-62 |

The limitation in dividing the original condition into two conditions is that there must not be any impact on overall emissions. For an illustrative example of what this means, consider Condition 1240 Part 14 as written in the A0901 permit (issued December 16, 2004):

14. Total asphalt plant emissions (excluding marine emissions) shall not exceed the limits listed below:

- 1) Non-Methane Hydrocarbons      49.345 tons/yr

- 2) Sulfur Dioxide, SO<sub>2</sub> 28.049 tons/yr
- 3) Nitrogen Oxides, as NO<sub>2</sub> 40.047 tons/yr  
(Cumulative Increase)

The new Part in Condition 21738 is:

- 14. Total plant emissions shall not exceed the limit listed below:
  - 1) Non-Methane Hydrocarbons 6.64 tons/yr  
(Cumulative Increase)

The modified Part 14 in Condition 1240 is:

- 14. Total asphalt plant emissions (excluding marine emissions) shall not exceed the limits listed below:
  - 1) Non-Methane Hydrocarbons 42.705 tons/yr
  - 2) Sulfur Dioxide, SO<sub>2</sub> 28.049 tons/yr
  - 3) Nitrogen Oxides, as NO<sub>2</sub> 40.047 tons/yr  
(Cumulative Increase)

The sum of the new asphalt plant A0901 non-methane hydrocarbon emissions (42.705 tons/yr) and the new B5574 non-methane hydrocarbon emissions (6.64 tons/yr) is identical to the old plant A0901 non-methane hydrocarbon emissions (49.345 tons/yr). There is no net impact on emissions. All condition modifications adhere to this no-net-change limitation.

For clarity, the modified permit conditions are shown in the Appendix B. All changes to existing permit conditions are clearly shown in “strike-out/underline” format.

The regulatory basis is listed following each condition. The regulatory basis may be a rule or regulation. The District is also using the following terms for regulatory basis:

- BACT: This term is used for a condition imposed by the Air Pollution Control Officer (APCO) to ensure compliance with the Best Available Control Technology in Regulation 2-2-301.
- Cumulative Increase: This term is used for a condition imposed by the APCO which limits a source’s operation to the operation described in the permit application pursuant to BAAQMD Regulation 2-1-403.
- Offsets: This term is used for a condition imposed by the APCO to ensure compliance with the use of offsets for the permitting of a source or with the banking of emissions from a source pursuant to Regulation 2, Rules 2 and 4.
- PSD: This term is used for a condition imposed by the APCO to ensure compliance with a Prevention of Significant Deterioration permit issued pursuant to Regulation 2, Rule 2.
- TRMP: This term is used for a condition imposed by the APCO to ensure compliance with limits that arise from the District’s Toxic Risk Management Policy.

**VII. Applicable Limits and Compliance Monitoring Requirements**

This section of the permit is a summary of numerical limits and related monitoring requirements for each source. The summary includes a citation for each monitoring requirement, frequency of monitoring, and type of monitoring. The applicable requirements for monitoring are completely contained in Sections IV, Source-Specific Applicable Requirements, and VI, Permit Conditions, of the permit.

All tables of monitoring requirements in Section VII are derived from the appropriate tables in the A0901 and B2626 permits. Here is a summary of these tables:

| <u>Table</u> | <u>Permit</u> | <u>Title</u>  | <u>Covered Sources<br/>(in existing permit)</u>            | <u>B5574 Sources</u>  |
|--------------|---------------|---|--|---|
| VII-B        | A0901         | Crude Storage Tanks                                     | S-1, S-2, S-4, S-23  | S-1, S-2, S-4, S-23 (TK-1A, TK-1B, TK-10A, TK-10B)          |
| VII-J1       | B2626         | External Floating Roof Tank with Permit Conditions      | S-57   | S-57 (TK-1701)  |
| VII-J2       | B2626         | External Floating Roof Tank                             | S-58   | S-58 (TK-1702)  |
| VII-J3       | B2626         | External Floating Roof Tanks                            | S-59, S-60, S-61, S-62, S-86                               | S-59, S-60, S-61, S-62 (TK-1703, TK-1704, TK-1705, TK-1706) |
| VII-J4       | B2626         | External Floating Roof Tanks                            | S-63, S-66, S-68   | S-68 (TK-1716)  |
| VII-J5       | B2626         | External Floating Roof Tanks                            | S-64, S-73, S-74, S-74, S-76, S-77, S-78, S-79, S-80, S-82 | S-74 (TK-1734)  |
| VII-J6       | B2626         | External Floating Roof Tanks                            | S-72, S-83, S-84, S-92                                     | S-72 (TK-1720)  |
| VII-J15      | B2626         | Exempt Fixed Roof Tanks with Vapor Recovery to Fuel Gas | S-65, S-69, S-70, S-71                                     | S-70, S-71 (TK-1718, TK-1719)                               |
| VII-J33      | B2626         | External Floating Roof Tanks – Benzene Wastewater       | S-67, S-81, S-104  | S-67 (TK-1715)  |

The District has reviewed all monitoring and has determined the existing monitoring is adequate.

**VIII. Test Methods**

This section of the permit lists test methods that are associated with standards in District or other rules. It is included only for reference. In most cases, the test methods in the rules are source

test methods that can be used to determine compliance but are not required on an ongoing basis. They are not applicable requirements.

If a rule or permit condition requires ongoing testing, the requirement will also appear in Section IV of the permit.

#### **IX. Permit Shield**

The District rules allow two types of permit shields. The permit shield types are defined as follows: (1) A provision in a major facility review permit explaining that specific federally enforceable regulations and standards do not apply to a source or group of sources, or (2) A provision in a major facility review permit explaining that specific federally enforceable applicable requirements for monitoring, recordkeeping and/or reporting are subsumed because other applicable requirements for monitoring, recordkeeping, and reporting in the permit will assure compliance with all emission limits.

The second type of permit shield is allowed by EPA's White Paper 2 for Improved Implementation of the Part 70 Operating Permits Program. The District uses the second type of permit shield for all streamlining of monitoring, recordkeeping, and reporting requirements in Title V permits. The District's program does not allow other types of streamlining in Title V permits.

This facility has the second type of permit shield for S-1, S-2, S-4 and S-23 tank seal inspections.

#### **D. Alternate Operating Scenarios:**

No alternate operating scenario has been requested for this facility.

#### **E. Compliance Status:**

The facility is not currently in violation of any requirement. Moreover, the District has updated its review of recent violations and has not found a pattern of violations that would warrant imposition of a compliance schedule.

#### **F. Reserved for Permit Updates and Changes for future revisions.**

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**APPENDIX A: GLOSSARY**

**ACT**

Federal Clean Air Act

**APCO**

Air Pollution Control Officer

**ARB**

Air Resources Board

**BAAQMD**

Bay Area Air Quality Management District

**BACT**

Best Available Control Technology

**Basis**

The underlying authority which allows the District to impose requirements.

**CAA**

The federal Clean Air Act

**CAAQS**

California Ambient Air Quality Standards

**CAPCOA**

California Air Pollution Control Officers Association

**CEQA**

California Environmental Quality Act

**CFR**

The Code of Federal Regulations. 40 CFR contains the implementing regulations for federal environmental statutes such as the Clean Air Act. Parts 50-99 of 40 CFR contain the requirements for air pollution programs.

**CO**

Carbon Monoxide

**Cumulative Increase**

The sum of permitted emissions from each new or modified source since a specified date pursuant to BAAQMD Rule 2-1-403, Permit Conditions (as amended by the District Board on 7/17/91) and SIP Rule 2-1-403, Permit Conditions (as approved by EPA on 6/23/95). Cumulative increase is used to determine whether threshold-based requirements are triggered.

**District**

The Bay Area Air Quality Management District

**dscf**

Dry Standard Cubic Feet

**EPA**

The federal Environmental Protection Agency.

**Excluded**

Not subject to any District regulations.

**Federally Enforceable, FE**

All limitations and conditions which are enforceable by the Administrator of the EPA including those requirements developed pursuant to 40 CFR Part 51, subpart I (NSR), Part 52.21 (PSD), Part 60 (NSPS), Part 61 (NESHAPs), Part 63 (MACT), and Part 72 (Permits Regulation, Acid Rain), including limitations and conditions contained in operating permits issued under an EPA-approved program that has been incorporated into the SIP.

**FP**

Filterable Particulate as measured by BAAQMD Method ST-15, Particulate.

**HAP**

Hazardous Air Pollutant. Any pollutant listed pursuant to Section 112(b) of the Act. Also refers to the program mandated by Title I, Section 112, of the Act and implemented by 40 CFR Part 63.

**Major Facility**

A facility with potential emissions of: (1) at least 100 tons per year of regulated air pollutants, (2) at least 10 tons per year of any single hazardous air pollutant, and/or (3) at least 25 tons per year of any combination of hazardous air pollutants, or such lesser quantity of hazardous air pollutants as determined by the EPA administrator.

**MFR**

Major Facility Review. The District's term for the federal operating permit program mandated by Title V of the Federal Clean Air Act and implemented by District Regulation 2, Rule 6.

**MOP**

The District's Manual of Procedures.

**NAAQS**

National Ambient Air Quality Standards

**NESHAPS**

National Emission Standards for Hazardous Air Pollutants. See in 40 CFR Parts 61 and 63.

**NMHC**

Non-methane Hydrocarbons (Same as NMOC)

**NMOC**

Non-methane Organic Compounds (Same as NMHC)

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

Oxides of nitrogen.

**NSPS**

Standards of Performance for New Stationary Sources. Federal standards for emissions from



new stationary sources. Mandated by Title I, Section 111 of the Federal Clean Air Act, and implemented by 40 CFR Part 60 and District Regulation 10.

**NSR**

New Source Review. A federal program for pre-construction review and permitting of new and modified sources of pollutants for which criteria have been established in accordance with Section 108 of the Federal Clean Air Act. Mandated by Title I of the Federal Clean Air Act and implemented by 40 CFR Parts 51 and 52 and District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

**Offset Requirement**

A New Source Review requirement to provide federally enforceable emission offsets for the emissions from a new or modified source. Applies to emissions of POC, NOx, PM10, and SO2.

**Phase II Acid Rain Facility**

A facility that generates electricity for sale through fossil-fuel combustion and is not exempted by 40 CFR 72 from Titles IV and V of the Clean Air Act.

**POC**

Precursor Organic Compounds

**PM**

Particulate Matter

**PM10**

Particulate matter with aerodynamic equivalent diameter of less than or equal to 10 microns

**Process Unit**

For the purpose of start-up and shutdown reporting, a process unit is defined as in 40 CFR Part 60 Subpart GGG: Process Unit means components assembled to produce intermediate or final products from petroleum, unfinished petroleum derivatives, or other intermediates; a process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the product.

**PSD**

Prevention of Significant Deterioration. A federal program for permitting new and modified sources of those air pollutants for which the District is classified "attainment" of the National Air Ambient Quality Standards. Mandated by Title I of the Act and implemented by both 40 CFR Part 52 and District Regulation 2, Rule 2.

**Start-up**

For reporting purposes only, a start-up shall be defined as any of the following; the removal of boundary blinds, first fire to a furnace, or the introduction of process feed to a unit. A start-up only occurs following a shutdown unless it involves a newly constructed process unit.

**Shutdown**

For reporting purposes only, a shutdown shall be defined as any of the following; there is no process feed to a unit, no furnace fires, or the boundary blinds are installed.

**SIP**

State Implementation Plan. State and District programs and regulations approved by EPA and developed in order to attain the National Air Ambient Quality Standards. Mandated by Title I of the Act.

**SO<sub>2</sub>**

Sulfur dioxide

**THC**

Total Hydrocarbons (NMHC + Methane)

**Title V**

Title V of the federal Clean Air Act. Requires a federally enforceable operating permit program for major and certain other facilities.

**TOC**

Total Organic Compounds (NMOC + Methane, Same as THC)

**TPH**

Total Petroleum Hydrocarbons

**TRMP**

Toxic Risk Management Plan

**TSP**

Total Suspended Particulate

**VOC**

Volatile Organic Compounds

**Units of Measure:**

|                |   |                       |
|----------------|---|-----------------------|
| bhp            | = | brake-horsepower      |
| btu            | = | British Thermal Unit  |
| cfm            | = | cubic feet per minute |
| g              | = | grams                 |
| gal            | = | gallon                |
| gpm            | = | gallons per minute    |
| hp             | = | horsepower            |
| hr             | = | hour                  |
| k              |   | thousands             |
| lb             | = | pound                 |
| in             | = | inches                |
| max            | = | maximum               |
| m <sup>2</sup> | = | square meter          |
| min            | = | minute                |
| MM             | = | million               |
| MMbtu          | = | million btu           |
| MMcf           | = | million cubic feet    |

Permit Evaluation and Statement of Basis: Site B5574  
Valero Logistics Operations, LP, 3400 East Second Street, Benicia, California

|      |   |                                  |
|------|---|----------------------------------|
| ppmv | = | parts per million, by volume     |
| ppmw | = | parts per million, by weight     |
| psia | = | pounds per square inch, absolute |
| psig | = | pounds per square inch, gauge    |
| scfm | = | standard cubic feet per minute   |
| yr   | = | year                             |

**APPENDIX B: Permit Condition Modifications**

There are two current conditions in the A0901 and B2626 permits that apply to the sources in this permit. Condition 1240 covers many sources at the Benicia Asphalt Plant A0901, including S-1, S-2, S-4 and S-23 in this permit. Condition 8564 only applies to S-57 (but has parts pertaining to fugitive emissions from piping, fittings and equipment associated with S-57 which is not owned by Valero Logistics Operations). Both of these conditions are shown below (8564 is on the last page of this Appendix). The portions of these conditions that are shown by the strikeout notation below will be retained by the original facilities. The portions remaining below as well as some minor changes are the new permit conditions shown in Section VI of the permit.

**Condition #124021738**

**~~For All Sources~~**

Valero Logistics Operations Plant B5574  
3400 East Second Street  
Benicia, CA 94510

**S-1 Crude Oil Tank TK-1A, External Floating Roof, 3419 kgal**

**S-2 Crude Oil Tank TK-1B, External Floating Roof, 3419 kgal**

**S-4 Crude Oil Tank TK-10A, External Floating Roof, 1382 kgal**

**S-23 Crude Oil Tank TK-10B, External Floating Roof, 1382 kgal**

Permit Conditions II. 1, 11, 12, and 13; and IV. 1, 2, and 3 were modified ~~or added~~ as part of App. No. 14513.

~~Pursuant to permit application #17515, permit condition I.8 was modified, conditions I.9 and I.10 were added, and what had been conditions I.9 and I.10 were renumbered as I.11 and I.12, respectively.~~

~~Pursuant to permit application #17687 the total asphalt plant wide heat input has been corrected from 42 to 66.17 MMBTU/HR, S13 and S59 were permitted, and S12 was exempted from permitting.~~

~~Pursuant to permit application #1261 (May, 2000) the total asphalt plant wide heat input has been corrected from 76.06 to 86.6 MMBTU/HR, and the allowable heat input for S19 was increased from 22.4 to 33 MMBtu/hr.~~

Pursuant to permit application #1819 (October, 2000), the crude oil throughput to the crude unit, S18, was raised to 5,292,000 barrels/yr.

~~Pursuant to permit application #7123 (March, 2003) the total asphalt plant wide heat input has been corrected from 86.6 to 93.6 MMBTU/HR, and the allowable heat input for S19 was increased from 33 to 40 MMBtu/hr.~~

Change of ownership Application 7980 (February, 2004)

I. ASPHALT PLANT CONDITIONS

This Section I from BAAQMD Condition 1240 had 20 Parts when ownership of S-1, S-2, S-4 and S-23 was transferred to Valero Logistics Operations in February, 2004. In general, the parts in this section covered the main crude processing sources. Only Parts 14, 18, 18a, 18c and 18j are retained for S-1, S-2, S-4 and S-23.

~~S18 Crude Unit with Vacuum Distillation Column vented to and abated by S19 Vacuum H 1~~

~~1. The total throughput of feed oil to S18 Crude Unit shall not exceed 5,292,000 barrels in any consecutive 12 month period. (cumulative increase, toxics, offsets)~~

~~2. The total throughput of feed oil to S18 Crude Unit shall not exceed 18,000 barrels in any calendar day. (cumulative increase, toxics)~~

~~3. At all times, the vacuum exhaust from the vacuum distillation column at S18 Crude Unit shall be vented to and abated by S19 Vacuum Heater with a destruction efficiency for VOC of at least 98.5%, by weight, as measured across S19. (cumulative increase, toxics)~~

~~4. Each day, the permittee shall record, by material name, in a District approved log, the total volume of each and every liquid material throughput to S18 during the preceding calendar day, in gallon units or barrel units. At the conclusion of each month, the permittee shall total the daily log records and record the sum as the monthly throughput of all liquid materials to S18, in a District approved log. Additionally, the permittee shall record in the District approved log the throughput of all liquid materials to S18 for each rolling 12 consecutive month period. This log shall be retained for at least 5 years from date of entry, shall be kept on site, and shall be made available to the District staff on request. (cumulative increase)~~

~~5. The maximum heat input to all asphalt plant combustion units except S68, Emergency Diesel Powered Firewater Pump, shall not exceed a total of 93.6 MM BTU/Hr. Compliance will be determined from the daily reading of the PG&E natural gas flow meter and the asphalt plant refinery fuel gas meter. These meter readings shall be logged and initialed by the operations coordinator on a daily basis. These readings and the monthly PG&E bills shall be made available to the District upon request. Only refinery fuel gas that is produced at the asphalt plant may be burned at the facility. (cumulative increase)~~

~~5a. The maximum heat input to S19, Vacuum Heater, shall not exceed 40 MMbtu/hr. (cumulative increase)~~

~~5b. CO emissions in the exhaust of S19, Vacuum Heater, shall not exceed 50 ppmdv at 3% oxygen over any one hour period. (cumulative increase, BACT)~~

- ~~5c. CO emissions in the exhaust of S19, Vacuum Heater, shall not exceed 1.47 lb/hr over any one hour period. (cumulative increase, BACT)~~
- ~~6. Fuel oil and/or diesel fuel shall not be combusted in the asphalt plant's heaters or boilers or other combustion sources except for S68, Emergency Diesel powered Firewater Pump. (cumulative increase) (modified 8/12/99, 4/24/02)~~
- ~~7. Mechanical seals will be installed on all new rotary pumps and compressors. Mechanical packing of best available design will be installed in new reciprocating pumps. All compressor seals will be vented to an operating firebox or the vapors will otherwise be eliminated by a method, which is satisfactory to the District. (cumulative increase)~~
- ~~8. Vacuum Heater (S19) shall be equipped with a John Zink LoNOx Burner. Average NOx emissions from S19 shall not exceed 25 ppm corrected to 3% oxygen on a dry basis (one hour averaging period). (cumulative increase, BACT)~~
- ~~9. Deleted 06/02/98.~~
- ~~10. Boilers S20 and S21 and heater S19 shall be equipped with individual continuous recording oxygen analyzers. (2-1-403)~~
- ~~11. The H2S content in the asphalt plant's refinery process gas prior to mixing with another gaseous fluid shall not exceed 163 ppmv, dry, averaged over any consecutive 3-hour period. (NSPS) (Compliance with this condition will not necessarily ensure compliance with part I.12 of this condition.)~~
- ~~12. The H2S content in the asphalt plant's refinery process gas prior to mixing with another gaseous fluid shall not exceed 10 ppmv, dry, averaged over any consecutive 24-hour period. (BACT)~~
- ~~13. The permittee shall operate District approved H2S monitoring and recording instruments which, as set forth in 40 CFR 60 Subpart J, measure and record the content of H2S in the asphalt plant's refinery process gas prior to mixing with another gaseous fluid and which allow the District to determine compliance of the process gas H2S content with both the applicable standard in 40 CFR 60 Subpart J and parts I.11, I.12, and III.3 of this condition. These records shall be retained in a District approved log, retained for at least 5 years from date of record, shall be kept on site, and shall be made available to the District staff upon request. (NSPS, BACT)~~

14. ~~The Owner/Operator shall not operate S-1, S-2, S-4 and S-23 unless the Total asphalt plant tank emissions (excluding marine emissions) shall do not exceed the limits listed below:~~

- a. ~~Non-Methane Hydrocarbons..... 49.3456.64 tons/yr~~
  - b. ~~Sulfur Dioxide, SO2..... 28.049 tons/yr~~
  - c. ~~Nitrogen Oxides, as NO2..... 40.047 tons/yr~~
- ~~(Basis: Cumulative Increase)~~

15. ~~Asphalt plant wastewater and refinery wastewater shall not be used for dust control at this facility. (Cumulative Increase)~~

16a. ~~The permit holder shall perform a source test at S19, Vacuum Heater, every 6 months to determine compliance the NOx limit in part I.8 of this condition, and the CO limit in parts I.5b and I.5c of this condition. The source test shall be performed at a minimum of 85% of the maximum capacity of 40 MMBtu/hr (34 to 40 MMBtu/hr). All source testing shall be done in accordance with the District's Manual of Procedures. The facility shall receive approval from the District's Source Test Manager for installation of test ports and source testing procedures. The results shall be delivered to the District no later than 45 days from the date of the source test. (Cumulative Increase, BACT)~~

16b. ~~The permit holder shall perform a source test at S19, Vacuum Heater, every 24 months to determine compliance with the requirement for 98.5% POC destruction efficiency requirement in part I.3. The source test shall be performed at a minimum of 85% of the maximum capacity of 40 MMBtu/hr (34 to 40 MMBtu/hr). All source testing shall be done in accordance with the District's Manual of Procedures. The facility shall receive approval from the District's Source Test Manager for installation of test ports and source testing procedures. The results shall be delivered to the District no later than 45 days from the date of the source test. (Cumulative Increase, Toxics)~~

~~A/C Conditions (to be deleted after completion):~~

17. ~~Within 60 days of issuance of the authority to construct for application #7123, the permit holder shall perform a source test at S19, Vacuum Heater, to determine compliance with the NOx limit in part I.8 of this condition, the CO limit in part I.5b of this condition, and compliance with the requirement for 98.5% POC destruction efficiency. The source test shall be performed at the maximum capacity of 40 MMBtu/hr. All source testing shall be done in accordance with the District's Manual of Procedures. The facility shall receive approval from the District's Source Test Manager for installation of test ports and source testing procedures. The results shall be delivered to the District no later than 30 days from the date of the source test. (BACT, Cumulative Increase, Toxics)~~



18. To assure compliance with part I.14 of Condition 1240, the ~~permit holder~~ Owner/Operator shall perform the following monitoring on a semi-annual basis, starting on January 1 of each year.

18a. The ~~permit holder~~ Owner/Operator shall estimate emissions of Non-methane hydrocarbons (NMHC) and ~~nitrogen oxides~~ for each quarter. (Basis: Cumulative Increase)

18b. ~~The permit holder shall estimate fugitive NMHC emissions from valves, flanges, pumps, and compressors using the draft "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities" dated February 1999, or later version.~~

18c. The ~~permit holder~~ Owner/Operator shall estimate tank NMHC emissions from the following tanks using the most recent version of EPA's "Tanks" program or EPA publication AP-42: ~~S-1, -S-29, S-413, and S-23, S37, S38, S51-S53, S59-S63, S65, S70.~~ (Basis: Cumulative Increase)

18d. ~~The permit holder shall estimate NMHC emissions from the following loading racks using EPA publication AP-42: S14, S15, S16, S17, S31, S54.~~

18e. ~~The permit holder shall estimate NMHC emissions from the following wastewater sources using the most recent version of EPA's "Water" program: S12, S25-S28, S41, S66, S67. The permit holder may use maximum potential to emit in place of measured throughput.~~

18f. ~~The permit holder shall estimate NMHC emissions from the following combustion sources: S19-S21. The permit holder shall use fuel measurements for each fuel, the F factor method in EPA Method 19, and the average concentration in the last source test for these estimates.~~

18g. ~~The permit holder shall estimate NMHC emissions from the following combustion sources: S24, S34, A4, A31. The permit holder shall use the maximum capacity as an estimate of the fuel usage, and the appropriate emission factor from EPA publication AP-42. The permit holder shall estimate NMHC emissions from S68. The permit holder shall use the maximum capacity as an estimate of the fuel usage, the actual hours of operation, and the appropriate emission factor from EPA publication AP-42.~~

18h. ~~The permit holder shall estimate emissions of nitrogen oxides (NOx) from the following combustion sources: S19-S21. The permit holder shall use fuel measurements for each fuel, the F factor method in EPA Method 19, and the average concentration in the last source test for these estimates.~~

18i. ~~The permit holder shall estimate emissions of nitrogen oxides (NOx) from the following combustion sources: S24, S34, A4, A31. The permit holder shall use the maximum capacity as an estimate of the fuel usage, and the appropriate emission factor from EPA publication AP-42. The permit holder shall estimate NOX emissions from S68. The permit holder shall use the maximum capacity as an estimate of the fuel usage, the actual~~

~~hours of operation, and the appropriate emission factor from EPA publication AP-42.~~

18j. Within 30 days after the end of each semi-annual period, the ~~Owner/Operator~~ permit holder shall calculate the emission estimates required by parts I.18**~~cb~~** through 18i for the quarter, summarize the emission estimates for the period, and for the previous period. If the emission estimates exceed the limits in part I.14 of Condition 1240, the permit holder shall report non-compliance with part I.14 of this condition in accordance with Standard Condition I.F of the Title V permit. The emissions estimates shall be kept on-site for a minimum of five years and be made available to District staff upon request. (Basis: Cumulative Increase)

~~19. Within 90 days of issuance of the Title V permit, the permit holder shall install continuous temperature monitoring and recording device for A4, Thermal Oxidizer. Within 180 days of issuance of the Title V permit, the permit holder shall perform a source test to determine whether A4 is in compliance with the requirement for 98.5% destruction efficiency, the grain loading limit in BAAQMD Regulation 6-310, and the minimum temperature at which A4 must operate to maintain the destruction efficiency and compliance with the other standards. All source testing shall be done in accordance with the District's Manual of Procedures. The permit holder shall receive approval from the District's Source Test Manager for installation of test ports and source testing procedures. The results shall be delivered to the District no later than 30 days from the date of the source test. Minor revision procedures in accordance with BAAQMD Regulation 2-6-414 shall be used to add the minimum temperature specification to the Title V permit. (2-6-503)~~

~~19a. The temperature limit in part I.19 shall not apply during an "Allowable Temperature Excursion", provided that the temperature controller setpoint complies with the temperature limit. An Allowable Temperature Excursion is one of the following:~~

- ~~a. A temperature excursion not exceeding 20 degrees F; or~~
- ~~b. A temperature excursion for a period or periods which when combined are less than or equal to 15 minutes in any hour; or~~
- ~~c. A temperature excursion for a period or periods which when combined are more than 15 minutes in any hour, provided that all three of the following criteria are met.~~
  - ~~i. the excursion does not exceed 50 degrees F;~~
  - ~~ii. the duration of the excursion does not exceed 24 hours; and~~
  - ~~iii. the total number of such excursions does not exceed 12 per calendar year (or any consecutive 12 month period).~~

~~Two or more excursions greater than 15 minutes in duration occurring during the same 24 hour period shall be counted as one excursion toward the 12 excursion limit. (basis: Regulation 2-1-403)~~

~~19b. For each Allowable Temperature Excursion that exceeds 20 degrees F. and 15 minutes in duration, the Permit Holder shall keep sufficient records to demonstrate that they meet the qualifying criteria described above. Records shall be retained for a minimum of five years from the date of entry, and shall be made available to the District upon request. Records shall include at least the following information:~~

- ~~a. Temperature controller setpoint;~~
  - ~~b. Starting date and time, and duration of each Allowable Temperature Excursion;~~
  - ~~c. Measured temperature during each Allowable Temperature Excursion;~~
  - ~~d. Number of Allowable Temperature Excursions per month, and total number for the current calendar year; and~~
  - ~~e. All strip charts or other temperature records.~~
- ~~(basis: Regulation 2-1-403)~~

~~19c. For the purposes of parts I.19a and I.19b, a temperature excursion refers only to temperatures below the limit. (basis: Regulation 2-1-403)~~

~~20. Deleted Application 9297~~

## II. TANKAGE AND LOADING RACK CONDITIONS:

This Section II from BAAQMD Condition 1240 had 92 Parts when ownership of S-1, S-2, S-4 and S-23 was transferred to Valero Logistics Operations in February, 2004. In general, the parts in this section covered all of the storage tank and loading rack sources. Only Parts 1 and 11 through 24 are retained for S-1, S-2, S-4 and S-23.

- ~~1. S2 abatement requirement Deleted 8/26/00. Modifications to S2 completed converting S2 to an external floating roof tank.~~
- ~~2. Deleted 5/01. Redundant with condition 1240 II.26.~~
- ~~3. Deleted 07/20/99. Redundant with condition 1240 II.27.~~
- ~~4. Deleted 07/20/99. Redundant with condition 1240 II.54.~~
- ~~5. Deleted 07/20/99. Redundant with condition 1240 II.60.~~
- ~~6. The safety relief system for the crude unit, S18 shall vent to the thermal oxidizer (A4). (Cumulative Increase)~~
- ~~7. Deleted 07/20/99. Redundant with condition 1240 II.51.~~

8. ~~Asphalt loading at S17 shall be immediately terminated if the blowdown system is venting to the thermal oxidizer (A4). (Cumulative Increase)~~

9. ~~Deleted 08/12/99.~~

10. ~~Source S25 shall be vented to A1 or A3, Mist Eliminator F-8 or F-10 and A31, Thermal Oxidizer, at all times of operation. If A31 is inoperative, this source shall be vented to source S24, Hot Oil Heater, as a backup until A31 is operating. (cumulative increase) (Added 10/27/93)~~

~~S1 Crude Oil Storage Tank 1A, External Floating Roof,~~

~~Capacity: 3,419,000 Gallons~~

~~S2 Crude Oil Storage Tank, External Floating TK-1B,~~

~~Capacity: 3,419,000 Gallons~~

~~S4 Crude Oil Storage Tank, External Floating Roof,~~

~~TK-10A, Capacity: 1,382,000 Gallons~~

~~S23 Crude Oil Storage Tank, External Floating Roof,~~

~~TK-10B, Capacity: 1,382,000 Gallons~~

11. Deleted 08/26/00. Tanks S1, S2, S4 and S23 conversion to external floating roof tanks completed under application 14513.

12. The Owner/Operator shall operate tanks S1, S2, S4 and S23 shall be external floating roof tanks of welded construction, equipped with which have liquid mounted mechanical shoe primary seals and zero-gap, rim mounted secondary seals, and with only the following fittings. There shall be no ungasketed roof fittings.

- (1) Automatic Gauge Float Well/bolted cover, gasketed
    - (1) Access Hatch, 24-inch diameter/bolted cover, gasketed
    - (1) Gauge Hatch Sample Well, 8 inch diameter/weighted mech actuation, gasketed
    - (1) Sample well, 24-inch diameter/slit fabric seal 10% open
    - (1) Vacuum Breaker, 10-inch diameter/weighted mech actuation, gasketed
    - (1) Roof Drain (which does not drain water into product)
    - (18) Roof Legs, 3-inch diameter, adjustable, pontoon area, sock
    - (20) Roof Legs, 3-inch diameter, adjustable, center area, sock
    - (1) Rim Vent, 6-inch diameter/weighted mech actuation, gasketed
- (Basis: eCumulative Increase, Offsets)

Note 1: Slotted Guide Pole Control Configuration, per Addendum to API Publication 2517, May 1994, shall include the following components:

- a. Sliding cover;
- b. Well gasket;

- c. Pole sleeve with pole wiper approximately 6 inches above sliding cover, or District approved equivalent;
  - d. Float with float wiper approximately 1 inch above the sliding cover, or alternately a float with multiple wipers.
- (Added per ~~Application N~~ 14513, 9/95 or ~~Application N~~ 366 1/2000)

13. ~~For The Owner/Operator of the four crude tanks S1, S2, S4 and S23, the permit holder~~ will inspect the primary seals and secondary tank seals and fittings quarterly, and maintain records of each inspection for five years from the date of the inspection. These records shall be made available to the District upon request. The quarterly inspections will include all items required by Regulations 8-5, as well as all items required by 40 CFR 60.113b(b). (Basis: Cumulative Increase) (Added per ~~Application N~~ 14513, 9/95)

14. The Owner/Operator shall sum total crude oil throughput to S1, S2, S4, and S23 and shall not exceed 6,235,000 barrels (261,870,000 gallons) in any consecutive 12-month period. (Basis: eCumulative increase)

15. The Owner/Operator may store Material other than crude oil ~~may be throughput to or stored at~~ in S1, S2, S4, or S23 only; if all of the following are satisfied:

- a. the storage of each material complies with all other conditions applicable these sources
  - b. the storage of each material complies with all other applicable regulatory requirements
  - c. the ~~permittee~~ Owner/Operator keeps District approved records which demonstrate to the District's satisfaction that no toxin listed in Table 2-1-316 is emitted from S1, S2, S4, and S23 in an amount in excess of the toxin's respective trigger level set forth in Table 2-1-316.
- (Basis: eCumulative Increase, Toxics)

16. The Owner/Operator shall not operate ~~For~~ S1, S2, S4, and S23 unless; the true vapor pressure of each and all materials stored in each of S1, S2, S4 and S23 ~~shall do not exceed~~ 11 psia. (Basis: eCumulative increase, Offsets, Toxics)

17. Vapor Recovery Requirement Deleted 08/26/00. S2 and S4 conversion is complete.

18. Part II.18 merged with part II.12.

19. Part II.19 merged with part II.12.

20. S-2 Vapor Recovery Requirement Deleted 08/26/00.

21. Deleted 6/1/00 per Application N 366, S-4 converted roof from a fixed roof to an external floating roof.

22. For each of S1, S2, S4, and S23, at the conclusion of each day, the ~~permittee~~ Owner/Operator shall record, by material name, in a District approved log, the total volume of each and every liquid material throughput to each of S1, S2, S4, and S23 during that day, in gallon units or barrel units. At the conclusion of each month, the ~~permittee~~ Owner/Operator shall total the daily log recordings separately for each of S1, S2, S4, and S23 and record the respective sum as the monthly throughput for each source, in a District approved log. Additionally, the ~~permittee~~ Owner/Operator shall record in a District approved log, the total volume of each and every liquid material throughput to S1, S2, S4, and S23 during each rolling 12 consecutive month period. This log shall be retained for at least 5 years from date of entry, shall be kept on site, and shall be made available to the District staff on request. (Basis: ~~e~~Cumulative increase)

23. At the conclusion of each month, the ~~permittee~~ Owner/Operator shall record in a District approved log, the 12 consecutive month sum total throughput of all liquid materials to S1, S2, S4, and S23 combined. This log shall be retained for at least 5 years from date of entry, it shall be kept on site, and it shall be made available to the District staff on request. (Basis: ~~e~~Cumulative increase)

24. Material transferred from S1, S2, S4, and/or S23, which is not to be processed at the Facility A0901 (13193) S18 Crude Unit, shall only be transferred (out of the facility) by pipeline and shall not be transferred by marine vessel. (Basis: ~~e~~Cumulative increase)

~~S9 Internal Floating Roof Tank, TK 7; Capacity: 571,200 Gallons, White, Storing: Naphtha equipped with a mechanical shoe primary seal, rim mounted secondary seal, and welded deck~~

~~25. Material other than Naphtha may be throughput to or stored in S9, if all of the following are satisfied:~~

- ~~a. the storage of each material complies with all other conditions applicable to this source~~
- ~~b. the storage of each material complies with all other applicable regulatory requirements~~
- ~~c. the permittee keeps District approved records that demonstrate to the District's satisfaction that no toxin listed in Table 2-1-316 is emitted from S9 in an amount in excess of the toxin's respective trigger level set forth in Table 2-1-316. (cumulative increase, toxics)~~

~~26. The true vapor pressure of each and all material stored in S9 shall not exceed 11 psia. (cumulative increase, toxics)~~

~~27a. S9 shall not be operated unless it is equipped with a District approved internal floating roof with a mechanical shoe primary seal, a rim mounted secondary seal, and a welded deck. (cumulative increase, NSPS)~~

~~28. The total throughput of all liquid materials to S9 shall not exceed 24,019,000 gallons (571,880 barrels) in any rolling 12 consecutive month period. (cumulative increase, toxics)~~

~~29. On a monthly basis, the permittee shall record in a District approved log the total volume of each and all liquid materials throughput to S9 each month and each rolling 12 consecutive month period, in gallon units or barrel units. This log shall be retained for at least 5 years from date of entry, shall be kept on site, and shall be made available to the District staff on request. (cumulative increase)~~

~~S13 Fixed Roof Storage Tank (TK-8); Capacity: 88,000 Gallons, Storing: Kerosene, Light or Heavy Vacuum Gas Oil, and Asphalt abated by (either) A3 or A20 Mist Eliminator F-10 or F-500 and A31 Thermal Oxidizer H-7 or S24 Hot Oil Heater H-3~~

~~S59 Fixed Roof Storage Tank (TK-5); Capacity: 1,050,000 Gallons, Storing: Kerosene, Light or Heavy Vacuum Gas Oil and Asphalt, abated by A1 or A3 Mist Eliminator F-8 (or) F-10 and A31 Thermal Oxidizer H-7 or (either) S24 Hot Oil Heater H-3.~~

~~S63 Kerosene/Light Vacuum Gas Oil/Heavy Vacuum Gas Oil/Asphalt Storage Tank, Fixed Roof, TK-31, Capacity: 1,218,000 Gallons abated by A3 or A20 Mist Eliminator F-10 or F-500 and A31 Thermal Oxidizer H-7 or S24 Hot Oil Furnace H-3~~

~~30. Petroleum materials other than Kerosene, Light or Heavy Vacuum Gas Oil, and Asphalt may be stored in S13, S59, and S63 if all of the following are satisfied:~~

- ~~a. the storage of each petroleum material complies with all other conditions applicable to S13, S59, or S63.~~
  - ~~b. the storage of each petroleum material complies with all other applicable regulatory requirements~~
  - ~~c. the permittee keeps District approved records which demonstrate to the District's satisfaction that no toxin listed in Table 2-1-316 is emitted from S13, S59, or S63 in an amount in excess of the toxin's respective trigger level set forth in Table 2-1-316.~~
- ~~(cumulative increase, toxics)~~

~~31. The true vapor pressure of each material stored in S13, S59, or S63 shall not exceed 1.5 psia. (cumulative increase, toxics)~~

~~31a. To assure compliance with the limit in part II.31, the permit holder shall take a sample from each tank on an annual basis and determine the true vapor pressure of the sample. Records of these analyses shall be retained for at least 5 years from the date of the analysis, shall be kept on site, and shall be made available to the District staff on request. (cumulative increase, toxics)~~

~~32a. At all times that S13 stores petroleum materials, S13 shall be operated with a District approved vapor recovery system and S13 shall be abated by (either) A3 or A20 Mist Eliminator F-10 or F-500 and A31 Thermal Oxidizer H-7 or S24 Hot Oil Heater H-3; with an overall collection and destruction efficiency of at least 98.5%, by weight. (Regulation 8-5-306, NSPS, and cumulative increase, toxics)~~

~~32b. At all times that S59 stores organic materials, S59 shall be operated with a District approved vapor recovery system and S59 organic emissions shall be abated by (either) A1 or A3 Mist Eliminator F-8 or F-10 and S24 Hot Oil Heater H-3 or A31 Thermal Oxidizer H-7; with an overall collection and destruction efficiency of at least 98.5%, by weight. (Regulation 8-5-306, NSPS, and cumulative increase, toxics)~~

~~32c. For S63, at all times that petroleum materials/VOC are in this equipment, S63 shall be operated with a District approved vapor recovery system with emissions ducted to and abated by (either) A3 or A20 Mist Eliminator F-10 or F-500 and A31 Thermal Oxidizer H-7 or S24 Hot Oil Heater H-3; with a destruction efficiency of at least 98.5%, by weight, as measured across the combustion device (S24 or A31). (cumulative increase, NSPS, Regulation 8-5-306, offsets, BACT)~~

~~32d. For S63, the District approved vapor recovery system operated in conjunction with S63 shall operate such that it has no detectable fugitive organic emissions in excess of 100 ppmv, measured as total organic compounds. Total organic compounds is as defined in Regulation 8, Rule 18. (BACT)~~

~~32e. To monitor compliance with the standard in 40 CFR 60.112b(a)(3)(i) for fugitive emissions at closed vent systems, the owner/operator shall inspect the closed vent systems that control S13, S59, and S63 using EPA Method 21 on a semi-annual basis. (Regulation 2-6-503)~~

~~33a. The total combined throughput of all materials to S13, S59, and S63 shall not exceed 68,208,000 gallons (1,624,600 barrels) in any rolling 12 consecutive month period. (cumulative increase, toxics)~~



~~33b. Cutback asphalt materials including but not limited to SC Cutback Asphalt, MC Cutback Asphalt, and FM-1 Cutback Asphalt and other cutback asphalt materials shall NOT be stored in or transferred to S63. (toxics)~~

~~34. On a monthly basis, the permittee shall record in a District approved log the total volume of each liquid material throughput to S13, S59, or S63 by material name (e.g., kerosene, light vacuum gas oil, heavy vacuum gas oil, asphalt) each month and each rolling 12 consecutive month period, in gallon units or barrel units. This log shall be retained for at least 5 years from date of entry, shall be kept on-site, and shall be made available to the District staff on request. (cumulative increase)~~

~~35. Deleted May, 2001~~

~~36. Deleted May, 2001~~

~~37. Deleted May, 2001~~

~~38. Deleted May, 2001~~

~~39. Deleted May, 2001~~

~~S3 Fixed Roof Storage Tank, TK-1C, Storing: Heavy Vacuum Gas Oil, Capacity: 3,415,000 Gallons operated with a District approved vapor recovery system and abated by (either) A3 or A20 Mist Eliminator F-10 or F-500 and S24 Hot Oil Heater H-3 or A31 Thermal Oxidizer H-7~~

~~40. Materials other than Heavy Gas Oil may be stored in S3, if all of the following are satisfied:~~

~~a. the storage of each petroleum material complies with all other conditions applicable to S3~~

~~b. the storage of each petroleum material complies with all other applicable regulatory requirements~~

~~c. the permittee keeps District approved records that demonstrate to the District's satisfaction that no toxin listed in Table 2-1-316 is emitted from S3 in an amount in excess of the toxin's respective trigger level set forth in Table 2-1-316. (cumulative increase, toxics)~~

~~41. The permittee shall ensure that at least 38,300,000 gallons (the 1996 calendar year baseline throughput to S3) of gas oil is throughput exclusively to S3 for storage during every rolling 12 consecutive month period, prior to transferring/storing gas oil material into another vessel for which VOC emissions are not abated with a destruction efficiency of at least 98.5%, by weight. (offsets)~~

~~42. The true vapor pressure of each and all material stored in S3 shall not exceed 0.5 psia. (cumulative increase, NSPS)~~

~~43. At all times that S3 stores VOC, S3 shall be operated with a District approved vapor recovery system and S3 volatile organic compound emissions shall be abated by (either) A3 or A20 Mist Eliminator F 10 or F 500 and A31 Thermal Oxidizer H 7 or S24 Hot Oil Heater H 3; with a destruction efficiency of at least 98.5%, by weight, as measured across the combustion device (S24 or A31). (cumulative increase, offsets, BACT)~~

~~44. The District approved vapor recovery system operated in conjunction with S3 shall operate under negative pressure and ensure that S3, including the District approved vapor recovery system, has no detectable fugitive organic emissions in excess of 100 ppmv, measured as total organic compounds. The vapor recovery system shall be monitored in accordance with BAAQMD Regulation 8, Rule 18. (BACT, cumulative increase, offsets)~~

~~45. All tank fittings present at S3 shall be gasketed. (BACT)~~

~~46. At the conclusion of each month, the permittee shall record in a District approved log the total volume of each and all liquid materials throughput to S3 during that month and for each rolling 12 consecutive month period, in gallon units or barrel units. This log shall be retained for at least 5 years from date of entry, shall be kept on site, and shall be made available to the District staff on request. (cumulative increase)~~

~~47. Deleted 11/29/99. Start up condition~~

~~S5 Asphalt Storage Tank, Fixed Roof, TK 2A, Capacity: 3,415,000 Gallons abated by either A1 or A3 Mist Eliminator F 8 or F 10 and A31 Thermal Oxidizer H 7 or S24 Hot Oil Furnace H 3~~

~~S6 Asphalt Storage Tank, Fixed Roof, TK 2B, Capacity: 3,415,000 Gallons abated by either A1 or A3 Mist Eliminator F 8 or F 10 and A31 Thermal Oxidizer H 7 or S24 Hot Oil Furnace H 3~~

~~S7 Asphalt Storage Tank, Fixed Roof, TK 3, Capacity: 1,050,000 Gallons abated by either A1 or A3 Mist Eliminator F 8 or F 10 and A31 Thermal Oxidizer H 7 or S24 Hot Oil Furnace H 3~~

~~S8 Asphalt Storage Tank, Fixed Roof, TK 4, Capacity: 1,050,000 Gallons abated by either A1 or A3 Mist Eliminator F 8 or F 10 and A31 Thermal Oxidizer H 7 or S24 Hot Oil Furnace H 3~~

~~S37 Asphalt Storage Tank, Fixed Roof, TK 54, Capacity: 100,000  
Gallons abated by A3 or A20 Mist Eliminator F 10 or F 500 and A31  
Thermal Oxidizer H 7 or S24 Hot Oil Furnace H 3~~

~~S38 Asphalt Storage Tank, Fixed Roof, TK 55, Capacity:  
100,000 Gallons abated by A3 or A20 Mist Eliminator F 10 or F 500 and  
A31 Thermal Oxidizer H 7 or S24 Hot Oil Furnace H 3~~

~~S51 Asphalt Storage Tank TK 506; Fixed Roof Tank, Capacity: 152,880  
Gallons abated by A3 or A20 Mist Eliminator F 10 or F 500 and A31  
Thermal Oxidizer H 7 or S24 Hot Oil Furnace H 3~~

~~S52 Asphalt Storage Tank TK 507, Fixed Roof Tank, Capacity: 152,880  
Gallons abated by A3 or A20 Mist Eliminator F 10 or F 500 and A31  
Thermal Oxidizer H 7 or S24 Hot Oil Furnace H 3~~

~~S53 Asphalt Storage Tank TK 508, Fixed Roof Tank, Capacity: 152,880  
Gallons abated by A3 or A20 Mist Eliminator F 10 or F 500 and A31  
Thermal Oxidizer H 7 or S24 Hot Oil Furnace H 3~~

~~S60 Asphalt Storage Tank TK 505; Fixed Roof, Capacity:  
15,000 Gallons abated by (either) A3 or A20 Mist  
Eliminator F 10 or F 500 and S24 Hot Oil Heater H 3  
-or A31 Thermal Oxidizer H 7~~

~~S61 Asphalt Storage Tank, Fixed Roof, TK 30A, Capacity:  
995,400 Gallons abated by A3 or A20 Mist Eliminator F 10 or F 500  
and A31 Thermal Oxidizer H 7 or S24 Hot Oil Furnace H 3~~

~~S62 Asphalt Storage Tank, Fixed Roof, TK 30B, Capacity:  
995,400 Gallons abated by A3 or A20 Mist Eliminator F 10 or F 500  
and A31 Thermal Oxidizer H 7 or S24 Hot Oil Furnace H 3~~

~~S65 Asphalt Storage Tank, Fixed Roof, TK 32 Tank Capacity: 6,920,000  
Gallons abated by A3 or A20 Mist Eliminator F 10 or F 500 and A31  
Thermal Oxidizer H 7 or S24 Hot Oil Furnace H 3~~

~~S70 Asphalt Additive Mixing Tank, Fixed Roof, Tank Capacity: 2,200  
Gallons abated by A3 or A20 Mist Eliminator F 10 or F 500 and A31  
Thermal Oxidizer H 7 or S24 Hot Oil Furnace H 3~~

~~48. The sum total asphalt throughput to S5, S6, S7, S8, S37, S38, S51,  
S52, S53, S60, S61, S62, and S65 shall not exceed 6,738,349 barrels  
(283,010,658 gallons) in any 12 consecutive month period. (cumulative  
increase, offsets)~~

~~49. For S5, S6, S7, S8, S37, S38, S51, S52, S53, S60, S61, S62, S65, S70: Cutback asphalt materials including but not limited to SC Cutback Asphalt, MC Cutback Asphalt, and FM 1 Cutback Asphalt and other cutback asphalt materials shall not be stored in or transferred to any of the above tanks. (toxics)~~

~~50. For S5, S6, S7, S8, S37, S38, S51, S52, S53, S60, and S70: the true vapor pressure of each and all materials stored in each tank shall not exceed 0.5 psia. (cumulative increase, offsets)~~

~~51. For S61 and S62, the true vapor pressure of each and all materials stored in each tank shall not exceed 0.49 psia. (cumulative increase, offsets, NSPS, BACT)~~

~~52. For S65, the true vapor pressure of each and all materials stored in S65 shall not exceed 0.49 psia. (cumulative increase, offsets, BACT)~~

~~53. The District approved vapor recovery system operated in conjunction with S65 shall operate under negative pressure and ensure that S65, including the District approved vapor recovery system, has no detectable fugitive organic emissions in excess of 100 ppmv, measured as total organic compounds. The vapor recovery system shall be monitored in accordance with BAAQMD Regulation 8, Rule 18. (BACT, cumulative increase)~~

~~54. Deleted May, 2001.~~

~~55. Whenever petroleum materials or VOC are stored at S5, S6, S7, S8, S37, S38, and S70, each source shall be operated with a District approved vapor recovery system with emissions ducted to and abated by (either) A1 or A3 or A20 Mist Eliminator F-8 or F-10 or F-500 and S24 Hot Oil Heater H-3 or A31 Thermal Oxidizer H-7; with a destruction efficiency of at least 98.5%, by weight, as measured across the combustion device (S24 or A31). (cumulative increase, offsets)~~

~~56. Whenever petroleum materials or VOC are stored at S51, S52, S53, S60, and S65, each source shall be operated with a District approved vapor recovery system with emissions ducted to and abated by (either) A3 or A20 Mist Eliminator F-10 or F-500 and A31 Thermal Oxidizer H-7 or S24 Hot Oil Heater H-3; with a destruction efficiency of at least 98.5%, by weight, as measured across the combustion device (S24 or A31). (cumulative increase, offsets)~~

~~57. Whenever petroleum materials or VOC are stored in S61 and/or S62, each source shall be operated with a District approved vapor recovery system with emissions ducted to and abated by (either) A3 or A20 Mist Eliminator F-10 or F-500 and A31 Thermal Oxidizer H-7 or S24 Hot Oil~~

~~Heater H-3; with a destruction efficiency of at least 98.5%, by weight, as measured across the combustion device (S24 or A31). (cumulative increase, offsets, BACT)~~

~~58. Separately, for each of S5, S6, S7, S8, S37, S38, S51, S52, S53, S60, S61, S62, S65, and S70, at the conclusion of each month, the permittee shall record, by material name, in a District approved log, the total volume of each liquid material throughput to each tank during that month and during each rolling 12 consecutive month period, in gallon units or barrel units. This log shall be retained for at least 5 years from date of entry, shall be kept on site, and shall be made available to the District staff on request. (cumulative increase)~~

~~58a. Deleted Application 17468.~~

~~58b. The permit holder shall install continuous temperature monitoring and recording devices for A31, Thermal Oxidizer and S24, Hot Oil Heater. By March 1, 2004, the permit holder shall perform a source test to determine whether A31 and S24 are in compliance with the requirement for 98.5% destruction efficiency, the grain loading limit in BAAQMD Regulation 6-310, and the minimum temperature at which A31 and S24 must operate to maintain the destruction efficiency and compliance with the other standards. All source testing shall be done in accordance with the District's Manual of Procedures. The permit holder shall receive approval from the District's Source Test Manager for installation of test ports and source testing procedures. The results shall be delivered to the District no later than 30 days from the date of the source test. Minor revision procedures in accordance with BAAQMD Regulation 2-6-414 shall be used to add the minimum temperature specification to the Title V permit. (40 CFR 60.113b(e)(1)(ii) and 60.113b(e)(2); 40 CFR 60.473(e); 40 CFR 61.354(e)(1), 61.354(e)(4), , Regulation 2-6-409.2.2, 2-6-414)~~

~~S14 Naphtha Loading Racks abated by A4 Thermal Oxidizer H-6~~

~~59. S14 shall be operated with a submerged fill pipe and be abated by A4 Thermal Oxidizer H-6 at all times that materials are transferred at S14. (cumulative increase, offsets, BACT, toxics)~~

~~59a. To monitor compliance with the standard in BAAQMD Regulation 8-6-306 for vapor tightness of equipment associated with organic liquid delivery and loading operations at S14, the owner/operator shall inspect the equipment using EPA Method 21 on a quarterly basis. (Regulation 2-6-503)~~

~~59b. To monitor compliance with the standard in BAAQMD Regulation 8-6-306 for leak free equipment associated with organic liquid delivery and loading operations at S14, the owner/operator shall inspect the~~

~~equipment on a quarterly basis. This condition shall be effective on April 1, 2004. (Regulation 2-6-503)~~

~~60. S14 emissions shall be captured by a District approved vapor recovery system and shall be abated by A4 Thermal Oxidizer H-6 with a destruction efficiency of at least 98.5%, by weight, as measured across A4.  
(cumulative increase, offsets, BACT, toxics)~~

~~61a. The true vapor pressure of the materials transferred at S14 shall not exceed 11 psia. (cumulative increase, offsets, toxics)~~

~~61b. The total throughput of naphtha to S14 shall not exceed 25,749,000 gallons (613,000 barrels) during any consecutive 12 months. (cumulative increase)~~

~~S15 Kerosene and Light Vacuum Gas Oil Loading Rack abated by A4 Thermal Oxidizer H-6~~

~~62. S15 shall be operated with a submerged fill pipe and be abated by A4 Thermal Oxidizer H-6 at all times that materials are transferred at S15.  
(cumulative increase, offsets, BACT, toxics)~~

~~62a. To monitor compliance with the standard in BAAQMD Regulation 8-6-306 for vapor tightness of equipment associated with organic liquid delivery and loading operations at S15, the owner/operator shall inspect the equipment using EPA Method 21 on a quarterly basis. (Regulation 2-6-503)~~

~~62b. To monitor compliance with the standard in BAAQMD Regulation 8-6-306 for leak free equipment associated with organic liquid delivery and loading operations at S15, the owner/operator shall inspect the equipment on a quarterly basis. (Regulation 2-6-503)~~

~~63. S15 emissions shall be captured by a District approved vapor recovery system and shall be abated by A4 Thermal Oxidizer H-6 with a destruction efficiency of at least 98.5%, by weight, as measured across A4.  
(cumulative increase, offsets, BACT, toxics)~~

~~64a. The true vapor pressure of the materials transferred at and/or sampled from S15 shall not exceed 1.5 psia. All materials loaded at S15 must be transferred from Tanks S13, S59, or S63. (cumulative increase, offsets, toxics)~~

~~64b. The total combined throughput of Kerosene and Light Vacuum Gas Oil to S15, shall not exceed 283,011,000 gallons (1,483,000 barrels) during any consecutive 12 months. (cumulative increase, offsets, toxics)~~

~~S17 Asphalt Loading Racks abated by A2 Mist Eliminator F-9 and A4 Thermal Oxidizer H-6~~

~~S31 Rail Car Loading Rack; 5 Loading Arms, Loading: Asphalt and Light Vacuum Gas Oil abated by A6 Mist Eliminator F-3 and A31 Thermal Oxidizer H-7 or S24 Hot Oil Heater H-3~~

~~S54 Asphalt Loading Rack abated by (either) A3 or A20 Mist Eliminator F-10 or F-500 and A31 Thermal Oxidizer H-7 or S24 Hot Oil Heater H-3~~

~~65. S17 shall be abated by A2 Mist Eliminator F-9 and A4 Thermal Oxidizer H-6 at all times that materials are transferred at S17. (cumulative increase)~~

~~66. S31 shall be abated by A6 Mist Eliminator F-3 and A31 Thermal Oxidizer H-7 or S24 Hot Oil Heater H-3 at all times that materials are transferred at S31. (cumulative increase)~~

~~67. S54 shall be abated by (either) A3 or A20 Mist Eliminator F-10 or F-500 and A31 Thermal Oxidizer H-7 or S24 Hot Oil Heater H-3 at all times that materials are transferred at S54. (cumulative increase)~~

~~68. Emissions from S17 shall be captured by a District approved vapor recovery system and shall be abated by A2 Mist Eliminator F-9 and A4 Thermal Oxidizer H-6 with a destruction efficiency of at least 98.5%, by weight, as measured across A4. (cumulative increase, BACT)~~

~~69. Emissions from S31 shall be captured by a District approved vapor recovery system and shall be abated by A6 Mist Eliminator F-3 and A31 Thermal Oxidizer H-7 or S24 Hot Oil Heater H-3 with a destruction efficiency of at least 98.5%, by weight, as measured across A31 or S24. (cumulative increase, BACT)~~

~~70. Emissions from S54 shall be captured by a District approved vapor recovery system and shall be abated by (either) A3 or A20 Mist Eliminator F-10 or F-500 and A31 Thermal Oxidizer H-7 or S24 Hot Oil Heater H-3 with a destruction efficiency of at least 98.5%, by weight, as measured across that combustion device(s) abating S54 (A31 and/or S24). (cumulative increase, BACT)~~

~~71. The true vapor pressure of the materials transferred at or sampled from S17 and/or S-54 shall not exceed 0.5 psia. (cumulative increase, offsets)~~

~~72. The true vapor pressure of the materials transferred at or sampled from S31 shall not exceed 1.5 psia, unless the material contains asphalt. (cumulative increase, toxics, offsets)~~

~~72a. To monitor compliance with the standard in BAAQMD Regulation 8-6-306 for vapor tightness of equipment associated with organic liquid delivery and loading operations at S31, the owner/operator shall inspect the equipment using EPA Method 21 on a quarterly basis. (Regulation 2-6-503)~~

~~72b. To monitor compliance with the standard in BAAQMD Regulation 8-6-306 for leak-free equipment associated with organic liquid delivery and loading operations at S31, the owner/operator shall inspect the equipment on a quarterly basis. (Regulation 2-6-503)~~

~~73. If asphalt or any asphalt containing material or any material blended with asphalt is transferred at or sampled from S31, the true vapor of the material may not exceed 0.5 psia. (cumulative increase, toxics, offsets)~~

~~74. The total combined throughput of asphalt and all asphalt containing materials to S17, S31, and S54 shall not exceed 283,011,000 gallons during any consecutive 12 months. (cumulative increase, offsets)~~

~~75. The permittee shall maintain a District approved log of the monthly throughput of asphalt and all asphalt containing materials to S17, S31, and S54 in gallon units or barrel units during each month and during each rolling 12 consecutive month period, in gallon units or barrel units. This log shall be retained for at least 5 years from date of entry, shall be kept on site, and shall be made available to the District staff on request. (cumulative increase)~~

~~76. Deleted May, 2001.~~

~~77. Deleted May, 2001.~~

~~78. Deleted May, 2001.~~

~~79. Deleted May, 2001.~~

~~80. Deleted May, 2001.~~

~~81. Deleted May, 2001.~~

~~82. Deleted May, 2001.~~



~~S66 Oil Water Separator, Physical Capacity: 830 GPM, Permitted Capacity: 210 GPM abated by (either) A1 or A3 Mist Eliminator F-8 or F-10 and A31 Thermal Oxidizer H-7 or S24 Hot Oil Furnace H-3~~

~~83. The permittee shall ensure that the throughput of liquid material to S66 shall not exceed 110,376,000 gallons per year (210 gallons per minute). (basis: cumulative increase)~~

~~84. The cover and each access opening at S66 shall be closed vapor tight (as defined in Regulation 8, Rule 8), and gasketed. (basis: Reg. 8, Rule 8)~~

~~85. S66 shall be operated with a District approved vapor recovery system with S66 emissions ducted to and abated by (either) A1 or A3 Mist Eliminator F-8 or F-10 and A31 Thermal Oxidizer H-7 or S24 Hot Oil Heater H-3; with a destruction efficiency of at least 98.5%, by weight, as measured across the combustion device (S24 or A31). (basis: BACT, cumulative increase, contemporaneous emission reductions)~~

~~86. The District approved vapor recovery system operated in conjunction with S66 shall operate under negative pressure and ensure that S66, including the District approved vapor recovery system, has no detectable fugitive organic emissions in excess of 100 ppmv, measured as total organic compounds. The vapor recovery system shall be monitored in accordance with BAAQMD Regulation 8, Rule 18. (basis: BACT, cumulative increase, contemporaneous emission reductions)~~

~~87. Not less frequently than on a monthly basis, the permittee shall measure and record the volume (in gallons) of oil (slop oil) product recovered at S66 and not less frequently than on a monthly basis, the permittee shall measure and record the volume (in gallons) of waste water product recovered at S66 (waste water discharge to City of Benicia). The sum of the volume of slop oil product and the volume of wastewater product shall be recorded in a District approved log as the throughput of liquid material to S66. (basis: cumulative increase)~~

~~88. On a monthly basis, the permittee shall record in a District approved log the total volume of all liquid materials throughput to S66 each month, in gallon units or barrel units. This log shall be retained for at least 5 years from date of entry, shall be kept on site, and shall be made available to the District staff on request. (basis: cumulative increase)~~

~~89. Deleted 2001.~~

~~S16 Truck Loading Rack Heavy Vacuum Gas Oil~~

~~90. The true vapor pressure of the materials transferred at and/or sampled from S16 shall not exceed 0.49 psia. (cumulative increase)~~

~~91. The total throughput of materials transferred through S16 shall not exceed 25,749,000 gallons (613,000 barrels) during any consecutive 12-months. (cumulative increase)~~

~~91a. The permittee shall maintain a District approved log of the monthly throughput of materials transferred at S16 in gallon units or barrel units during each month and during each rolling 12 consecutive month period, in gallon units or barrel units. This log shall be retained for at least 5 years from date of entry, shall be kept on site, and shall be made available to the District staff on request. (cumulative increase)~~

~~S41, Wemco Hydrocleaner Induced Air Floatation Machine, abated by A1 or A3 Mist Eliminator F 8 or F 10 and S24 Hot Oil Furnace H 3 or A31 Thermal Oxidizer~~

~~92. The permittee shall ensure that the throughput of liquid material to S41 shall not exceed 77,263,200 gallons per year (147 gallons per minute). (basis: cumulative increase)~~

~~92a. The permittee shall maintain a District approved log of the monthly throughput of liquid material transferred to S41 in gallon units during each month and during each rolling 12 consecutive month period. This log shall be retained for at least 5 years from date of entry, shall be kept on site, and shall be made available to the District staff on request. (cumulative increase)~~

### ~~III. MARINE OPERATIONS CONDITIONS S30~~

~~\*1. The permit holder shall be limited to a total of 12 ships per year at their wharf. These ships shall be exclusively steam vessels less than 49 MDWEIGHT capacity. (Basis: cumulative increase)~~

~~\*2. While operating within District waters, any vessel delivering raw material to the asphalt plant or the asphalt plant dock shall use fuel oil with a maximum sulfur content of 2.9% by weight in all combustion units. In addition, all ballasting within District waters shall be accomplished by using dedicated tanks containing no volatile organic compounds. These conditions shall be stipulated in the purchase agreement between the permit holder and the supplier delivering the raw material to the asphalt plant. A copy of this purchase agreement shall be maintained on-site for District review. (Basis: cumulative increase)~~

~~3. While any vessel is in port at the asphalt plant wharf, all asphalt plant combustion units, except for S68, Emergency Diesel Powered Firewater Pump, shall be fired exclusively on natural gas or refinery fuel gas with~~

~~the maximum H<sub>2</sub>S content of 10 ppm (by volume). (Basis: cumulative increase)~~

~~\*4. District personnel shall have free access to board the tankers delivering material to the permit holder while in District waters. (Basis: Regulation 1-440)~~

~~\*5. The permit holder shall report all marine operations within District waters on a monthly basis. This report shall include all information on ballasting and offloading required by the District in order to determine emissions. (Basis: cumulative increase)~~

~~6. Marine loading and shipping of Bunker C fuel oil and gas oil may be done by barges with a capacity less than 100,000 bbls. No more than six barge loadings shall be made in any given month and no more than one barge loading shall be made on any given day. No barge loading shall be made on any day on which a vessel is delivering raw material to the permit holder. (Basis: cumulative increase)~~

~~7. The following organic liquids shall not be loaded onto vessels or barges at S30, Marine Loading Dock:~~

~~gasoline  
gasoline blending stocks  
aviation gas  
aviation fuel (JP-4 type)  
crude oil~~

~~(Basis: Synthetic minor condition)~~

~~8. The permit holder shall not load any liquid onto a vessel with a prior cargo of the following organic liquids:~~

~~gasoline  
gasoline blending stocks  
aviation gas  
aviation fuel (JP-4 type)  
crude oil~~

~~(Basis: Synthetic minor condition)~~

~~9. The permit holder shall keep the following records on a monthly basis of vessels delivering raw material to the asphalt plant, delivering materials to the asphalt plant dock, or loaded at the asphalt plant dock:~~

~~a. Number of ships loaded  
b. Capacity of ships in MDWEIGHT units  
c. Sulfur content of fuel oil used by vessels delivering raw materials  
d. H<sub>2</sub>S content of refinery fuel gas used at the asphalt plant while any vessel is in port  
e. Number of barges loaded per day  
f. Number of barges loaded per month~~

- ~~g. Capacity of each barge in barrel units~~
  - ~~h. Types of liquids loaded into and out of any vessel~~
- (Cumulative Increase)

~~IV. ODOR REDUCTION MEASURES (Added per AN 14513, 9/95)~~

~~\*1. The permit holder will maintain water seals, P-traps, caps, covers or equivalent on all process water drains. (1-301)~~

~~\*2. The permit holder will implement an Asphalt Tank Truck Dome Inspection Program for all asphalt tank trucks that they load. If a truck enters the facility with a leaking or malfunctioning dome lid, the permit holder will take the following action.~~

~~\*a. First occurrence in rolling twelve month period: the permit holder will orally notify the truck driver and dispatcher of the faulty dome lid, and request that the lid be repaired prior to the truck re-entering the facility.~~

~~\*b. Second occurrence in a rolling twelve month period: the permit holder will notify the driver and the trucking company in writing that if the truck enters the facility again with a malfunctioning dome hatch, the permit holder will not load the truck until the hatch has been repaired.~~

~~\*c. Third occurrence in a rolling twelve month period: the permit holder will not load the truck. The permit holder will also notify the driver and dispatcher, verbally and in writing, that the truck will not be loaded until the hatch has been repaired, and the repair has been inspected or repair documentation has been received by the permit holder to ensure that the hatch is in proper working order.~~

~~\*The permit holder shall keep records of all inspections and notifications. These records shall be made available to the District upon request. (1-301)~~

~~\*3. The permit holder shall provide written notification of the Asphalt Tank Truck Dome Inspection Program to any additional trucking company that may do business with the permit holder in the future, within two weeks of the first asphalt receipt. (1-301)~~

~~V. OTHER SOURCES~~

~~S24 Hot Oil Heater H-3; Max Firing Rate 9 MM BTU/hr~~

~~1. Respective emissions of nitrogen oxides, and carbon monoxide (CO) from S24 shall not exceed 30 ppm and 50 ppm at 3% O<sub>2</sub>. (Cumulative Increase)~~

Condition# 8564  
Valero Logistics Operations, Plant B5574  
3400 East Second Street  
Benicia, CA 94510  
Application 9817, November, 1992  
~~For~~ Source S-57 Floating Roof Tank

1. The Owner/Operator shall not heat Tank 1701 (S-57) -when storing "light" crude oil. [Basis: Cumulative Increase]
2. The Owner/Operator shall limit the vapor pressure of material stored in TK1701 to no more than 3.5 psi. [Basis: Cumulative Increase]
- ~~3. The following fugitive equipment, installed under Application #9817 to comply with 40 CFR 61, Subpart FF (Benzene Waste NESHAPS), shall be monitored, maintained, and repaired by the Owner/Operator in accordance with the NESHAPS [Basis: Cumulative Increase; Offsets]~~
  - ~~97 valves~~
  - ~~294 flanges~~
  - ~~3 pumps~~
- ~~1. Deleted. [Basis: Inspection and Maintenance program is covered by Regulation 8, Rule 18.]~~
- ~~2. Deleted. [Basis: Inspection and Maintenance program is covered by Regulation 8, Rule 18.]~~
- ~~3. Deleted. [Basis: Inspection and Maintenance program is covered by Regulation 8, Rule 18.]~~
- ~~4. Deleted. [Basis: Inspection and Maintenance program is covered by Regulation 8, Rule 18.]~~