

Bay Area Air Quality Management District

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**Permit Evaluation
and
Statement of Basis
for
RENEWAL of**

MAJOR FACILITY REVIEW PERMIT

**for
SFPP, L.P.
Facility #A4022**

Facility Address:
1550 Solano Way
Concord, CA 94520

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Orange, CA 92868

Application Engineer: Dharam Singh
Site Engineer: Dharam Singh

Application: 14577

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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 Title 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. Monitoring requirements are contained in section VII of the permit.

Each facility in the Bay Area is assigned a facility identifier that consists of a letter and a 4-digit number. This identifier is also considered to be the identifier for the permit. The identifier for this facility is A4020.

This facility received its initial Title V permit on November 21, 2001. This application is for a permit renewal. Although the current permit expired on October 31, 2006, it continues in force until the District takes final action on the permit renewal.

The standard sections of the permit will be upgraded to include new standard language used in all Title V permits.

Applicable requirements of 40 CFR Part 63, Subpart BBBBBB will be added.

Parametric requirements of District Regulation 1-523 for sources with abatement device subject to temperature limits will be added.

Air Toxic Control Measure (ATCM) requirements for stationary diesel engines adopted by California Air Resources Board (CARB or ARB) and effective on January 1, 2005 will be incorporated for S31. Permit condition will be replaced by standard condition ID# 22820.

Source (S29, Additive storage tank) will be removed because it is an exempt source.

Source (S40, Pipeline surge system) will be modified by adding two more surge vessels. The description of the source will be updated. The permit condition for this source remains unchanged. The evaluation of this source was done via Application 16342.

Four sources (S41, Soil vapor extraction system; S43 & S44, Transportable storage tanks; S1001, Sump tank D-8) and four abatement devices (A2, Thermal/Catalytic oxidation unit; A3, MTBE/VOC Oxidizer; A4, Activated carbon vessel; A5, Activated carbon vessel) will be removed.

Two new sources (S47 & S48, Oil water separators), and two abatement devices (A7 & A8, Vapor phase granular activated carbon units) will be included in the permit. The evaluation of these sources and abatement devices was done via Application 9577.

Permit conditions for sources, S10, S1000, and S1002 will be revised by increasing the throughput limits. The evaluation was done via Applications 14869 and 15923.

The proposed permit shows all changes to the permit in strikeout/underline format.

The following permit applications have been approved since the last TV permit modification:
Application # 8614 for S29, additive storage tank;
Applications # 9577 for Oil water separators, S47 & S48;
Application # 14869 for change in conditions ID# 15859 for Sump tanks, S1000 & S1002;
Application # 15923 for change in conditions ID# 13143 for Storage tank, S10.
Application # 16342 for modification of Pipeline surge system, S40.

B. Facility Description

SFPP, L.P. is a bulk terminal where refined petroleum products are stored in storage tanks and distributed via pipelines. Emissions from the facility are primarily volatile organic compounds, the main pollutant of concern.

There has been no significant change in emissions due to the addition of oil water separators and other revisions after the issuance of the initial permit.

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.

Changes to permit:

The dates of adoption and approval of rules in Standard Condition 1.A have been updated. The following language was added as Standard Condition I.B.12: "The permit holder is responsible for compliance, and certification of compliance, with all conditions of the permit, regardless whether it acts through employees, agents, contractors, or subcontractors. (Regulation 2-6-307)." The purpose is to reiterate that the Permit Holder is responsible for ensuring that all activities at the facility comply with all applicable requirements. The dates of the reporting periods and reporting deadlines have been added to Standard Conditions I.F and I.G for additional clarity.

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).

Permitted sources are those sources that require a BAAQMD operating permit pursuant to BAAQMD Rule 2-1-302.

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.

All abatement (control) devices that control permitted or significant sources are listed. Each abatement device whose primary function is to reduce emissions is identified by an A and a number (e.g., A-24). If a source is also an abatement device, such as when an engine controls VOC emissions, it will be listed in the abatement device table but will have an "S" number. An abatement device may also be a source (such as a thermal oxidizer that burns fuel) of secondary emissions. If the primary function of a device is to control emissions, it is considered an abatement (or "A") device. If the primary function of a device is a non-control function, the device is considered to be a source (or "S").

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

Following are explanations of the differences in the equipment list between the time that the facility originally applied for a Title V permit and the permit proposal date:

Sources, S47, S48, and abatement devices, A7, A8 were permitted, and sources, S41, S43, S44, S1001, and abatement devices, A2, A3, A4, A5 were removed after the initial Title V permit was issued. Description of source, S40, was amended.

Changes to permit:

New sources, S47, S48, and abatement devices, A7, A8, will be added to this part of the permit. Sources, S41, S43, S44, S1001, and abatement devices, A2, A3, A4, A5 will be deleted from this part of the permit. Description of source, S40, will be amended. Source, S29, will be deleted from this part of the permit.

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.

Changes to permit:

Section III has been modified to say that SIP standards are now found on EPA's website and are not included as part of the permit.

Table III has been updated by adding the following rules and standards to conform to current practice:

- BAAQMD Regulation 2, Rule 5, New Source Review of Toxic Air Contaminants
- SIP Regulation 5
- Regulation 8, Rule 2, Miscellaneous Operations
- Regulation 8, Rule 4, General Solvent and Surface Coating Operations
- Regulation 8, Rule 15, Emulsified and Liquid Asphalts
- SIP Regulation 8, Rule 18, Equipment Leaks
- BAAQMD Regulation 8, Rule 25 changed to SIP Regulation 8, Rule 25 because it is deleted from District listing of Regulations

- SIP Regulation 8, Rule 40 Aeration of Contaminated Soil and Removal of Underground Storage Tanks
- SIP Regulation 8, Rule 47, Air Stripping and Soil Vapor Extraction Operations
- SIP Regulation 8, Rule 51, Adhesive and Sealant Products
- SIP Regulation 9, Rule 1, Sulfur Dioxide
- SIP Regulation 12, Rule 4, Miscellaneous Standards of Performance – Sandblasting
- California Health and Safety Code Section 41750 et seq., Portable Equipment
- California Health and Safety Code Section 44300 et seq., Air toxic “Hot Spots” Information and Assessment Act of 1987
- California Health and Safety Code Section 93115 et seq., Airborne Toxic Control Measure for Stationary Compression Ignition Engines
- 40 CFR Part 61, Subpart M, National Emission Standards of Hazardous Air Pollutants – National Emission Standard for Asbestos 6/19/95

The dates of adoption or approval of the rules and their "federal enforceability" status in Table III have also been updated.

IV. Source-Specific Applicable Requirements

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 text of BAAQMD permit conditions is found in Section VI of the permit.
- Federal permit conditions. The 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.

CAM:

Several storage tanks are abated by the vapor burner, S1. These tanks comply with the Compliance Assurance Monitoring (CAM) requirements of 40 CFR Part 64. Material throughput limit is monitored on a daily basis. The operating temperature of the vapor burner, A1, is monitored continuously. The vapor burner is also subject to periodic source test to demonstrate compliance with the operating and control efficiency requirements.

NESHAPS

The facility is not subject to the requirements of 40 CFR 63, Subpart R – National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations). The facility is exempt from the requirements of Subpart R because E_p , emissions screening factor (= 0.36) is <1.0, and emissions of a single HAP are less than 10 tpy and total HAPs are less than 25 tpy.

However, the facility is subject to the requirements of 40 CFR 63, Subpart BBBBBB – National Emission Standards for Hazardous Air Pollutants for Source category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities as per 63.11081(a)(1).

The calculations are as follows:

EP Calculations

$$E_p = CF [6.7(T_F)(1-CE) + 0.21(T_E) + 0.093(T_{ES}) + 0.1(T_I) + 5.3 \times 10^{-6}(C)] + 0.04(OE) \\ = 0.36$$

Where,

E_p = emissions screening factor for pipeline breakout station;

$CF = 0.161$;

$CE = 0.0$, control efficiency;

$T_F = 0.0$, total number of fixed roof tanks without internal floating roof;

$T_E = 0.0$, total number of external floating roof tanks with only primary seals;

$T_{ES} = 6.0$, total number of external floating roof tanks with primary and secondary seals;;

$T_I = 15$; total number of fixed roof gasoline tanks with an internal floating roof;

$C = 9357$, number of valves, pumps, connectors, loading arm valves, and open ended lines in gasoline service;

$OE = 0.6$, other HAP screening factor (tons/yr);

HAP emission calculations

Potential to emit VOC from gasoline products = 100 tpy

HAP concentrations by weight in VOC (Ref: Gasoline Marketing (Stage I & Stage II), Volume III Chapter 11, Revised final, Area Source Committee, Emission Inventory Improvement Program, January 2001, Table 11.3-2) are used to calculate HAP emissions:

Benzene (= 0.9%) = 0.9 tpy

Ethyl Benzene (= 0.1%) = 0.1 tpy
n-hexane (= 1.6%) = 1.6 tpy
POM as 16-PAH (= 0.05%) = 0.05 tpy
Toluene (= 1.3%) = 1.3 tpy
2,2,4-Trimethylpentane (= 0.8%) = 0.8 tpy
Xylene (= 0.5%) = 0.5 tpy

Total HAP emissions = 5.25 tpy

On November 8, 2004, the California Air Resources Board (CARB or ARB) adopted an Air Toxics Control Measure (ATCM) for stationary diesel engines, which was effective on January 1, 2005. The measure restricted the hours of operation for older standby engines and required controls and/or lower emission rates for prime and new standby engines. Since the ATCM is a state standard, it is not federally enforceable. S31 is subject to the ATCM requirements.

Changes to permit:

Section IV has been modified to say that SIP standards are now found on EPA's website and are not included as part of the permit.

The applicable requirements of District's Regulation 8 Rules 2, 5, 8, 18, and 47 will be updated.

The applicable requirements of District's Regulation 9 Rule 8 will be updated.

The applicable requirements of 40 CFR 63, Subpart BBBBBB will be added.

New tables for S47 and S48 will be added.

Tables for S29, S41, S43, S44, and S1001 will be deleted.

Tables for S1000 and S1002 will be consolidated in one table.

Description of source, S40, will be amended.

Table for S31 will be updated by including applicable ATCM requirements adopted by ARB and new permit conditions.

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 has conducted a review of compliance over the past year and has no records of continuing compliance problems at this facility during the past year. Furthermore, the District reviewed compliance records for the past five years and found no recurring pattern of compliance violations that would suggest the need for additional permit conditions. The compliance report is contained in Appendix A of this permit evaluation and statement of basis.

Changes to permit:

No changes will be made to this part of the permit.

VI. Permit Conditions

During the Title V permit development, the District has reviewed the existing permit conditions, deleted the obsolete conditions, and, as appropriate, revised the conditions for clarity and enforceability. Each permit condition is identified with a unique numerical identifier, up to five digits.

When necessary to meet Title V requirements, additional monitoring, recordkeeping, or reporting has been added to the permit.

All changes to existing permit conditions are clearly shown in “strike-out/underline” format in the proposed permit. When the permit is issued, all ‘strike-out’ language will be deleted and all “underline” language will be retained, subject to consideration of comments received.

The existing permit conditions are derived from previously issued District Authorities to Construct (A/C) or Permits to Operate (P/O). Permit conditions may also be imposed or revised as part of the annual review of the facility by the District pursuant to California Health and Safety Code (H&SC) § 42301(e), through a variance pursuant to H&SC § 42350 et seq., an order of abatement pursuant to H&SC § 42450 et seq., or as an administrative revision initiated by District staff. After issuance of the Title V permit, permit conditions will be revised using the procedures in Regulation 2, Rule 6, Major Facility Review.

Conditions that are obsolete or that have no regulatory basis have been deleted from the permit.

Conditions have also been deleted due to the following:

- Redundancy in record-keeping requirements.
- Redundancy in other conditions, regulations and rules.
- The condition has been superseded by other regulations and rules.
- The equipment has been taken out of service or is exempt.
- The event has already occurred (i.e. initial or start-up source tests).

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.

Changes to permit:

Permit conditions ID# 3590 for S27, Oil water separator will be revised by deleting reference of S41.

Permit condition ID# 5245 for S29, Additive storage tank will be deleted.

Permit conditioned# 13143 will be revised by increasing the material throughput limit for S10, storage tank, and incorporating standard language as needed.

Permit conditioned# 15859 will be revised by increasing the material throughput limit for S1000 & S1002, Sump tanks, deleting S-1001, and incorporating standard language as needed.

Permit condition ID# 16699 for S41, Soil vapor extraction system will be deleted.

Permit condition ID# 17450 for S42, Air stripper will be revised by deleting A3.

Permit condition ID# 20874 for S43 & S44, Transportable storage tanks will be deleted.

Permit condition ID# 21509 for S47 & S48, Oil water separators will be added.

Permit condition ID# 22177 for S31 will be replaced by standard condition ID# 22820.

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.

The District has reviewed all monitoring and has determined the existing monitoring is adequate. Monitoring in Regulation 8 Rule 5 has increased and is adequate.

The tables below contain only the limits for which there is no monitoring or inadequate monitoring in the applicable requirements. The District has examined the monitoring for other limits and has determined that monitoring is adequate to provide a reasonable assurance of compliance. Calculations for potential to emit will be provided in the discussion when no monitoring is proposed due to the size of a source.

Monitoring decisions are typically the result of a balancing of several different factors including: 1) the likelihood of a violation given the characteristics of normal operation, 2) degree of variability in the operation and in the control device, if there is one, 3) the potential severity of

impact of an undetected violation, 4) the technical feasibility and probative value of indicator monitoring, 5) the economic feasibility of indicator monitoring, and 6) whether there is some other factor, such as a different regulatory restriction applicable to the same operation, that also provides some assurance of compliance with the limit in question.

These factors are the same as those historically applied by the District in developing monitoring for applicable requirements. It follows that, although Title V calls for a re-examination of all monitoring, there is a presumption that these factors have been appropriately balanced and incorporated in the District's prior rule development and/or permit issuance. It is possible that, where a rule or permit requirement has historically had no monitoring associated with it, no monitoring may still be appropriate in the Title V permit if, for instance, there is little likelihood of a violation. Compliance behavior and associated costs of compliance are determined in part by the frequency and nature of associated monitoring requirements. As a result, the District will generally revise the nature or frequency of monitoring only when it can support a conclusion that existing monitoring is inadequate.

SO2 Sources

| S# & Description | Citation of Limit | Federally Enforceable Emission Limit | Monitoring |
|--------------------------------|-------------------|--------------------------------------|------------|
| A1, Vapor Burner/VRU, | BAAQMD 9-1-301 | N | N |
| | BAAQMD 9-1-302 | N | N |
| | SIP 9-1-301 | Y | N |
| | SIP 9-1-302 | Y | N |
| A6, Thermal/Catalytic Oxidizer | BAAQMD 9-1-301 | N | N |
| | BAAQMD 9-1-302 | N | N |
| | SIP 9-1-301 | Y | N |
| | SIP 9-1-302 | Y | N |

SO2 Discussion:

BAAQMD Regulation 9-1-301

Area monitoring to demonstrate compliance with the ground level SO2 concentration requirements of Regulation 9-1-301 is at the discretion of the APCO (per BAAQMD Regulation 9-1-501). This facility does not have equipment that emits large amounts of SO2 and therefore is not required to have ground level monitoring by the APCO.

All facility combustion sources are subject to the SO2 emission limitations in District Regulation 9, Rule 1 (ground-level concentration and emission point concentration). In EPA's June 24, 1999 agreement with CAPCOA and ARB, "Periodic Monitoring Recommendations for Generally Applicable Requirements in SIP", EPA has agreed that natural-gas-fired combustion sources do not need additional monitoring to verify compliance with Regulation 9, Rule 1, since violations of the regulation are unlikely. Therefore, no monitoring is necessary for this requirement.

PM Sources

| S# & Description | Citation of Limit | Federally Enforceable Emission Limit | Monitoring |
|--|--------------------------|---|-------------------|
| A1, Vapor Burner/VRU | BAAQMD 6-1-301 | N | N |
| | SIP Regulation 6-301 | Y | N |
| | BAAQMD 6-1-310 | N | N |
| | SIP Regulation 6-310 | Y | N |
| A6, Thermal/Catalytic Oxidizer | BAAQMD 6-1-301 | N | N |
| | SIP Regulation 6-301 | Y | N |
| | BAAQMD 6-1-310 | N | N |
| | SIP Regulation 6-310 | Y | N |
| S31, Emergency diesel engine generator | BAAQMD 6-1-303.1 | N | N |
| | SIP Regulation 6-303.1 | Y | N |
| | BAQMD 6-1-310 | N | N |
| | SIP Regulation 6-310 | Y | N |

PM Discussion:

BAAQMD Regulation 6 “Particulate Matter”

Visible Emissions

BAAQMD Regulation 6-1-301 and SIP Regulation 6-301 limit visible emissions to no darker than 1.0 on the Ringelmann Chart (except for periods or aggregate periods of no more than 3 minutes in any hour). Visible emissions are normally not associated with combustion of gaseous fuels, such as natural gas. Abatement device, A1, burns gasoline vapor & supplement it by natural gas, and abatement device, A6, burns natural gas exclusively, therefore, per the EPA's June 24, 1999 agreement with CAPCOA and ARB titled "Summary of Periodic Monitoring Recommendations for Generally Applicable Requirements in SIP", no monitoring is required to assure compliance with this limit for these abatement devices (A1 & A6).

Monitoring for opacity for diesel standby reciprocating engines is not required in accordance with Section I.O.1 in CAPCOA/ARB/EPA Region IX Periodic Monitoring committee recommendations in the June 24, 1999 document entitled: “Periodic Monitoring Recommendations For Generally Applicable Requirements in SIP.” The reason is that sources in California burn low-sulfur, low-aromatic fuels. When the recommendations were written, California diesel contained 0.05% sulfur. Now the fuels contain 0.0015% sulfur, so particulate should be even lower.

In addition, in the Bay Area, the standard for opacity for emergency standby engines is Ringelmann 2, which is roughly equivalent to 40% opacity. It is unlikely that even an old engine would exceed a 40% opacity.

Moreover, the engine generator, S31, operates infrequently.

For the three reasons stated above, no monitoring for opacity is required for S31, engine generator.

Particulate Weight Limitation

BAAQMD Regulation 6-1-310 and SIP Regulation 6-310 limit filterable particulate (FP) emissions from any source to 0.15 grains per dry standard cubic foot (gr/dscf) of exhaust volume. Section 310.3 limits filterable particulate emissions from “heat transfer operations” to 0.15 gr/dscf @ 6% O₂. These are the “grain loading” standards.

Exceedances of the grain loading standards are normally not associated with combustion of gaseous fuels, such as natural gas and gasoline vapors. Abatement device, A1, burns gasoline vapor & supplement it by natural gas, and abatement device, A6, burns natural gas exclusively, therefore, per the EPA's July 2001 agreement with CAPCOA and ARB entitled "CAPCOA/CARB/EPA Region IX Recommended Periodic Monitoring for Generally Applicable Grain Loading Standards in the SIP: Combustion Sources: Summary of Periodic Monitoring Recommendations for Generally Applicable Requirements in SIP", no monitoring is required to assure compliance with this limit for these abatement devices (A1 & A6).

Monitoring for filterable particulate (FP) for diesel standby reciprocating engines is not required in accordance with Section II.A.1 in CAPCOA/ARB/EPA Region IX Periodic Monitoring committee recommendations in the June 24, 1999 document entitled: “CAPCOA/CARB/EPA Region IX Recommended Periodic Monitoring for Generally Applicable Grain Loading Standards in the SIP: Combustion Sources.” This determination applies to engines that are operated for maintenance and testing for less than 200 hours/yr. The engine, S31, is operated for maintenance and testing for less than 20 hours/yr, so no monitoring for FP is justified.

The generally applicable FP limit in the Bay Area is 0.15 grains/dscf. It is highly unlikely that any engine could exceed this standard, especially taking the fuel's low sulfur and aromatic content into account.

Changes to permit:

The standard language at the beginning of the section has been updated.

A note has been added at the beginning of the section to clarify that this section is a summary of the limits and monitoring, and that in the case of a conflict between Sections I-VI and Section VII, the preceding sections take precedence.

The applicable requirements of District's Regulation 8 Rules 2, 5, 8, 18, and 47 will be updated.

The applicable requirements of District's Regulation 9 Rule 8 will be updated.

The applicable requirements of 40 CFR 63, Subpart BBBBBB will be added.

New tables for S47 and S48 will be added.

Tables for S29, S41, S43, S44, and S1001 will be deleted.

Tables for S1000 and S1002 will be consolidated in one table.

New tables for S47 and S48 will be added.

Description of source, S40, will be amended.

Table for S31 will be updated by including ATCM requirements adopted by ARB and new permit condition.

40 CFR 60, Subpart Kb requirements are not deleted but moved within the Table VII – G.

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.

Changes to permit:

Applicable requirements of Regulation 8, Rule 5 will be updated as shown.

Applicable requirements of Regulation 6-310 and 6-1-310 will be added.

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 no permit shields.

X. Glossary

Changes to permit:

There will be no change in the glossary.

XI. Appendix A - State Implementation Plan

Changes to permit:

This section has been deleted. The address for EPA's website is now found in Sections III and IV.

D. Alternate Operating Scenarios:

No alternate operating scenario has been requested for this facility.

E. Compliance Status:

An office memorandum dated August 15, 2008 from the Director of Compliance and Enforcement to the Director of Permit Services, presents a review of the compliance record of SFPP, L.P. (Site #A4022). The Compliance and Enforcement Division staff has reviewed the compliance records for SFPP, L.P. for the period of January 1, 2007 through June 30, 2008. This review was initiated as part of the District evaluation of an application by SFPP, L.P. for a renewal Title V permit. During the period subject to review, activities known to the District include:

- Two Notices of Violation issued during this review period. Both violations were returned to compliance on the same day that they occurred.
- The District did not receive any alleged complaints.
- The facility is not operating under a Variance or an Order of Abatement from the District Board.
- There were no monitor excesses or equipment breakdowns reported or documented by District staff.

Through the submittal of the Title V renewal application on April 28, 2006, the owner certified that all equipment at SFPP, L.P. was operating in compliance with all applicable rules and regulations. No non-compliance issues have been identified to date. The compliance review is attached as Appendix A.

F. Differences between the Application and the Proposed Permit:

The Title V permit application 14577 was submitted on April 28, 2006. This version is the basis for constructing the proposed Title V permit. Revisions were made to the application 14577 as a result of changes at the facility that were made pursuant to Permit Applications 14869, 15923, and 16342. Changes to the permit *conditions, application, sources, etc.* include the following:

Source (S40, Pipeline surge system) was modified by adding two more surge vessels. The description of the source will be updated. The permit condition for this source remains unchanged. The evaluation of this source was done via Application 16342.

Four sources (S41, Soil vapor extraction system; S43 & S44, Transportable storage tanks; S1001, Sump tank D-8) and four abatement devices (A2, Thermal/Catalytic oxidation unit; A3, MTBE/VOC Oxidizer; A4, Activated carbon vessel; A5, Activated carbon vessel) will be removed.

Two new sources (S47 & S48, Oil water separators), and two abatement devices (A7 & A8, Vapor phase granular activated carbon units) will be included in the permit. The evaluation of these sources and abatement devices was done via Application 9577.

Permit conditions for sources, S10, S1000, and S1002 will be revised by increasing the throughput limits. The evaluation was done via NSR Applications 14869 and 15923.

APPENDIX A
BAAQMD COMPLIANCE REPORT

APPENDIX B
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_x

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

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.

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.

SO2

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 |
| lb | = | pound |
| in | = | inches |
| max | = | maximum |
| m ² | = | square meter |
| min | = | minute |
| mm | = | million |
| MMbtu | = | million btu |
| MMcf | = | million cubic feet |
| 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 C
BAAQMD EVALUATION REPORTS

ENGINEERING EVALUATION REPORT
SFPP,L.P.
PLANT NUMBER 4022
APPLICATION NUMBER 8614

BACKGROUND

SFPP,L.P. has been operating a tank, S-29, to store methyl cellosolve (ethylene glycol monomethyl ether) at their pipeline breakout station in Concord. SFPP has proposed to change the product for storage to glycol ether DM (diethylene glycol monomethyl ether)-Jet fuel grade, which is used as an additive for JP-8 product. Glycol ether DM is a low vapor pressure (0.2 mm Hg) and a high boiling point (380 degree F) liquid and therefore qualifies for exemption from the permit as per Regulation 2-1-123.3.2.

The application covers the following source:

S-29 Additive Storage Tank, CCA-3, fixed roof, 13K gallon capacity,
12 ft.dia., white. [Exemption: Regulation 2-1-123.3.2]

PERMIT CONDITIONS

The permit condition ID #5245 for S-29 shall be archived.

RECOMMENDATIONS

It is recommended that SFPP, L.P. be issued an exemption letter for the source described in the background section of this report.

BY: _____
Dharam Singh, AQE II

ENGINEERING EVALUATION REPORT
SFPP, L.P
PLANT NUMBER 4022
APPLICATION NUMBER 9577

BACKGROUND

SFPP, L.P., has submitted an application to obtain an Authority to Construct for two oil-water separators. The separators will be used to remove free phase product from extracted groundwater associated with site clean-up activities. VOC emissions will be controlled by a vapor phase granular activated carbon adsorption system.

The application covers the following sources:

S-47 Oil-water separator #1, Carbonair.COW 15F, abated by A-7 & A-8 in series

S-48 Oil-water separator #2, Carbonair.COW 50F, abated by A-7 & A-8 in series

A-7 Vapor phase granular activated carbon bed, US Filter, VSC 200, 200 lb carbon, 100 cfm.

A-8 Vapor phase granular activated carbon bed, US Filter, VSC 200, 200 lb carbon, 100 cfm.

EMISSION CALCULATIONS

S-47 & S-48:

POC emissions from the oil/water separators are calculated on the basis of an emission factor of 0.2 lb/1000 gallons as specified in the EPA document AP-42, Table 5.1-2, and typical maximum flow rate of 15 gpm from ground water extraction.

$$\begin{aligned} \text{POC emissions} &= (0.2 \text{ lb}/1000 \text{ gal})(15 \text{ gpm})(1440 \text{ min}/\text{day})(365 \text{ days}/\text{yr}) \\ &= 1577 \text{ lbs}/\text{yr} \\ &= 0.8 \text{ tpy} \end{aligned}$$

Benzene concentration is about 0.4% wt. in gasoline vapors. On the basis of this,

$$\begin{aligned} \text{Benzene emissions} &= (0.4\% \text{ wt.})(1577 \text{ lbs}/\text{yr}) \\ &= 6.31 \text{ lb}/\text{yr} \end{aligned}$$

BACT REQUIREMENTS

The oil/water separators do not trigger BACT requirements of the District Regulation 2-2-301.1 because POC emissions from each separator are less than 10 lbs/day.

PLANT CUMULATIVE INCREASE

POC = 0.8 tpy

OFFSET REQUIREMENTS

The project is subject to the offset requirements of Regulation 2-2-302 for POC emissions. Facility wide POC emissions are greater than 15 tpy. POC emission offsets are provided from SFB.

Offset = 0.8 tpy

TOXIC RISK SCREENING ANALYSIS

Benzene emissions do-not exceed the threshold level of 6.7 lbs/yr (Ref: Table 2-1-316), and therefore a toxic risk screen analysis is not required.

STATEMENT OF COMPLIANCE

On the basis of the information submitted, the oil/water separators will operate in compliance with the requirements of Regulation 8-8-301.1, gasketed cover etc.

The project does not trigger BACT requirements of the District Regulation 2-2-301.1 for POC emissions from any source.

The project triggers the offset requirements of the District Regulation 2-2-302. Facility wide POC emissions exceed 15 tpy. Emission offsets are provided from SFBA.

The project is not subject to CEQA review since it is considered to be ministerial under the District's CEQA Regulation 2-1-311 (PHBK chapter 3.3).

A toxic risk screening is not required due to the emissions of benzene.

The project is not subject to the public notification requirements of the District Regulation 2-1-412, Public Notice, Schools. The project is not located within 1000 feet of the nearest school.

NSR, PSD, NSPS, and NESHAPS do not apply.

PERMIT CONDITIONS

For oil/water separators, S-47 & S-48:

1. The owner/operator shall not exceed groundwater processing limit of 21,600 gallons per day at S-47 and S-48.
(basis: cumulative increase; toxic risk screen)

2. The owner/operator shall have all the openings of the separators kept closed with well gasketed covers at all times except when the opening is used for inspection and maintenance of the separators. The detectable leak emissions of organic compounds shall not exceed the limit of 100 ppm above background.
(basis: Regulation 8-18-301)
3. The owner/operator shall abate emissions from S-47 & S-48 by two granular activated carbon beds, A-7 & A-8, arranged in series at all times of operation. The volatile organic compound emissions from carbon adsorption system shall be monitored with a flame ionization detector(OVA-FID) at the start-up and bi-weekly thereafter for carbon breakthrough.
(basis: cumulative increase; toxic risk screen)
4. The owner/operator shall keep the following records in a District approved log for at least five years from the date of data entry, and make it available to the District staff upon request:
 - a. groundwater processing rate to demonstrate compliance with condition 1.
 - b. POC concentration in the exhaust of A-8 to demonstrate compliance with condition 3.
(basis: cumulative increase; toxic risk screen)

RECOMMENDATIONS

It is recommended that SFPP, LP be issued an Authority to Construct the sources described in background section of this report.

EXEMPTION: None

BY: _____
Dharam Singh, AQE II

ENGINEERING EVALUATION REPORT
SFPP,L.P.
PLANT NUMBER 4022
APPLICATION NUMBER 14869

BACKGROUND

SFPP,L.P. has been operating two sump tanks at the terminal in Concord. These sumps are used primarily to collect discharges from the gasoline and distillate line sampling sinks. They are also used to collect drains from prover (product metering device), collect product from pipeline construction projects, and emergency draining of a line when a pipeline leak is found. The product is finally pumped back into pipeline delivery system. The sumps are underground tanks with vents to the atmosphere.

SFPP has proposed to increase the throughput from the existing limit of 300,000 gallons to 750,000 gallons per year in anticipation of the future demand at the terminal.

The application covers the following sources:

S-1000 Sump tank D-3 Stockton line, fixed roof, underground, multi-liquid, 5880 gallon capacity.

S-1002 Sump tank D-10 Sacramento line, fixed roof, underground, multi-liquid, 5880 gallon capacity.

EMISSION CALCULATIONS

Volatile organic compounds (VOC) emissions from the sumps are calculated by executing the EPA Tank Program 4.0 (Program result printout attached). This program is based on the procedures described in AP-42 for storage tanks. Physical properties of gasoline are used. Toxic air contaminants emissions are based on weight percentages for gasoline vapors from *Gasoline Marketing (Stage I and Stage II)*, Volume III, Chapter 11, revised final, Area Source Committee, Emission Inventory Improvement Program, January 2001, Table 11.3.2.

$$\begin{aligned}\text{VOC emissions increase} &= (2 \text{ sumps})(3587 - 2420 \text{ lbs/yr}) \\ &= 2334 \text{ lbs/yr} \\ &= 1.167 \text{ tpy}\end{aligned}$$

$$\begin{aligned}\text{Benzene emissions increase} &= 21.02 \text{ lbs/yr} \\ &= 0.0024 \text{ lb/hr max.}\end{aligned}$$

$$\text{Ethylbenzene emissions increase} = 2.34 \text{ lbs/yr}$$

$$\text{Hexane emissions increase} = 37.34 \text{ lbs/yr}$$

$$\text{Napthalene} = 1.16 \text{ lbs/yr}$$

Toluene = 30.32 lbs/yr
= 0.0035 lb/hr max.
Xylene = 11.68 lbs/yr
= 0.0013 lb/hr max.

TOXIC RISK SCREENING ANALYSIS

A toxic health risk screening analysis is required for Benzene emissions greater than the toxic trigger level of 6.4 lb/yr (Ref. Table 2-5-1 of Regulation 2 Rule 5). The analysis estimates the incremental health risk resulting from toxic air contaminants emissions from the operation of two sump tanks. Results from the analysis indicate that the maximum cancer risk is estimated at 0.8 in a million. In accordance with the District's Regulation 2 Rule 5, this risk level is considered acceptable.

PLANT CUMULATIVE EMISSION INCREASE

POC = 1.167 tpy

OFFSET REQUIREMENTS

Offset requirements of Regulation 2-2-302 are triggered for facility wide POC emissions exceeding 10 tpy. Offsets are provided from the Banking certificate # 935 in a ratio of 1.0:1.0.

Offset provided = 1.167 tpy

STATEMENT OF COMPLIANCE

The storage sumps comply with the requirements of Regulation 8 Rule 5, Storage of Organic Liquids.

The project is considered to be ministerial under the District's CEQA Regulation 2-1-311 (PHBK chapter 4.2), and therefore is not subject to CEQA review.

The project is over 1000 feet from the nearest school, and therefore is not subject to the public notice requirements of Regulation 2-1-412.

BACT is not required for POC emissions less than 10 lb/day for each sump tank.

PSD, NSPS and NESHAPS do not apply.

PERMIT CONDITIONS

Permit condition ID# 15859 is revised by increasing the throughput limit.

RECOMMENDATIONS

I recommend SFPP, L.P. be issued the revised permit condition ID# 15859 for the sources described in the background section of this report.

EXEMPTIONS: None

BY: _____
Dharam Singh, AQE II

ENGINEERING EVALUATION REPORT
SFPP,L.P.
PLANT NUMBER 4022
APPLICATION NUMBER 15923

BACKGROUND

SFPP,L.P. has been operating an internal floating roof tank at the pipeline breakout station in Concord. The tank is subject to the permit condition ID# 13143 throughput limit of 353,808,000 gallons/yr. SFPP has proposed to increase the throughput limit to 504,000,000 gallons per year in anticipation of the future demand at the station.

The application covers the following source:

S-10 Storage tank CC-13, internal floating roof, multi-liquid, 2310K gallon capacity.

EMISSION CALCULATIONS

Volatile organic compounds (VOC) emissions from the tank are calculated by executing the EPA Tank Program 4.0.9d (Program result printout attached). This program is based on the procedures described in AP-42 for storage tanks. The tank is a multi-liquid storage tank but physical properties of gasoline are used to calculate emissions.

Toxic air contaminants emissions are based on weight percentages for gasoline vapors from *Gasoline Marketing (Stage I and Stage II)*, Volume III, Chapter 11, revised final, Area Source Committee, Emission Inventory Improvement Program, January 2001, Table 11.3.2.

$$\begin{aligned}\text{VOC emissions increase} &= (3418 - 3100 \text{ lbs/yr}) \\ &= 318 \text{ lbs/yr} \\ &= 0.16 \text{ tpy}\end{aligned}$$

$$\begin{aligned}\text{Benzene emissions increase} &= (0.9\%)(318 \text{ lb/yr}) \\ &= 2.86 \text{ lb/yr}\end{aligned}$$

$$\begin{aligned}\text{Ethylbenzene emissions increase} &= (0.1\%)(318 \text{ lb/yr}) \\ &= 0.32 \text{ lb/yr}\end{aligned}$$

$$\begin{aligned}\text{Hexane emissions increase} &= (1.6\%)(318 \text{ lb/yr}) \\ &= 5.09 \text{ lb/yr}\end{aligned}$$

$$\begin{aligned}\text{Napthalene} &= (0.05\%)(318 \text{ lb/yr}) \\ &= 0.16 \text{ lb/yr}\end{aligned}$$

$$\begin{aligned}\text{Toluene} &= (1.3\%)(318 \text{ lb/yr}) \\ &= 4.14 \text{ lb/yr}\end{aligned}$$

$$\begin{aligned}\text{Xylene} &= (0.5\%)(318 \text{ lb/yr}) \\ &= 1.59 \text{ lb/yr}\end{aligned}$$

TOXIC RISK SCREENING ANALYSIS

A toxic health risk screening analysis is not required for toxic emissions less than the toxic trigger levels given in the Table 2-5-1 of Regulation 2 Rule 5.

PLANT CUMULATIVE EMISSION INCREASE

POC = 0.16 tpy

OFFSET REQUIREMENTS

Offset requirements of Regulation 2-2-302 are triggered for facility wide POC emissions greater than 35 tpy. Offsets are provided from the Banking certificate # 1024 in a ratio of 1.15:1.0.

Offset provided = (1.15)(0.16 tpy)
= 0.184 tpy

STATEMENT OF COMPLIANCE

The storage tank complies with the requirements of Regulation 8 Rule 5, Storage of Organic Liquids.

The project is considered to be ministerial under the District's CEQA Regulation 2-1-311 (PHBK chapter 4), and therefore is not subject to CEQA review.

The project is over 1000 feet from the nearest school, and therefore is not subject to the public notice requirements of Regulation 2-1-412.

BACT is not required for POC emissions less than 10 lb/day.

PSD, NSPS and NESHAPS do not apply.

PERMIT CONDITIONS

Permit condition ID# 13143 is revised by increasing the throughput limit for S-10.

RECOMMENDATIONS

It is recommended that SFPP, L.P. be issued the revised permit condition ID# 13143 for the source described in the background section of this report.

EXEMPTIONS: None

BY: _____
Dharam Singh, AQE II

ENGINEERING EVALUATION REPORT
SFPP,L.P.
PLANT NUMBER 4022
APPLICATION NUMBER 16342

BACKGROUND

SFPP, L.P. has been operating a pipeline surge system, S-40, consisting of three surge vessels at the terminal in Concord.

This system is used to service storage tanks rather than to store product. Product from storage tanks is pumped to the main pipeline via the surge vessels. The vessels are vented to a vapor recovery system via a saturator and a vapor holding tank to facilitate the transition from one batch of product in one storage tank to another batch in another storage tank without shutting down the mainline pumps. During normal operation no surge vessel is vented to the vapor recovery system. The venting takes place only when there is a switch between storage tanks. This source is currently subject to the permit condition ID# 15574.

The surge system was modified without obtaining an authority to construct by adding two surge vessels. The physical change has made the system more flexible to operate with negligible increase in POC emissions. The permit condition remains unchanged. The description of the source will be updated in the database.

The application covers the following source with revised description:

S-40 Pipeline Surge System consisting of 5 surge vessels (D6, D7, & D14 each 4884 gallon capacity, D9-900 gallon capacity, and D15-6000 gallon capacity)

EMISSION CALCULATIONS

POC emissions from the system are limited by the number of allowable tank switchover of storage tanks on a daily/yearly basis (Ref: Condition ID# 15574). The switchover of storage tanks will remain unchanged regardless of which of the five vessels are used to service the tanks. However, POC fugitive emissions will increase due to additional fittings, flanges, etc. for the 2 added vessels. The applicant provided emission estimates (Tables attached) using USEPA emission factors for Marketing Terminals.

POC fugitive emissions (vessel D9) = 0.0229 tpy
POC fugitive emissions (vessel D15) = 0.0238 tpy
Benzene fugitive emissions (vessel D9) = 0.00021 tpy
Benzene fugitive emissions (vessel D15) = 0.00021 tpy

Total POC fugitive emissions increase = 0.0238 tpy + 0.0229 tpy
= 0.0467 tpy

Total Benzene fugitive emissions increase = 0.00021 tpy + 0.00021 tpy
= 0.00042 tpy

PLANT CUMULATIVE EMISSION INCREASE

POC = 0.0467 tpy

TOXIC RISK SCREENING ANALYSIS

A toxic risk screening analysis is not required because Benzene emissions increase is less than the trigger level (6.4 lb/yr) given in the Table 2-5-1 of the District Regulation 2-5.

BACT DETERMINATION

BACT requirements of Regulation 2-2-301 are not triggered for POC emissions less than 10 lbs/day. Even though BACT requirements are not triggered, the surge system is abated by a vapor recovery system.

OFFSET REQUIREMENTS

Offset requirements of Regulation 2-2-302 are triggered for facility wide POC emissions > 35 tpy. POC emissions will be offset in a ratio of 1.15:1.0, and provided by the applicant.

POC emissions offset = (1.15)(0.0467 tpy)
= 0.0537 tpy

STATEMENT OF COMPLIANCE

The surge system complies with the requirements of Regulation 8 Rule 2 (8-2-301, Miscellaneous Operations). POC emissions < 15 lbs/day.

8-2-301 Miscellaneous Operations: A person shall not discharge into the atmosphere from any miscellaneous operation an emission containing more than 6.8 kg. (15 lbs.) per day and containing a concentration of more than 300 PPM total carbon on a dry basis.

The project is considered ministerial under the District's CEQA Regulation 2-1-311 (PHBK chapter 11.9), and therefore is not subject to CEQA review.

The project is over 1000 feet from the nearest school, and therefore is not subject to the public notice requirements of Regulation 2-1-412.

PSD, NSPS, and NESHAPS do not apply.

PERMIT CONDITIONS

The permit condition ID # 15574 will remain unchanged.

RECOMMENDATIONS

It is recommended that SFPP, L.P. shall be issued a permit to operate the modified source described in the background section of the report.

EXEMPTIONS: None

BY: _____
Dharam Singh, AQE II