

**Bay Area Air Quality Management District**

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

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

**Facility Address:**  
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Application Engineer: Dharam Singh  
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Application: 9698

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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.

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 A4022.

This facility received its initial Title V permit on November 21, 2001. This application is for a minor revision to the permit. The purpose of the revision is to change the permit conditions ID# 3590 for oil-water separator and ID# 13143 for storage tanks, modification of the air stripper with addition of an alternative abatement device and change the permit condition ID# 17450, and adding new sources, S31, S43 and S44. The revision also includes updating the requirements of Regulation 8 Rule 5, 18, and 25 as a result of revision to Rules 5 and 18, and deletion of Rule 25. The proposed permit shows all changes to the permit in strikeout/underline format.

The revision was evaluated via Applications 4703, 7316, 9734, 11296 and 11297. These evaluations are attached in Appendices A, B, C, D, and E.

### **B. Facility Description**

SFPP, L.P. is a bulk terminal where refined petroleum products are stored in storage tanks and distributed by 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 this revision.

### **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:

No changes are proposed.

#### **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).

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.

### Changes to permit

New sources, S31, S43 and S44, and abatement devices, A4, A5 and A6 will be added.

### **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:

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

### **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.

This permit did not require any complex applicability determinations.

Changes to permit:

Section IV will be 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 Regulation 8 Rules 5, 18, and 25 will be updated.

Table IV – I for oil-water separator, S27, will be revised.

New tables for sources, S31, S44, and S44 will be added to the permit.

**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.

There are no changes in compliance status.

**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.

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 that 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 condition ID# 3590 will be revised to reflect changes made under application 11296 (see Appendix D).

Permit condition ID# 13143 will be revised to reflect changes made under application 11297 (See appendix E).

Permit condition ID# 17450 will be revised to reflect changes made under application 9734 (see appendix C).

New permit conditions for sources, S31 (condition # 22177) and S43 & S44 (condition #20874), will be added to the permit.

**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 monitoring requirements set forth in Regulation 8 Rule 5 have increased. The District has reviewed the facility's monitoring activities and has determined that the facility's existing monitoring meets the new requirements of Regulation 8 Rule 5.

Changes to permit:

The type of limit will be made pollutant specific, where applicable.

The limit and monitoring type will be made more specific, where needed.

The part VII tables, including that for source S27 will be revised.

New part VII tables for sources S31, S43, and S44, will be added to the permit.

**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 true vapor pressure, VOC emissions for tank cleaning, and pressure vacuum leak concentration will be updated.

**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 streamlining of all 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. Revision History**

Changes to Permit:

The revision history is updated.

**XI Glossary**

Changes to permit:

There is no change in the glossary.

**XII. Appendix A - State Implementation Plan**

Changes to permit:

No changes are proposed for this section.

**D. Alternate Operating Scenarios:**

No alternate operating scenario has been requested for this facility.

## APPENDIX A

### PERMIT EVALUATION FOR APPLICATION 4703

ENGINEERING EVALUATION  
SFPP, L.P.; SITE 4022  
APPLICATION 4703

BACKGROUND

SFPP, L.P. has applied for a permit to operate an existing standby generator powered by a diesel engine (S-31). The engine has been in operation since 1989 and was thus installed before May 17, 2000 when Regulation 1 and Regulation 2-1 were modified to require engines greater than 50 HP to require a Permit to Operate. As such, S-31 constitutes a Loss-Of-Exemption source not subject to Regulations 2-1-301 or 2-1-302 ("new" and "modified sources").

Emergency Generating Set: Diesel Engine; Make: Caterpillar; Model: 3306; Rated Horsepower: 266 HP

In accordance with Regulation 9-8-330, a standby generator is limited to 100 hours per year for reliability-related activities and unlimited when used for power in emergency situations.

EMISSIONS

Emissions from S-31 do not need to be calculated since S-31 is not defined as a new or modified source.

CUMULATIVE INCREASE

Emissions from S-31 do not count towards the facility's cumulative increase since S-31 is not defined as a new or modified source pursuant to Regulation 9-8-232 and 9-8-234.

BACT

Since S-31 is a loss-of-exemption source, it is not subject to BACT requirements pursuant to Regulation 2-2-301.

OFFSETS

Offsets are not required because S-31 is not a new or modified source pursuant to Regulation 2-2-302.

TOXIC RISK SCREEN ANALYSIS

A Toxic Risk Screen Analysis is not required for this source since S-31 is not a new or modified source and not subject to Regulation 2-1-316.

STATEMENT OF COMPLIANCE

S-31 is a loss-of-exemption standby generator installed before May 17, 2000 and therefore not subject to Regulations 9-8-301, 9-8-302, and 9-8-502. S-31 is subject to the monitoring and record keeping procedures described in Regulation 9-8-530, the SO<sub>2</sub> limitations of Regulation 9-1-302 (ground level concentration) and 9-1-304 (0.5% by weight in fuel), and the Ringelmann No. 2 limitations of Regulation 6-303 (emissions opacity limitations). Requirements for Regulation 9-8-530 are included in the proposed permit conditions. Compliance with Regulation 9-1-304 is likely since California law mandates using diesel fuel with a 0.05% by weight sulfur.

Per Regulation 6, Section 303, a person shall not emit for a period or periods aggregating more than three minutes in any hour, a visible emission that is as dark or darker than No. 2 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree, nor shall

said emission, as perceived by an opacity sensing device in good working order, where such device is required by District regulations, be equal to or greater than 40% opacity.

This application is considered to be ministerial under the District's proposed CEQA guidelines (Regulation 2-1-311) and therefore is not subject to CEQA review. The engineering review for this project requires only the application of standard permit conditions and standard emission factors in accordance with Permit Handbook Chapter 2.3.

This source is not defined as a new or modified source and is therefore not subject to the public notification requirements of Regulation 2-1-412.

A toxic risk screening analysis is not required.

BACT, PSD, NSPS, and NESHAPS are not triggered.

#### PERMIT CONDITIONS

APPLICATION 4703; SFPP, L.P.; PLANT 4022; CONDITIONS FOR S-31:  
(PC 19533)

1. Hours of Operation: The emergency standby engine(s) shall only be operated to mitigate emergency conditions or for the reliability-related activities. Operation for reliability-related activities shall not exceed 100 hours in any calendar year. Operation while mitigating emergency conditions is unlimited. [Basis: Reg. 9-8-330]
  
2. "Emergency Conditions" is defined as any of the following: [Basis: Reg. 9-8-231]
  - a. Loss of regular natural gas supply.
  - b. Failure of regular electric power supply.
  - c. Flood mitigation.
  - d. Sewage overflow mitigation.
  - e. Fire.
  - f. Failure of a primary motor, but only for such time as needed to repair or replace the primary motor.
  
3. "Reliability-related activities" is defined as any of the following: [Basis: Reg. 9-8-232]
  - a. Operation of an emergency standby engine to test its ability to perform for an emergency use, or
  - b. Operation of an emergency standby engine during maintenance of a primary motor.
  
4. The emergency standby engine shall be equipped with either: [Basis: Reg. 9-8-530]
  - a. a non-resettable totalizing meter that measures and records the hours of operation for the engine.
  - b. a non-resettable fuel usage meter.
  
5. Records: The following monthly records shall be maintained in a District-approved log for at least 2 years and shall be made available for District inspection upon request: [Basis: Reg. 9-8-530, 1-441]
  - a. Hours of operation (total).
  - b. Hours of operation (emergency).
  - c. For each emergency, the nature of the emergency condition.

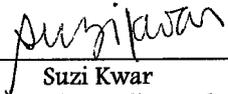
#### RECOMMENDATION

Waive Authority to Construct and issue a Permit to Operate to SFPP, L.P. for:

S-31            Emergency Generating Set: Diesel Engine; Make: Caterpillar; Model: 3306; Rated  
Horsepower: 266 HP

SNK:snk  
4703Eval.doc

BY:

  
\_\_\_\_\_  
Suzi Kwar  
Air Quality Technician

07/12/02  
\_\_\_\_\_  
Date

**APPENDIX B**  
**PERMIT EVALUATION FOR APPLICATION 7316**

**ENGINEERING EVALUATION REPORT**

**SFPP, L.P.**

**PLANT NUMBER 4022**

**APPLICATION NUMBER 7316**

**BACKGROUND**

SFPP, L.P. has applied to obtain an authority to construct and permits to operate four above ground transportable tanks at their pipeline breakout station in Concord. These tanks are to be used to store recovered product and water generated from clean-up activities associated with a recent gasoline product spill. After a tank is full it is taken off-site after a couple of weeks, when its contents are analyzed. Each tank is connected to a designated carbon adsorption unit to control VOC emissions. The tanks meet the criteria of accelerated permit. The tanks were supposed to be in operation temporarily for few weeks. Two tanks have already been taken out of service and the applicant has requested to process permits only for the remaining two tanks, which are now supposed to be in service permanently at the site.

The application covers the following sources:

- S-43 Transportable storage tank, 12'h X 8'w X 35'l, 21K gallon capacity, abated by A-4.
- S-44 Transportable storage tank, 12'h X 8' w X 35'l, 21K gallon capacity, abated by A-5.
- A-4 Activated carbon vessel, Westates, VSC-1200, 3.71'dia.X 6.17'h, 1000 lb carbon.
- A-5 Activated carbon vessel, NWC, LF-18, 3.5'dia.X 7.75'h, 1800 lb carbon.

**EMISSION CALCULATIONS**

**S-43 & S-44:**

**Method 1:**

Volatile organic compounds (VOC) emissions from a tank are calculated by executing the Tank Program 4.0 (Program result printout attached). This program is based on the procedures described in AP-42 for storage tanks. Even though the liquid stored is a mixture of gasoline, distillate fuel #2, jet kerosene, and water, physical properties of gasoline are used to calculate emissions. Actual emissions will be much less than the estimated amount because of two reasons: one is that a tank after it is filled is stationed on-site only for a couple of weeks, and secondly emissions are calculated assuming the content is all gasoline. A control efficiency of 95% is used.

Uncontrolled POC emissions for each tank	= 3626 lbs/yr
Uncontrolled POC emissions for both tanks	= 7252 lbs/yr
Controlled POC emissions for both tanks	= (7252 lbs/yr)(1-0.95)
	= 0.18 tpy
Benzene emissions (based on 1.5% of POC)	= (362.6 lbs/yr)(1.5%)
	= 5.44 lbs/yr

**Method 2:**

Basis:

- a. Maximum emissions during filling
- b. Standing losses are negligible because tank is moved off-site after a couple of weeks.
- c. Carbon adsorber exhaust concentration of 100 ppmv (permit condition) before it is changed out.
- d. Exhaust flow rate (assuming tank is filled in one hour) = tank volume of 2808 cu.ft./hr

e. Content is all gasoline

$$\begin{aligned} \text{POC emissions for each tank} &= (100 \text{ ppmv})(2808 \text{ cu.ft./tank})(68 \text{ lb/lb-mole}) / \\ &\quad (385 \text{ cu.ft./lb-mole}) \\ &= 0.05 \text{ lb/tank loading} \\ &= 0.25 \text{ lb/5 tank loading} \end{aligned}$$

POC emissions for both tanks = 0.5 lb/yr.

### **PLANT CUMULATIVE INCREASE**

POC = 0.18 tpy (based on Method 1)

### **OFFSET REQUIREMENTS**

Offset requirements of Regulation 2-2-302 are triggered because facility wide POC emissions are greater than 15 tpy. Offsets are provided in a ratio of 1.0:1.0 from the Banking Certificate #689 issued to SFPP (P#4022).

$$\begin{aligned} \text{POC offset provided} &= 0.18 \text{ tpy (new)} + 0.003 \text{ tpy (existing)} \\ &= 0.183 \text{ tpy} \end{aligned}$$

### **TOXIC RISK SCREENING ANALYSIS**

Toxic risk screening analysis is not required for benzene emissions (5.44 lbs/yr for both tanks) less than the toxic trigger level of 6.7 lbs/yr given in the Table 2-1-316 of Regulation 2-1.

### **STATEMENT OF COMPLIANCE**

The storage tanks, S-43 and S-44, comply with the requirements of the District 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 4.1), and therefore is not subject to CEQA review.

The sources are not located within 1000 feet of the nearest school, and therefore are not subject to the public notice requirements of Regulation 2-1-412.

BACT is not required for POC emissions less than 10 lbs/day for the storage tanks.

Offset requirements are discussed in a separate section of this report.

Storage tanks are not subject to NSPS.

PSD, and NESHAPS do not apply.

### **PERMIT CONDITIONS**

S-43 and S-44:

1. The owner/operator shall not exceed total recovered product (from the spill) throughput of 100,000 gallons per consecutive 12-month period at each tank. (basis: cumulative increase)
2. The owner/operator shall abate emissions from each tank by an activated carbon vessel with an overall collection and abatement efficiency of at least 95% by weight. (basis: Regulation 8-5-306)
3. The Owner/operator shall monitor non-methane hydrocarbon concentration at the exhaust from the carbon vessel only at the time of tank filling with a flame ionization detector (OVA-FID) or other method approved in writing by the APCO. The owner/operator shall change out the unspent

carbon upon detection at its outlet of 100 ppmv (measured as C1). (basis: cumulative Increase, Toxic Risk Screen)

4. The owner/operator shall record monitor readings in a monitoring log at the time they are taken. The monitoring data shall be used to calculate time of predicted breakthrough of hydrocarbons and estimate frequency of carbon change out to maintain compliance with condition #3. (basis: cumulative increase)
5. The owner/operator shall maintain the following records in a District approved logbook for at least five years from the date of data entry and shall make them available to the District staff for inspection.
  - a. monthly material throughput at each tank
  - b. each monitoring reading and analysis result for the day of operation they were taken
  - c. the calculations of hydrocarbon breakthrough from the carbon vessels
  - d. the number of carbon beds removed from the service. (basis: cumulative increase)

### **RECOMMENDATIONS**

I recommend that SFPP, L.P. be issued permits to operate the sources described in the background section of this report.

**EXEMPTIONS:** None

**BY:** \_\_\_\_\_  
Dharam Singh, AQE II

APPENDIX C  
PERMIT EVALUATION FOR APPLICATION 9734

**ENGINEERING EVALUATION REPORT  
SFPP, L.P  
PLANT NUMBER 4022  
APPLICATION NUMBER 9734**

**BACKGROUND**

SFPP, L.P., has been operating an air stripper (S-42) to decontaminate groundwater at the SFPP, L.P. facility in Concord. At present, the stripper is abated by an ADDOX unit (A-3) consisting of an adsorption, a desorption, and a catalytic oxidation system. The ADDOX unit is in need of significant repair. SFPP, L.P. has proposed to replace the ADDOX unit by a thermal/catalytic oxidizer (A-6) on an interim basis. The new abatement device will also be evaluated to permanently replace the ADDOX unit. The new abatement device will operate only in the catalytic mode. The air stripper will be subject to the existing permit condition ID# 17450 with a minor recordkeeping change. This modification of the air stripper will not result in any increase in emissions of VOC and/or toxic compounds except for natural gas combustion emissions from the new abatement device.

The application covers the following source and abatement devices:

- S-42 Air stripper, NEEP, Shallow Tray 2651, 600 scfm max., abated by A-3 or A-6.
- A-3 MTBE/VOC oxidizer, NEEP, Model ADDOX AD6 (electric mode), 600 scfm max., and associated controls.
- A-6 Thermal/catalytic oxidizer, Envent, EMTOS6-2.2, 600 cfm, natural gas fired, 2.2 MMBTU/hr.

**EMISSION CALCULATIONS**

Emissions are calculated only for the new abatement device because it is fired with natural gas.

**Natural Gas Combustion**

**Basis:**

1. Oxidizer firing rate = 2.2 MMBTU/hr;
2. Natural gas: average gross heating value = 1000 BTU/cu.ft.; usage = 2200 cu.ft./hr.
2. Operating schedule: 24 hrs/day; 7 days/wk; 52 wks/yr.
3. Emission factors: Emission factors for PM10, SO2, NOX, CO, and POC are taken from AP-42, 1/95, Table 1.4-1, and 1.4-3..

**Emission Rate:**

Pollutant	lb/MM cu.ft.	Lb/hr	Lb/day	ton/yr
PM-10	7.6	0.017	0.41	0.074
NOX	100	0.22	5.28	0.961
SO2	0.6	0.001	0.03	0.006
CO	84	0.185	4.44	0.807
POC	5.5	0.012	0.29	0.053

**PLANT CUMULATIVE INCREASE**

- PM10 = 0.074 tpy
- NOx = 0.961 tpy
- SO2 = 0.006
- CO = 0.807 tpy
- POC = 0.053 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 the Banking Certificate #677.

Offset = 0.053 tpy

## **TOXIC RISK SCREENING ANALYSIS**

Since there is no increase in benzene, toluene, and xylene emissions and also their emissions do not exceed their respective threshold toxic trigger levels (Ref: Table 2-1-316), therefore a toxic risk screen analysis is not required.

## **STATEMENT OF COMPLIANCE**

On the basis of the information submitted, the source, S-42, complies with the requirements of Regulations 8-47-301, Emission Control Requirements, Specific compounds, and 8-47-302, Organic compounds. The POC emissions are vented through a catalytic oxidation unit prior to discharge into the ambient air. The control device is expected to reduce emissions by more than 90 by weight.

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

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 the Banking Certificate #677.

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 9.1).

A toxic risk screening is not required.

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**

The permit condition ID# 17450 is revised as indicated.

## **RECOMMENDATIONS**

I recommend that SFPP, LP be issued a permit to operate the source, S-42, with modification as described in the background section of this report.

**EXEMPTION:** None

**BY:** \_\_\_\_\_  
Dharam Singh, AQE II

APPENDIX D  
PERMIT EVALUATION FOR APPLICATION 11296

**ENGINEERING EVALUATION REPORT  
SFPP, L.P  
PLANT NUMBER 4022  
APPLICATION NUMBER 11296**

**BACKGROUND**

SFPP, L.P., has been operating an oil/water separator subject to the permit condition ID# 3590 at their facility in Concord. The separator is used to remove free phase product from the groundwater extracted at S-41, Soil vapor/groundwater extraction system. The applicant has requested for administrative changes to the permit condition. These changes do not result in any increase in emissions.

The application covers the following source:

S-27 Oil-water separator

**EMISSION CALCULATIONS**

Not required.

**PLANT CUMULATIVE INCREASE**

POC = 0.0 tpy

**STATEMENT OF COMPLIANCE**

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

The project is not subject to BACT and offset requirements for POC emissions.

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).

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**

The permit condition ID# 3590 is amended as requested.

**RECOMMENDATIONS**

It is recommended that SFPP, LP be issued an amended permit condition ID# 3590 for the source described in the background section of this report.

**EXEMPTION:** None

**BY:** \_\_\_\_\_  
Dharam Singh, AQE II

APPENDIX E  
PERMIT EVALUATION FOR APPLICATION 11297

**ENGINEERING EVALUATION REPORT  
SFPP, L.P  
PLANT NUMBER 4022  
APPLICATION NUMBER 11297**

**BACKGROUND**

SFPP, L.P., has been operating several storage tanks subject to the permit condition ID# 13143 at their facility in Concord. VOC emissions from these tanks are abated by A-1, Vapor burner system. Part 3 of the permit condition requires A-1 to operate at a minimum temperature of 1400 degree F, which can be adjusted if the source test as per Part 7 indicates that an alternative temperature can achieve the destruction efficiency specified in Part 2. The applicant performed a source test (a copy of the report attached) on 7/12/04, which demonstrates that operating A-1 at 1200 degree F can achieve the specified efficiency. The applicant has requested to change the operating temperature and also extend the period of submitting source test report from 30 days to 60 days (Part 7).

The application covers the following sources:

S-3, S-5 thru S-13, and S-18 thru S-26 Storage Tanks.

**EMISSION CALCULATIONS**

Not required.

**PLANT CUMULATIVE INCREASE**

POC = 0.0 tpy

**STATEMENT OF COMPLIANCE**

On the basis of the information submitted, the storage tanks will continue to operate in compliance with the requirements of Regulation 8-5.

The project is not subject to BACT and offset requirements for POC emissions.

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 4.1).

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**

The permit condition ID# 13143 is amended as requested.

**RECOMMENDATIONS**

It is recommended that SFPP, LP be issued an amended permit condition ID# 13143 for the sources described in the background section of this report.

**EXEMPTION:** None

**BY:** \_\_\_\_\_  
Dharam Singh, AQE II