



JUN 02 2014

Bill Donadio
Hathaway, LLC
PO Box 31385
Bakersfield, CA 93380

Re: Notice of Preliminary Decision - Authority to Construct
Facility Number: S-6509
Project Number: S-1141881

Dear Mr. Donadio:

Enclosed for your review and comment is the District's analysis of Hathaway, LLC's application for an Authority to Construct for the installation of one 1,000 bbl crude oil storage tank and a reduction in throughput of tank S-6509-11 , at Heavy Oil Central stationary source.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. After addressing all comments made during the 30-day public notice and 45-day EPA notice comment periods, the District intends to issue the Authority to Construct. Please submit your written comments on this project within the 30-day public comment period, as specified in the enclosed public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Steve Davidson of Permit Services at (661) 392- 5618.

Sincerely,

Arnaud Marjollet
Director of Permit Services

AM:SDD

Enclosures

cc: Mike Tollstrup, CARB (w/ enclosure) via email
cc: Gerardo C. Rios, EPA (w/ enclosure) via email

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

San Joaquin Valley Air Pollution Control District
Authority to Construct Application Review
Crude Oil Storage Tank

Facility Name:	Hathaway, LLC	Engineer:	Steve Davidson
Mailing Address:	PO Box 31385	Date:	May 6, 2014
	Bakersfield, CA 93380	Lead Engineer:	Richard Karris <i>ASWR AVE</i>
Contact Person:	Bill Donadio and Nick Diercks	Date:	MAY 08 2014
Telephone:	661-393-2004 and 377-0073 (#13)		
Application #(s):	S-6509-11-4 and '-40-0		
Project #:	S-1141881		
Deemed Complete:	April 28, 2014		

I. Proposal

Hathaway, LLC (Hathaway) requests Authorities to Construct (ATCs) for the installation of one 1,000 bbl crude oil storage tank and a reduction in the throughput limit of tank S-6509-11 from 675 bbl/day to 560 bbl/day.

The increase in emissions from the new tank results in a Federal Major Modification. BACT and public notice are required. Offsets are not required.

Disposition of Outstanding ATCs

Existing ATC S-6509-11-3 authorized decreasing the tank's throughput to 675 bbl per day. It is the only outstanding ATC for any permit unit associated in this project. It will be implemented prior to or concurrent with this project; therefore, it is the base document. ATC S-6509-11-3 is included in **Attachment I**.

Hathaway is a major source for VOCs. However, Hathaway's actual emissions are less half the Major Source threshold; therefore, the facility is exempt from the requirements of Rule 2520. District Rule 2530 is applicable.

II. Applicable Rules

Rule 2201	New and Modified Stationary Source Review Rule (4/21/11)
Rule 2410	Prevention of Significant Deterioration (06/16/11)
Rule 2530	Federally Enforceable Potential to Emit (12/18/08)
Rule 4001	New Source Performance Standards (04/14/1999)

Subpart Kb (Amended 4/14/99) - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) is not applicable. This subpart does not apply to vessels with a design capacity $\leq 1,589.874 \text{ m}^3$ ($\leq 420,000$ gallons) used for petroleum or condensate stored, processed, or treated prior to custody transfer. The

capacity of these tanks is $\leq 420,000$ gallons, and they store crude oil prior to custody transfer; therefore, this subpart does not apply to the tanks in this project.

Subpart OOOO (Adopted 8/16/2012) - Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution.

Rule 4101 Visible Emissions (2/17/05)
Rule 4102 Nuisance (12/17/92)
Rule 4623 Storage of Organic Liquids (5/19/05)
Rule 4801 Sulfur Compounds (12/17/92)
CH&SC 41700 Health Risk Assessment
CH&SC 42301.6 School Notice
Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

III. Project Location

S-6509-11
NW/4 section 15, T25S, R27E.

S-6509-40
Section 28, T29S, R29E

The above two locations are within Hathaway's Heavy Oil Central stationary source.

The equipment will not be located within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

A location map is included in **Attachment II**.

IV. Process Description

Hathaway operates facilities for processing of crude oil.

In TEOR operations, steam generators are used to produce steam which is injected into the production zone to reduce the viscosity of the crude oil and pressurize the oil-bearing strata, thereby facilitating oil flow to producing wells. Produced fluids are then piped to surface facilities for processing and temporary storage.

Production from wells enters a wash tank for separation into oil, gas and water. Separated oil is stored in stock tanks prior to custody transfer.

Proposed Additions/Modifications

Installation of one 1,000 bbl crude oil storage and a reduction in throughput limit of tank S-6509-11.

A process diagram is included in **Attachment III**.

V. Equipment Listing

Pre-Project Equipment Description:

ATC S-6509-11-3: MODIFICATION OF 1,000 BBL BOLTED, FIXED ROOF SHIPPING/STOCK TANK WITH P/V VENT -- (QUINN LEASE): REDUCE THROUGHPUT TO 675 BBL PER DAY

Proposed Modification:

S-6509-11-4: MODIFICATION OF 1,000 BBL FIXED ROOF SHIPPING/STOCK TANK WITH P/V VENT -- (QUINN LEASE): REDUCE THROUGHPUT TO 560 BBL PER DAY

Post Project Equipment Description:

S-6509-11-4: 1,000 BBL FIXED ROOF SHIPPING/STOCK TANK WITH P/V VENT (COHN LEASE)

S-6509-40-0: 1000 BBL CRUDE OIL STOCK TANK (COHN LEASE)

VI. Emission Control Technology Evaluation

Existing tank S-6509-11 and new tank -40 are equipped with pressure-vacuum (P/V) relief valves set to within 10% of the maximum allowable working pressure of the tank. The PV-valve reduces VOC wind-induced emissions from the tank vent.

VII. General Calculations

A. Assumptions

The maximum operating schedule is 24 hours per day, 8,760 hr/year

Tank S-6509-11:

Pre-project

- Emissions are based on ATC S-6509-11-3 and found in Project S-6509, 1134631

Post project

- Post-project throughput: 560 bbl/day
- Maximum TVP: 0.5 psi (current PTO)
- API gravity: <26 degrees (applicant)
- Tank temperature: 140 deg F
- Additional parameters included in **Attachment IV**.

Tank S-6509-40 New Stock Tank:

- Fluid Throughput: 50 bbl/day (applicant)

- Maximum TVP: 0.5 psi (applicant)
- API gravity: <26 degrees (applicant)
- Tank temperature: 140 deg F
- Additional parameters included in **Attachment IV**.

B. Emission Factors

Both the daily and annual PE's for the tanks will be based on the results from the District's Microsoft Excel spreadsheets for Tank Emissions - Fixed Roof Crude Oil less than 26° API.

C. Calculations

1. Pre-Project Potential to Emit (PE1)

PE1		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
S-6509-11-3	35.5	12,966

2. Post Project Potential to Emit (PE2)

PE2		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
S-6509-11-4	30.4	11,093
S-6509-40-0	4.9	1785
Total		12,878

Greenhouse Gas (GHG) Emissions

The project results in a decrease in VOC emissions; therefore, even if VOCs are assumed to be 100% methane, there is no increase in CO2e emissions.

The emissions profiles are included in **Attachment V**.

3. Pre-Project Stationary Source Potential to Emit (SSPE1)

Pursuant to District Rule 2201, the SSPE1 is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of Emission Reduction Credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions (AER) that have occurred at the source, and which have not been used on-site. The facility has no ERCs. SSPE1 is calculated in Attachment X.

SSPE1 (lb/year)					
Permit Unit/ERC	NO _x	SO _x	PM ₁₀	CO	VOC
SSPE1	4535	1117	1744	13,884	244,616

4. Post Project Stationary Source Potential to Emit (SSPE2)

Pursuant to District Rule 2201, the SSPE2 is the PE from all units with valid ATCs or PTOs at the Stationary Source and the quantity of ERCs which have been banked since September 19, 1991 for AER that have occurred at the source, and which have not been used on-site.

SSPE2 (lb/year)					
Permit Unit/ERC	NO _x	SO _x	PM ₁₀	CO	VOC
SSPE1	4535	1117	1744	13,884	244,616
PTO S-6509-11-3	0	0	0	0	-12,966
ATC S-6509-11-4	0	0	0	0	+11,093
ATC S-6509-40-0	0	0	0	0	+1,785
SSPE2	4535	1117	1744	13,884	244,528

5. Major Source Determination

Rule 2201 Major Source Determination:

Pursuant to District Rule 2201, a Major Source is a stationary source with a SSPE2 equal to or exceeding one or more of the following threshold values. For the purposes of determining major source status the following shall not be included:

- any ERCs associated with the stationary source
- Emissions from non-road IC engines (i.e. IC engines at a particular site at the facility for less than 12 months)
- Fugitive emissions, except for the specific source categories specified in 40 CFR 51.165

Rule 2201 Major Source Determination (lb/year)					
	NO _x	SO _x	PM ₁₀	CO	VOC
Facility emissions pre-project	4535	1117	1744	13,844	244,616
Facility emissions – post project	4535	1117	1744	13,884	244,528
Major Source Threshold	20,000	140,000	140,000	200,000	20,000
Major Source?	No	No	No	No	Yes

This source is an existing Major Source for VOC emissions and will remain a Major Source for VOC.

Rule 2410 Major Source Determination:

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(i). Therefore the following PSD Major Source thresholds are applicable.

PSD Major Source Determination (tons/year)							
	NO2	VOC	SO2	CO	PM	PM10	CO2e
Estimated Facility PE before Project Increase	2.3	122.3	0.6	6.9	0.9	0.9	13,375*
PSD Major Source Thresholds	250	250	250	250	250	250	100,000
PSD Major Source ? (Y/N)	n	n	n	n	n	n	n

*NG combustion – 26.1 MMBtu/hr x 117.0 lb-CO2e/hour x 8760 hr/year x 1 ton/2000 lb= 13,375 ton/year

As shown above, the facility is not an existing major source for PSD for any pollutant. Therefore the facility is not an existing major source for PSD.

6. Baseline Emissions (BE)

The BE calculation (in lbs/year) is performed pollutant-by-pollutant for each unit within the project to calculate the QNEC, and if applicable, to determine the amount of offsets required.

Pursuant to District Rule 2201, BE = PE1 for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, located at a Major Source.

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to District Rule 2201.

S-6509-11:

Tank S-6509-11 is equipped with a PV vent, which meets the requirements for achieved-in-practice BACT. Therefore, it's BE = PE1.

S-6509-40:

Since this is a new emissions unit, BE = PE1 = 0 for all pollutants.

7. SB 288 Major Modification

SB 288 Major Modification is defined in 40 CFR Part 51.165 as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act."

Since this facility is a major source for VOC, the project's PE2 is compared to the SB 288 Major Modification Thresholds in the following table in order to determine if the SB 288 Major Modification calculation is required.

SB 288 Major Modification Thresholds			
Pollutant	Project PE2 (lb/year)	Threshold (lb/year)	SB 288 Major Modification Calculation Required?
VOC	12,878	50,000	no

Since the SB 288 Major Modification Thresholds are surpassed with this project, this project does not constitute an SB 288 Major Modification.

8. Federal Major Modification

The determination of Federal Major Modification is based on a two-step test. For the first step, only the emission *increases* are counted. Emission decreases may not cancel out the increases for this determination.

NO_x, SO_x, PM₁₀

Since this facility is not a Major Source for NO_x, SO_x, and PM₁₀, this project does not constitute a Federal Major Modification for these air contaminants. Additionally, since the facility is not a major source for PM₁₀ (140,000 lb/year), it is not a major source for PM_{2.5} (200,000 lb/year).

Step 1

VOCs

For new emissions units, the increase in emissions is equal to the PE2 for each new unit included in this project. Project emissions decreases are not included in the calculation.

The project's combined **total emission increases** compared to the Federal Major Modification Thresholds in the following table.

Federal Major Modification Thresholds for Emission Increases			
Pollutant	Total Emissions Increases (lb/yr)	Thresholds (lb/yr)	Federal Major Modification?
VOC	1785	0	Yes

Since there is an increase in VOC emissions, this project constitutes a Federal Major Modification, and no further analysis is required.

9. Rule 2410 -- Prevention of Significant Deterioration (PSD) Applicability Determination

Rule 2410 applies to pollutants for which the District is in attainment or for unclassified, pollutants. The pollutants addressed in the PSD applicability determination are listed as follows:

- NO2 (as a primary pollutant)
- SO2 (as a primary pollutant)
- CO
- PM
- PM10
- Greenhouse gases (GHG): CO2, N2O, CH4, HFCs, PFCs, and SF6

The first step of this PSD evaluation consists of determining whether the facility is an existing PSD Major Source or not (See Section VII.C.5 of this document).

Because the facility is NOT an existing PSD Major Source but is an existing source, the second step of the PSD evaluation is to determine if the project, by itself, would be a PSD major source.

I. Significance of Project Emission Increase Determination

a. Potential to Emit of attainment/unclassified pollutant for New or Modified Emission Units vs PSD Significant Emission Increase Thresholds

As a screening tool, the project potential to emit from all new and modified units is compared to the PSD major source threshold, and if total project potential to emit from all new and modified units is below this threshold, no further analysis will be needed.

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(i). Therefore the following PSD Major Source thresholds are applicable.

PSD Major Source Determination: Potential to Emit (tons/year)							
	NO2	VOC	SO2	CO	PM	PM10	CO2e
Total PE from New and Modified Units	0	6.4	0	0	0	0	0
PSD Major Source threshold	250	250	250	250	250	250	100,000
New PSD Major Source?	n	N	n	n	n	n	N

As shown in the table above, the project potential to emit, by itself, does not exceed any of the PSD major source thresholds. Therefore, Rule 2410 is not applicable and no further discussion is required.

10. Quarterly Net Emissions Change (QNEC)

Using the values in Sections VII.C.2 and VII.C.6 in the evaluation above, quarterly PE2s are calculated as follows:

S-6509-11

$$\begin{aligned} \text{QNEC} &= (11,093 - 12,966)/4 \\ &= -468 \text{ lb/qtr} \end{aligned}$$

S-6509-40

As this is a new emissions unit $\text{QNEC} = \text{PE2}/4$.

$$\begin{aligned} &= 1785/4 \\ &= 446 \text{ lb/qtr} \end{aligned}$$

VIII. Compliance

Rule 2201 New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT)

1. BACT Applicability

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis. Unless specifically exempted by Rule 2201, BACT shall be required for the following actions*:

- a. Any new emissions unit with a potential to emit exceeding two pounds per day,
- b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,
- c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding two pounds per day, and/or
- d. Any new or modified emissions unit, in a stationary source project, which results in an SB 288 Major Modification or a Federal Major Modification, as defined by the rule.

*Except for CO emissions from a new or modified emissions unit at a Stationary Source with an SSPE2 of less than 200,000 pounds per year of CO.

a. New emissions units – PE > 2 lb/day

As seen in Section VII.C.2 above, the applicant is proposing to install a new crude oil storage tank (S-6509-40) with a PE greater than 2 lb/day for VOC; therefore, BACT is triggered.

b. Relocation of emissions units – PE > 2 lb/day

As discussed in Section I above, there are no emissions units being relocated from one stationary source to another; therefore, BACT is not triggered.

c. Modification of emissions units – AIPE > 2 lb/day

$$\text{AIPE} = \text{PE2} - \text{HAPE}$$

Where,

AIPE = Adjusted Increase in Permitted Emissions, (lb/day)

PE2 = Post-Project Potential to Emit, (lb/day)

HAPE = Historically Adjusted Potential to Emit, (lb/day)

HAPE = PE1 x (EF2/EF1)

Where,

PE1 = The emissions unit's PE prior to modification or relocation, (lb/day)

EF2 = The emissions unit's permitted emission factor for the pollutant after modification or relocation. If EF2 is greater than EF1 then EF2/EF1 shall be set to 1

EF1 = The emissions unit's permitted emission factor for the pollutant before the modification or relocation

$$\text{AIPE} = \text{PE2} - (\text{PE1} * (\text{EF2} / \text{EF1}))$$

Tank S-6509-11:

$$\text{EF2} = \text{EF1}$$

$$\text{AIPE} = \text{PE2} - \text{PE1}$$

$$\text{AIPE} = 30.4 - 35.5 < 0 \text{ lb-VOC/day}$$

As demonstrated above, the AIPE is not greater than 2.0 lb/day for the tank.

Therefore BACT is not triggered.

d. SB 288/Federal Major Modification

As discussed in Section VII.C.7 above, this project does not constitute an SB 288 Major Modification. Therefore, BACT is not triggered for any pollutant.

As discussed in Section VII.C.8 above, this project constitutes a Federal Major Modification for VOC emissions. Therefore, BACT is triggered for VOC for all emissions units in the project for which there is an emission increase.

2. BACT Guideline

BACT Guideline 7.3.1, applies to the fixed roof organic liquid storage or processing tanks < 5,000 bbl in capacity. (See **Attachment VI**)

3. Top-Down BACT Analysis

Per Permit Services Policies and Procedures for BACT, a Top-Down BACT analysis shall be performed as a part of the application review for each application subject to the BACT requirements pursuant to the District's NSR Rule.

Pursuant to the attached Top-Down BACT Analysis (see **Attachment VII**), BACT has been satisfied with the following:

S-6509-40

VOC: P/V relief valve set to within 10% of maximum allowable pressure of the tank

B. Offsets

1. Offset Applicability

Offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the SSPE2 equals to or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

The SSPE2 is compared to the offset thresholds in the following table.

Offset Determination (lb/year)					
	NO _x	SO _x	PM ₁₀	CO	VOC
SSPE2	4535	1117	1744	13,884	244,528
Offset Thresholds	20,000	54,750	29,200	200,000	20,000
Offsets calculations required?	No	No	No	No	Yes

2. Quantity of Offsets Required

The applicant has proposed to reduce the throughput of tank S-6509-11 to mitigate the VOC emissions increase

$$\text{Offsets Required (lb/year)} = \sum ((PE2 - BE)) \times DOR$$

	<u>PE2</u>	<u>BE</u>
S-6509-40	1785	0
S-6509-10	<u>11,093</u>	<u>12,966</u>
Total	12,878	12,966
$\Sigma (PE2 - BE) = -88 \text{ lb/yr}$		

Offsets are not required.

C. Public Notification

1. Applicability

Public noticing is required for:

- a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications,
- b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
- c. Any project which results in the offset thresholds being surpassed, and/or
- d. Any project with an SSPE of greater than 20,000 lb/year for any pollutant.

a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications

New Major Sources are new facilities, which are also Major Sources. Since this is not a new facility, public noticing is not required for this project for New Major Source purposes.

As demonstrated in Section VII.C.7, this project does not constitute an SB 288 Major Modification; therefore, public noticing for SB 288 Major Modification purposes is not required.

As demonstrated in Section VII.C.8, this project is a Federal Major Modification. Therefore, public noticing for Federal Major Modification purposes is required.

b. PE > 100 lb/day

Applications which include a new emissions unit with a PE greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. As seen in Section VII.C.2 above, this project does not include a new emissions unit which has daily emissions greater than 100 lb/day for any pollutant; therefore, public noticing for PE > 100 lb/day purposes is not required.

c. Offset Threshold

The SSPE1 and SSPE2 are compared to the offset thresholds in the following table.

Offset Thresholds				
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	Offset Threshold	Public Notice Required?
NO _x	4535	4535	20,000 lb/year	No
SO _x	1117	1117	54,750 lb/year	No
PM ₁₀	1744	1744	29,200 lb/year	No
CO	13,884	13,884	200,000 lb/year	No
VOC	244,616	244,528	20,000 lb/year	No

As detailed above, there were no thresholds surpassed with this project; therefore public noticing is not required for offset purposes.

d. SSIPE > 20,000 lb/year

Public notification is required for any permitting action that results in a SSIPE of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE = SSPE2 – SSPE1. The SSIPE is compared to the SSIPE Public Notice thresholds in the following table.

SSIPE Public Notice Thresholds					
Pollutant	SSPE2 (lb/year)	SSPE1 (lb/year)	SSIPE (lb/year)	SSIPE Public Notice Threshold	Public Notice Required?
NO _x	4535	4535	0	20,000 lb/year	No
SO _x	1117	1117	0	20,000 lb/year	No
PM ₁₀	1744	1744	0	20,000 lb/year	No
CO	13,884	13,884	0	20,000 lb/year	No
VOC	244,528	244,616	-88	20,000 lb/year	No

As demonstrated above, the SSIPEs for all pollutants were less than 20,000 lb/year; therefore public noticing for SSIPE purposes is not required.

2. Public Notice Action

As discussed above, public noticing is required for this project for Federal Major Modification purposes. Therefore, public notice documents will be submitted to the California Air Resources Board (CARB) and a public notice will be published in a local newspaper of general circulation prior to the issuance of the ATC for this equipment.

D. Daily Emission Limits (DELs)

DELs and other enforceable conditions are required by Rule 2201 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. The DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.

Proposed Rule 2201 (DEL) Conditions:

S-6509-11

Throughput shall not exceed 560 bbl/day. [District Rule 2201] N

This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] N

VOC emissions shall not exceed 30.4 lb per day. [District Rule 2201] N

S-6509-40

This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) not exceeding 0.5 psia under all storage conditions. [District Rule 2201] N

Crude oil throughput shall not exceed 50 barrels per day based on a monthly average. [District Rules 2201 and 4623] N

VOC emissions shall not exceed 4.9 lb per day. [District Rule 2201] N

E. Compliance Assurance

1. Source Testing

Pursuant to District Policy APR 1705, source testing is not required to demonstrate compliance with Rule 2201.

2. Monitoring

S-6509-11

Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] N

S-6509-40

Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank upon initial start-up, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 2201 and 4623] N

3. Record Keeping

Record keeping is required to demonstrate compliance with the daily emission limit requirements of Rule 2201. The following conditions will appear on the permits:

S-6509-11:

Permittee shall maintain monthly records of average daily crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623] Y

{2490} All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 1070 and 4623] N

S-6509-40

Permittee shall maintain monthly records of average daily crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rules 2201 and 4623] N

All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 1070 and 4623] N

4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

F. Ambient Air Quality Analysis (AAQA)

An AAQA shall be conducted for the purpose of determining whether a new or modified Stationary Source will cause or make worse a violation of an air quality standard. The project emissions are VOCs which does not have a Federal or State Air Quality standard. AAQA is not required.

G. Compliance Certification

Section 4.15.2 of this Rule requires the owner of a new Major Source or a source undergoing a Major Modification to demonstrate to the satisfaction of the District that all other Major Sources owned by such person and operating in California are in compliance or are on a schedule for compliance with all applicable emission limitations and standards. As discussed above, the project is a Federal Major Modification, therefore this requirement is applicable. Included in **Attachment VIII** is Hathaway's Statewide Compliance Certification document.

H. Alternate Siting Analysis

The current project occurs at an existing facility. The applicant proposes to authorize a tank. Since the project is at the current facility location, the existing site will result in the least possible impact from the project. Alternative sites would involve the relocation and/or construction of various support structures on a much greater scale, and would therefore result in a much greater impact.

Rule 2520 Federally Mandated Operating Permits

Since this facility's emissions exceed the major source thresholds of District Rule 2201, this facility is a major source. However, this facility has elected to comply with Rule 2530, exempts it from the requirements of Rule 2520.

Rule 2530 Federally Enforceable Potential to Emit

The purpose of this rule is to restrict the emissions of a stationary source so that the source may elect to be exempt from the requirements of Rule 2520. Pursuant to Rule 2530, since this facility has elected exemption from the requirements of Rule 2520 by ensuring actual emissions from the stationary source in every 12-month periods to not exceed the following: ½ the major source thresholds for NO_x, VOCs, CO, and PM₁₀; 50 tons per year SO₂; 5 tons per year of a single HAP; 12.5 tons per year of any combination of HAPs; 50 percent of any lesser threshold for a single HAP as the EPA may establish by rule; and 50 percent of the major source threshold for any other regulated air pollutant not listed in Rule 2530.

Rule 4101 Visible Emissions

As long as the tanks are properly maintained and operated, compliance with visible emissions limits is expected under normal operating conditions. Compliance with District Rule 4101 is expected.

Rule 4102 Nuisance

Rule 4102 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, compliance with this rule is expected.

California Health & Safety Code 41700 (Health Risk Assessment)

District Policy APR 1905 – *Risk Management Policy for Permitting New and Modified Sources* specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite.

An HRA is not required for a project with a total facility prioritization score of less than or equal to one. According to the Technical Services Memo for this project (**Attachment IX**), the total facility prioritization score including this project was less than or equal to one. Therefore, no future analysis is required to determine the impact from this project and compliance with the District's Risk Management Policy is expected.

Rule 4623, Storage of Organic Liquids

This rule applies to any tank with a capacity of 1,100 gallons or greater in which any organic liquid is placed, held, or stored.

According to Section 4.3, except for complying with Sections 6.3.4 and 7.2, a small producer's tank with a throughput of 50 barrels of crude oil per day or less is exempt from the requirements of this rule.

The facility produces on average less than 6,000 barrels per day of crude oil, and does not engage in refining, transportation, or marketing of refined petroleum products. Therefore, under Section 3.29 of this rule and District Rule 1020, Section 3.45, this facility is a small producer and is exempt from the rule except for keeping tank throughput records. Therefore, the following conditions shall be placed on the permit:

- Permittee's crude oil production shall average less than 6,000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rule 4623] N
- Crude oil throughput shall not exceed 50 barrels per day based on a monthly average. [District Rules 2201 and 4623] N

- Permittee shall maintain monthly records of average daily crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rules 2201 and 4623] N
- All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 1070 and 4623] N

Compliance with the requirements of this rule is expected.

California Health & Safety Code 42301.6 (School Notice)

The District has verified that this site is not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

California Environmental Quality Act (CEQA)

CEQA requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The District adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities;
- Identify the ways that environmental damage can be avoided or significantly reduced;
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

Greenhouse Gas (GHG) Significance Determination

It is determined that no other agency has or will prepare an environmental review document for the project. Thus the District is the Lead Agency for this project. The District's engineering evaluation (this document) demonstrates that the project would not result in an increase in project specific greenhouse gas emissions. The District therefore concludes that the project would have a less than cumulatively significant impact on global climate change.

District CEQA Findings

The District is the Lead Agency for this project because there is no other agency with broader statutory authority over this project. The District performed an Engineering Evaluation (this document) for the proposed project and determined that the activity will occur at an existing facility and the project involves negligible expansion of the existing use. Furthermore, the District determined that the activity will not have a significant effect on the environment. The District finds that the activity is categorically exempt from the provisions of CEQA pursuant to CEQA Guideline § 15031 (Existing Facilities),

and finds that the project is exempt per the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061(b)(3)).

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Pending a successful NSR Public Noticing period, issue ATC S-6509-11-3 and -40-0 subject to the permit conditions on the attached draft ATC in **Attachment XI**.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
S-6509-11	3020-05S-C	1000 BBLs	\$63
S-6509-40	3020-05S-C	1000 BBLs	\$63

Attachments

- I: ATC S-6509-11-3
- II: Location Map
- III: Process Diagram
- IV: Tank Emissions Calculations
- V: Emissions Profile
- VI: BACT Guideline
- VII: BACT Analysis
- VIII: Statewide Compliance Form
- IX: HRA
- X: SSPE1 Calculation
- XI: Draft ATCs

ATTACHMENT I
ATC S-6509-11-3



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT



AUTHORITY TO CONSTRUCT

PERMIT NO: S-6509-11-3

ISSUANCE DATE: 01/27/2014

LEGAL OWNER OR OPERATOR: HATHAWAY LLC
MAILING ADDRESS: PO BOX 81385
BAKERSFIELD, CA 93380-1385

LOCATION: HEAVY OIL CENTRAL

SECTION: NW15 TOWNSHIP: 25S RANGE: 27E

EQUIPMENT DESCRIPTION:
MODIFICATION OF 1,000 BBL BOLTED, FIXED ROOF SHIPPING/STOCK TANK WITH PV VENT -- (QUINN LEASE):
REDUCE THROUGHPUT TO 675 BBL PER DAY

CONDITIONS

1. To maintain status as a small producer, permittee's crude oil production shall average less than 6000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rules 3020 and 4623]
2. Throughput shall not exceed 675 bbl/day. [District Rule 2201]
3. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623]
4. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
5. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 el "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623]
6. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (861) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

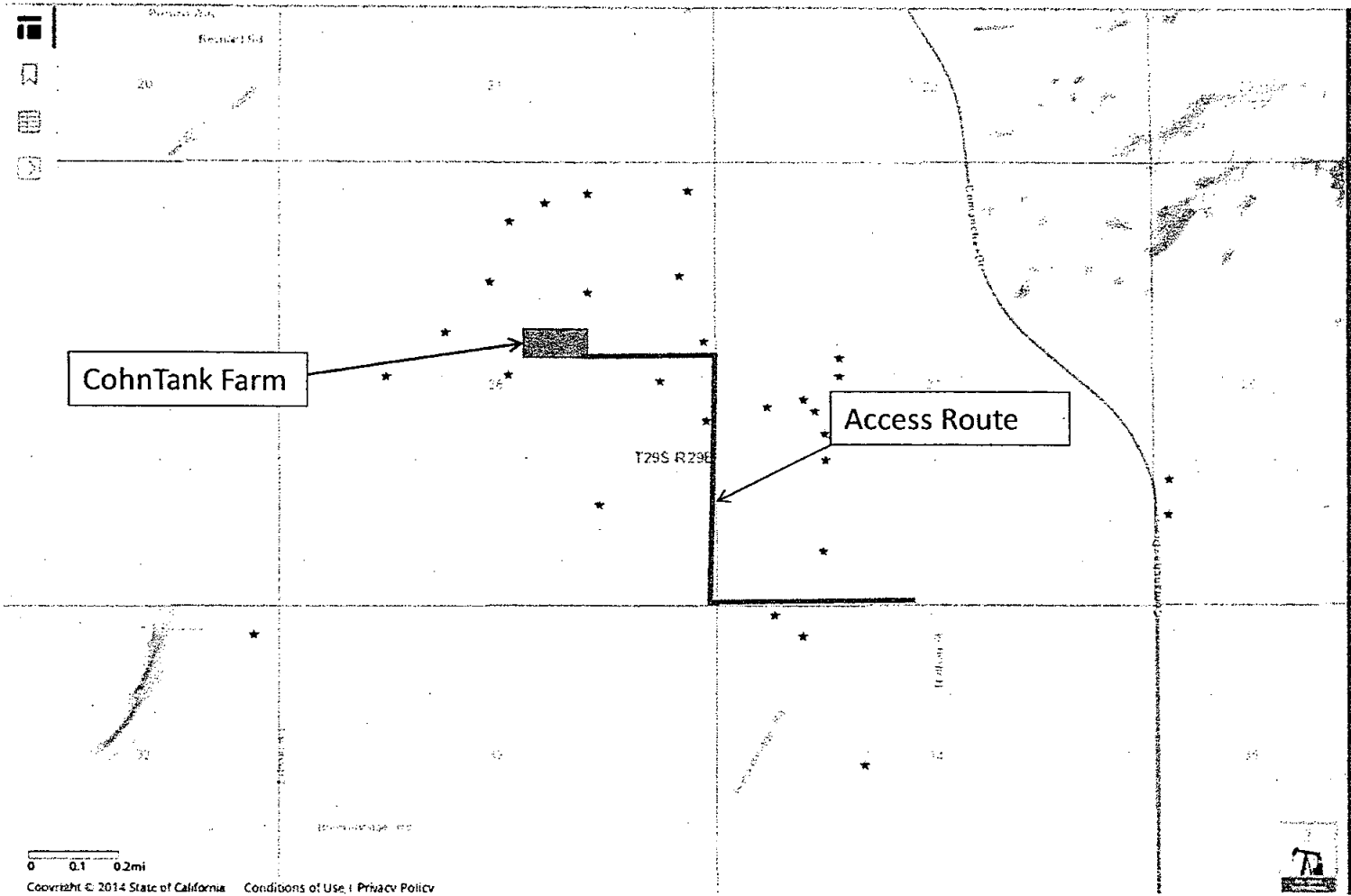
Seyed Sadredin, Executive Director / APCO


DAVID WARNER, Director of Permit Services
APC 6509-11-3 - Jan 27 2014 3:10PM - EDC/ELR - Job Inspection NOT Required

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308 • (861) 392-5500 • Fax (861) 392-5585

7. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623]
8. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1 through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623]
9. Permittee shall maintain monthly records of average daily crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rules 2201 and 4623]
10. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 1070 and 4623]

ATTACHMENT II
Location Map



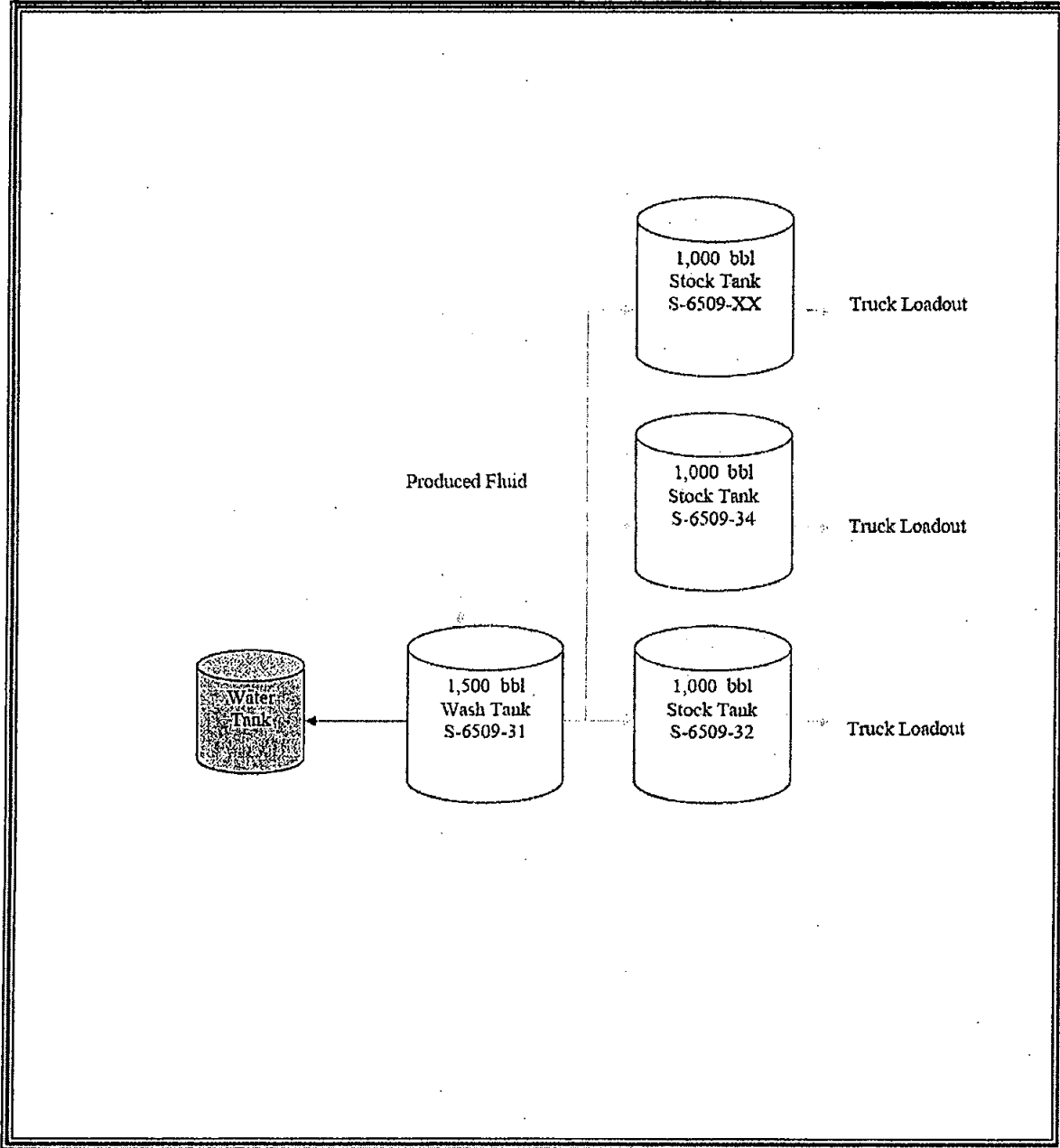
ATTACHMENT III
Process Diagram

HATHAWAY, LLC.



FACILITY NAME: Cohn Tank Battery – Post-Project Process Flow Diagram
SCALE: NONE

Facility Diagram S-6509



ATTACHMENT IV
Tank Emissions Calculations

Tank Input Data	
permit number (S-xxxx-xx-xx)	-11-3
facility tank I.D.	Post-proj
nearest city {1: Bakersfield, 2: Fresno, 3: Stockton}	1
tank ROC vapor pressure (psia)	0.5
liquid bulk storage temperature, Tb (°F)	140
is this a constant-level tank? {yes, no}	no
will flashing losses occur in this tank (only if first-line tank)? {yes, no}	no
breather vent pressure setting range (psi)	0.06
diameter of tank (feet)	21.15
capacity of tank (bbl)	1,000
conical or dome roof? {c, d}	c
shell height of tank (feet)	16
average liquid height (feet)	9
are the roof and shell the same color? {yes,no}	yes
For roof:	
color {1:Spec Al, 2:Diff Al, 3:Light, 4:Med, 5:Red, 6:White}	4
condition {1: Good, 2: Poor}	1
-----This row only used if shell is different color from roof-----	3
-----This row only used if shell is different color from roof-----	1

Liquid Input Data	A	B
maximum daily fluid throughput (bbl)		560
maximum annual fluid throughput (bbl)	204,400	204,400
-----This row only used if flashing losses occur in this tank-----		100
-----This row only used if flashing losses occur in this tank-----	204400	204,400
molecular weight, Mw (lb/lb-mol)		100

Calculated Values	A	B
daily maximum ambient temperature, T _{ax} (°F)		77.65
daily minimum ambient temperature, T _{an} (°F)		53.15
daily total solar insulation factor, I (Btu/ft ² -day)		1648.9
atmospheric pressure, P _a (psia)		14.47
water vapor pressure at daily maximum liquid surface temperature (T _{lx}), P _{vx} (psia)	121.4	1.7703
water vapor pressure at daily minimum liquid surface temperature (T _{ln}), P _{vn} (psia)	110.6	1.3034
water vapor pressure at average liquid surface temperature (T _{la}), P _{va} (psia)	116.0	1.5288
roof outage, H _{ro} (feet)		0.2203
vapor space volume, V _v (cubic feet)		2536.69
paint factor, alpha		0.68
vapor density, W _v (lb/cubic foot)		0.0081
daily vapor temperature range, delta T _v (degrees Rankine)		49.04
vapor space expansion factor, K _e		0.1166

Results	lb/year	lb/day
Standing Storage Loss	873	2.39
Working Loss	10,220	28.00
Flashing Loss	N/A	N/A
Total Uncontrolled Tank VOC Emissions	11,093	30.4

Summary Table	
Permit Number	-11-3
Facility Tank I.D.	Post-proj
Tank capacity (bbl)	1,000
Tank diameter (ft)	21.15
Tank shell height (ft)	16
Conical or Dome Roof	Conical
Maximum Daily Fluid Throughput (bbl/day)	560
Maximum Annual Fluid Throughput (bbl/year)	204,400
Maximum Daily Oil Throughput (bbl/day)	N/A
Maximum Annual Oil Throughput (bbl/year)	N/A
Total Uncontrolled Daily Tank VOC Emissions (lb/day)	30.4
Total Uncontrolled Annual Tank VOC Emissions (lb/year)	11,093

Tank Input Data	
permit number (S-xxxx-xx-xx)	-40
facility tank I.D.	Post-proj
nearest city {1: Bakersfield, 2: Fresno, 3: Stockton}	1
tank ROC vapor pressure (psia)	0.5
liquid bulk storage temperature, Tb (°F)	140
is this a constant-level tank? {yes, no}	no
will flashing losses occur in this tank (only if first-line tank)? {yes, no}	no
breather vent pressure setting range (psi)	0.06
diameter of tank (feet)	21.15
capacity of tank (bbl)	1,000
conical or dome roof? {c, d}	c
shell height of tank (feet)	16
average liquid height (feet)	9
are the roof and shell the same color? {yes,no}	yes
For roof: color {1:Spec Al, 2:Diff Al, 3:Light, 4:Med, 5:Red, 6:White}	4
condition {1: Good, 2: Poor}	1
-----This row only used if shell is different color from roof-----	3
-----This row only used if shell is different color from roof-----	1

Liquid Input Data	A	B
maximum daily fluid throughput (bbl)		50
maximum annual fluid throughput (bbl)	18,250	18,250
-----This row only used if flashing losses occur in this tank-----		100
-----This row only used if flashing losses occur in this tank-----	18250	18,250
molecular weight, Mw (lb/lb-mol)		100

Calculated Values	A	B
daily maximum ambient temperature, T _{ax} (°F)		77.65
daily minimum ambient temperature, T _{an} (°F)		53.15
daily total solar insolation factor, I (Btu/ft ² -day)		1648.9
atmospheric pressure, P _a (psia)		14.47
water vapor pressure at daily maximum liquid surface temperature (T _{lx}), P _{vx} (psia)	121.4	1.7703
water vapor pressure at daily minimum liquid surface temperature (T _{ln}), P _{vn} (psia)	110.6	1.3034
water vapor pressure at average liquid surface temperature (T _{la}), P _{va} (psia)	116.0	1.5288
roof outage, H _{ro} (feet)		0.2203
vapor space volume, V _v (cubic feet)		2536.69
paint factor, alpha		0.68
vapor density, W _v (lb/cubic foot)		0.0081
daily vapor temperature range, delta T _v (degrees Rankine)		49.04
vapor space expansion factor, K _e		0.1166

Results	lb/year	lb/day
Standing Storage Loss	873	2.39
Working Loss	913	2.50
Flashing Loss	N/A	N/A
Total Uncontrolled Tank VOC Emissions	1,785	4.9

Summary Table	
Permit Number	-40
Facility Tank I.D.	Post-proj
Tank capacity (bbl)	1,000
Tank diameter (ft)	21.15
Tank shell height (ft)	16
Conical or Dome Roof	Conical
Maximum Daily Fluid Throughput (bbl/day)	50
Maximum Annual Fluid Throughput (bbl/year)	18,250
Maximum Daily Oil Throughput (bbl/day)	N/A
Maximum Annual Oil Throughput (bbl/year)	N/A
Total Uncontrolled Daily Tank VOC Emissions (lb/day)	4.9
Total Uncontrolled Annual Tank VOC Emissions (lb/year)	1,785

ATTACHMENT V
Emissions Profile

Permit #: S-6509-11-4	Last Updated
Facility: HATHAWAY LLC	05/02/2014 DAVIDSOS

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	0.0	0.0	0.0	0.0	11093.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	30.4
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	-468.0
Q2:	0.0	0.0	0.0	0.0	-468.0
Q3:	0.0	0.0	0.0	0.0	-468.0
Q4:	0.0	0.0	0.0	0.0	-468.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Permit #: S-6509-40-0	Last Updated
Facility: HATHAWAY LLC	05/02/2014 DAVIDSOS

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	0.0	0.0	0.0	0.0	1785.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	4.9
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	446.0
Q2:	0.0	0.0	0.0	0.0	446.0
Q3:	0.0	0.0	0.0	0.0	446.0
Q4:	0.0	0.0	0.0	0.0	446.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

ATTACHMENT VI
BACT Guideline

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 7.3.1*

Last Update 10/1/2002

**Petroleum and Petrochemical Production - Fixed Roof Organic
Liquid Storage or Processing Tank, < 5,000 bbl Tank capacity ****

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	PV-vent set to within 10% of maximum allowable pressure	99% control (Waste gas incinerated in steam generator, heater treater, or other fired equipment and inspection and maintenance program; transfer of noncondensable vapors to gas pipeline; reinjection to formation (if appropriate wells are available); or equal).	

** Converted from Determinations 7.1.11 (10/01/02).

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

***This is a Summary Page for this Class of Source**

ATTACHMENT VII BACT Analysis

VOC emissions may occur when the produced fluids from the crude oil production wells enter the oil storage tanks.

Step 1 - Identify All Possible Control Technologies

BACT Guideline 7.3.1 lists the controls that are considered potentially applicable to fixed-roof organic liquid storage or processing tank <5,000 bbl tank capacity. The VOC control measures are summarized below.

Technologically feasible:

99% control (waste gas incinerated in steam generator, heater treater, or other fired equipment and inspection and maintenance program; transfer of uncondensed vapors to gas pipeline or reinjection to formation (if appropriate wells are available).

Achieved in Practice:

PV relief valve set to within 10% of maximum allowable pressure.

Step 2 - Eliminate Technologically Infeasible Options

All of the above identified control options are technologically feasible.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

1. 99% control (waste gas incinerated in steam generator, heater treater, or other fired equipment and inspection and maintenance program; transfer of uncondensed vapors to gas pipeline or reinjection to formation (if appropriate wells are available).
2. PV relief valve set to within 10% of maximum allowable pressure.

Step 4 - Cost Effectiveness Analysis

Applicant has provided a detailed installation and annual operating cost for a vapor control system achieving 99% vapor control efficiency, \$276,050. The cost effectiveness is calculated below:

Annual cost from a capital cost using a capital recovery factor is calculated as follows:

$$A = P \frac{i(1+i)^n}{(1+i)^n - 1} \quad \text{where;}$$

A = Equivalent Annual Control Equipment Capital Cost

P = Present value of the control equipment, including installation cost

- (\\$276,050 –per quote)
i = interest rate (use 10%, or demonstrate why alternate is more representative of the specific operation).
n = equipment life (assume 10 years or demonstrate why alternate is more representative of the specific operation)

$$A = \$276,050 \frac{0.1(1+0.1)^{10}}{(1+0.1)^{10} - 1} \quad \text{where;}$$

$$A = \$44,926$$

VOCs controlled is calculated as follows:

$$\begin{aligned} \text{VOC Controlled} &= \text{Total Emission} \times \text{Control efficiency} \\ \text{VOC Controlled} &= 1785 \text{ lb/year} \times 99\% \text{ control} \\ \text{VOC Controlled} &= 1767 \text{ lbs/yr} = 0.9 \text{ tons} \end{aligned}$$

Cost effectiveness is calculated as follows:

$$\$44,926/\text{yr}/[0.9\text{ton}/\text{yr}] = \$49,918/\text{ton}.$$

This exceeds the cost effectiveness threshold for VOCs of \$17,500/ton. Therefore vapor control is not effective.

Step 5 - Select BACT

PV relief valve set to within 10% of maximum allowable pressure of the tank

ATTACHMENT VIII
Statewide Compliance Form

April 3, 2014

Mr. Leonard Scandura
Permit Services Manager
San Joaquin Valley Unified
Air Pollution Control District
34946 Flyover Ct.
Bakersfield, CA 93308

Subject: Federal Major Modification Compliance Certification – S-6509

Dear Mr. Scandura:

I hereby certify that all major Stationary Sources owned or operated by such person (or by any entity controlling, controlled by, or under common control with such person) in California, which are subject to emission limitations, are in compliance or on a schedule for compliance with all applicable emission limitations and standards.

Bill Donadi
Signature

Title Manager of Engineering

ATTACHMENT IX

San Joaquin Valley Air Pollution Control District Risk Management Review

To: Will Jones – Permit Services
 From: Yu Vu – Technical Services
 Date: April 28, 2014
 Facility Name: Hathaway LLC
 Location: Section 28, Township 29S, Range 29E
 Application #(s): S-6509-11-4 and -40-0
 Project #: S-1141881

A. RMR SUMMARY

RMR Summary				
Categories	Crude Oil Storage Tank (Unit 11-4)	Crude Oil Storage Tank (Unit 40-0)	Project Totals	Facility Totals
Prioritization Score	N/A ¹	0.02	0.02	0.80
Acute Hazard Index	N/A ¹	N/A ²	N/A ²	N/A
Chronic Hazard Index	N/A ¹	N/A ²	N/A ²	N/A
Maximum Individual Cancer Risk (10 ⁻⁶)	N/A ¹	N/A ²	N/A ²	N/A
T-BACT Required?	No	Yes		
Special Permit Conditions?	No	Yes		

¹There was no net increase in emissions associated with this unit; therefore, this unit was not included in this analysis.

²This project passes on prioritization with a prioritization score less than 1.0; therefore, no further analysis was necessary.

Proposed Permit Conditions

To ensure that human health risks will not exceed District allowable levels; the following permit conditions must be included for:

Unit #s 11-4 and 40-0

No special conditions are required.

B. RMR REPORT

I. Project Description

Technical Services received a request on April 28, 2014, to perform a Risk Management Review for a proposed installation of a 1,000 bbl crude oil storage tank (unit S-6509-40-0). Along with this installation, the applicant is proposing to reduce the throughput for unit S-6509-11-4, which would result in a net decrease in emissions for the unit. This project triggers a public notice as well, which would necessitate an Ambient Air Quality Analysis (AAQA) being performed for this project. Since the only emissions for this project are VOC emissions, and there are currently no ambient air quality standards for VOCs, an AAQA was not performed for this project.

II. Analysis

Toxic emissions for this proposed unit were calculated using District approved emission factors (from a source test) for fugitive VOC emissions from crude oil tanks. In accordance with the District's *Risk Management Policy for Permitting New and Modified Sources* (APR 1905, March 2, 2001), risks from the proposed unit's toxic emissions were prioritized using the procedure in the 1990 CAPCOA Facility Prioritization Guidelines and incorporated in the District's HEARTs database. The prioritization score for this proposed unit was less than 1.0 (see RMR Summary Table). Therefore, no further analysis was necessary.

The following parameters were used for the review:

Analysis Parameters Unit 40-0			
VOC Emissions (lb/hr)	0.2	Max Hours per Year	8760
VOC Emissions (lb/yr)	1,785	Closest Receptor (m)	305

III. Conclusion

The prioritization score is less than 1.0. **In accordance with the District's Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT).**

To ensure that human health risks will not exceed District allowable levels; the permit conditions listed on page 1 of this report must be included for this proposed unit.

These conclusions are based on the data provided by the applicant and the project engineer. Therefore, this analysis is valid only as long as the proposed data and parameters do not change.

IV. Attachments

- A. RMR request from the project engineer
- B. Additional information from the applicant/project engineer
- C. Toxic emissions summary
- D. Prioritization score
- E. Facility Summary

ATTACHMENT X
SSPE1 Calculations

Detailed SSPE Report

Region	Facility	Unit	Mod	NOx	SOx	PM10	CO	VOC	Number of Outstanding ATCs
S	6509	0	0						0
S	6509	3	0	0	0	0	0	7477	0
S	6509	4	0	0	0	0	0	25727	0
S	6509	7	0	0	0	0	0	22372	0
S	6509	8	0	0	0	0	0	14924	0
S	6509	10	1	0	0	0	0	16865	4
S	6509	11	2					15641	1
S	6509	12	0	0	0	0	0	51424	0
S	6509	13	0	0	0	0	0	51424	0
S	6509	14	1	1752	50	133	1472	96	0
S	6509	15	0	0	0	0	0	1677	1
S	6509	16	0					3374	1
S	6509	17	0	0	0	0	0	720	0
S	6509	18	0	0	0	0	0	1357	1
S	6509	19	0	0	0	0	0	2261	0
S	6509	20	0					850	0
S	6509	21	0					1429	0
S	6509	22	0	0	0	0	0	461	0
S	6509	23	0	0	0	0	0	1332	0
S	6509	24	0	0	0	0	0	1332	0
S	6509	26	2	0	0	0	0	146	2
S	6509	27	0	0	0	0	0	58	0
S	6509	28	0	0	0	0	0	73	0
S	6509	38	0					8322	0
S	6509	39	0					8322	0

Friday, May 02, 2014

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Notes:

Blank values for a particular permit unit do not necessarily reflect zero emissions. For units with blank values, the PE must still be determined based on physical PE or as limited by permit condition.

For permits that show outstanding ATCs, consult PAS ATC Emission Profile records to determine what the highest PE is for each pollutant.

ATCs for new units (e.g. S-XXXX-X-0) must be added in separately.

ERC's for onsite reductions must be added in separately per Rule 2201 as well.

Region	Facility	Unit Mod	NOx	SOx	PM10	CO	VOC	Number of Outstanding ATCs
		SSPE (lbs)	1752	50	133	1472	237664	
		- 29-1					868	
		- 30-1	1542	549	1465	7131	1060	
		- 32-0					1663	
		- 33-0					72	
		- 35-0	1241	518	146	6753	1150	
		- 31-6					580	
		- 34-6					1559	
			4835	1117	1744	13,884	244,616	

Friday, May 02, 2014

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Notes:

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For permits that show outstanding ATCs, consult PAS ATC Emission Profile records to determine what the highest PE is for each pollutant.

ATCs for new units (e.g. S-XXXX-X-0) must be added in separately.

ERC's for onsite reductions must be added in separately per Rule 2201 as well.

ATTACHMENT XI
Draft ATCs

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: S-6509-11-4

LEGAL OWNER OR OPERATOR: HATHAWAY LLC
MAILING ADDRESS: PO BOX 81385
BAKERSFIELD, CA 93380-1385

LOCATION: HEAVY OIL CENTRAL

SECTION: NW15 TOWNSHIP: 25S RANGE: 27E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 1,000 BBL FIXED ROOF SHIPPING/STOCK TANK WITH P/V VENT -- (QUINN LEASE): REDUCE THROUGHPUT LIMIT TO 560 BBL PER DAY

CONDITIONS

1. ATC S-6509-11-3 shall be implemented prior to or concurrent with this ATC. [District Rule 2201]
2. ATC S-6509-40-0 shall be implemented concurrent with this ATC. [District Rule 2201]
3. To maintain status as a small producer, permittee's crude oil production shall average less than 6000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rules 3020 and 4623]
4. Throughput shall not exceed 560 bbl/day. [District Rule 2201]
5. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623]
6. VOC emissions shall not exceed 30.4 lb per day. [District Rule 2201]
7. {2910} Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
8. {2482} The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

YOU **MUST** NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director, APCO

Arnaud Marjolle, Director of Permit Services

S-6509-11-4 : May 8 2014 7:39AM - DAVIDSOS : Joint Inspection NOT Required

9. {2483} For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623]
10. {2911} The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623]
11. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1 through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623]
12. Permittee shall maintain monthly records of average daily crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rules 2201 and 4623]
13. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 1070 and 4623]

DRAFT

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-6509-40-0

LEGAL OWNER OR OPERATOR: HATHAWAY LLC
MAILING ADDRESS: PO BOX 81385
BAKERSFIELD, CA 93380-1385

LOCATION: HEAVY OIL CENTRAL

SECTION: 28 TOWNSHIP: 29S RANGE: 29E

EQUIPMENT DESCRIPTION:
1,000 BBL FIXED ROOF SHIPPING/STOCK TANK WITH PV VENT (COHN LEASE)

CONDITIONS

1. ATC S-6509-11-4 shall be implemented prior to or concurrently with this ATC. [District Rule 2201]
2. To maintain status as a small producer, permittee's crude oil production shall average less than 6000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rules 3020 and 4623]
3. Throughput shall not exceed 50 bbl/day. [District Rules 2201 and 4623]
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201]
5. VOC emissions shall not exceed 4.9 lb per day. [District Rule 2201]
6. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201]
7. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions. [District Rule 2201]
8. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank upon initial start-up, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 2201 and 4623]
9. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

YOU **MUST** NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director, APCO

DRAFT
Arnaud Marjollet, Director of Permit Services

S-6509-40-0: May 9 2014 10:17AM - DAVIDSOS : Joint Inspection NOT Required

10. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2201 and 4623]
11. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products". [District Rule 2201 and 4623]
12. Permittee shall maintain monthly records of average daily crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rules 2201 and 4623]
13. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 1070 and 4623]

DRAFT