Bay Area Air Quality Management District

939 Ellis Street
San Francisco, CA 94109
(415) 771-6000

Permit Evaluation
and
Statement of Basis
for
MAJOR FACILITY REVIEW PERMIT
Minor Revision

for

ConocoPhillips – San Francisco Refinery
Facility #A0016

Facility Address:
1380 San Pablo Avenue
Rodeo, CA 94572

Mailing Address:
1380 San Pablo Avenue
Rodeo, CA 94572

October 2005

Application 12217

Application Engineer: Brenda Cabral
Site Engineer: Brenda Cabral

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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, more than 100 tons per year of a regulated air pollutant.

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

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

The District issued the initial Title V permit to this facility on December 1, 2003.

The purpose of this action is to allow Sources S135 and S137, Tanks, to hold petroleum liquids with a vapor pressure up to 11 psia. These tanks were previously exempt from permits. This is a minor revision to the Title V permit. The expected emissions impact is small because the tanks are vented to A7, Vapor Recovery System. Fugitive VOC emissions will increase by approximately 251 lb/yr. Emissions of toxic air contaminants will increase by approximately 13 lb/yr. The increases in toxic air contaminants are below the triggers in BAAQMD Regulation 2, Rule 5. The detailed emission calculations are contained in the evaluation for Application 12216, which is attached and forms part of this statement of basis.

This is a minor revision of the Title V permit because:

- The change is not considered a major modification under 40 CFR Parts 51 (NSR) or 52 (PSD).
- The change is not considered a modification under 40 CFR Parts 60 (NSPS), 61 (NESHAPS), or Section 112 of the Clean Air Act (HAP).
- There is no significant change or relaxation of monitoring.
- No term is established to allow the facility to avoid an applicable requirement.
- No case-by-case determination has been made.
- No facility-specific determination for ambient impacts, visibility analysis, or increment analysis on portable sources has been made.
- No new federal requirement has been imposed.

The proposed changes to the permit are shown in "~~strikeout~~/underline" format. In this action, the District is soliciting public comment only on the revisions proposed in this action. When the permit is finalized, the tracking marks will be removed.

This statement of basis does not address the factual and legal basis for any other permit terms. These are addressed in the comprehensive statements of basis that were prepared for the initial issuance of the permit and subsequent reopenings and revisions. These are available on request.

B. Facility Description

The facility description can be found in the statement of basis that was prepared for the reopening issued on December 16, 2004. It is available on request from the Engineering Division of the District.

C. Permit Content

Additional information concerning the legal and factual basis of the Title V permit conditions is presented below. The information is organized by the relevant section of the Title V permit.

I. Standard Conditions

No changes to Section I are proposed.

II. Equipment

The following changes are proposed in this action:

Table II A - Permitted Sources

Each of the following sources has been issued a permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits. The capacities in this table are the maximum allowable capacities for each source, pursuant to Standard Condition I.J and Regulation 2-1-301.

S#	Description	Make or Type	Model	Capacity
135	Tank 200	Fixed roof	Petroleum liquids to 11 psia	79 thousand bbl
137	Tank 202	Fixed roof	Petroleum liquids to 11 psia	88 thousand bbl

Table II B – Abatement Devices

A-#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
7	Vapor Recovery System (3 electrically driven compressors)	Tanks S135, S137. S139, S140, S182, S388, S433, S445, S446, S447	BAAQMD 7-301, 7-302, 7-303	none	nuisance odors
~~7~~	~~Vapor Recovery System (3 electrically driven compressors)~~	~~S139, S140, S182~~	~~SIP 8-5-311.3~~	~~None~~	~~95% overall control of emissions~~
7	Vapor Recovery System (3 electrically driven compressors)	S135, S137, S139, S140, S182	BAAQMD 8-5-306	None	95% overall control of emissions

Table II D – Sources Exempt from Permit Requirements

S#	Description	Basis for Exemption
~~135~~	~~Tank 200~~	~~BAAQMD 2-1-123.3.2~~
~~137~~	~~Tank 202~~	~~BAAQMD 2-1-123.3.2~~

Tanks S135 and S137 are being converted from tanks that only hold petroleum liquids with a vapor pressure below 0.5 psia to tanks that can hold petroleum liquids with a vapor pressure up to 11 psia. Therefore, they now require District permits. These are fixed roof tanks that will be controlled by A7, Vapor Recovery System. The tanks will be added to the list of permitted sources, the list of sources that are controlled by abatement devices, and deleted from the list of exempt sources.

The line for "SIP 8-5-311.3" is being deleted from the abatement device table because it is no longer in the State Implementation Plan (SIP). The BAAQMD 8-5-306 requirement is equivalent and is now in the SIP.

III. Generally Applicable Requirements

No changes to this section are proposed in this action.

IV. Source-Specific Applicable Requirements

This section of the permit lists the applicable requirements for 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) listed following the corresponding District Rules. SIP rules are District rules that have been approved by EPA into 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 portions of the SIP rule are cited separately after the District rule. The SIP portions will be federally enforceable; the non-SIP versions will not be federally enforceable, unless EPA has approved them 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 (unless they have been assigned a District permit condition number, in which case they are included as BAAQMD 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 changes to monitoring is included in Section C.VII of this permit evaluation/statement of basis.

Changes to permit:

S135 will be added to Table IV-BB.11 for tanks that are: subject to 40 CFR 60, Subpart Kb, fixed roof tanks routed to the fuel gas system, and subject to BAAQMD Regulation 8, Rule 5. Table IV-BB.26, which previously only contained this tank, will be deleted. The new permit conditions will be added to Table IV-BB.11.

S137 will be added to Table IV-BB.15 for tanks that are fixed roof tanks routed to the fuel gas system and subject to BAAQMD Regulation 8, Rule 5. S137 will be deleted from Table IV-BB.21 for tanks that are exempt from District permits and BAAQMD Regulation 8, Rule 5, but subject to MACT recordkeeping. The new permit conditions will be added to Table IV-BB.15.

Table IV – BB.11
Source-Specific Applicable Requirements
NSPS Kb Fixed Roof Tanks with Vapor Recovery to Fuel Gas
S135 (Tank 200), S360 (Tank 223), S445 (Tank 271), S449 (Tank 285)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD · Regulation 8, Rule 5	**Organic Compounds, Storage of Organic Liquids (11/27/02) REQUIREMENTS FOR FIXED ROOF TANKS**		
8-5-111	Limited Exemption, Tank Removal From and Return to Service	Y	
8-5-111.1	Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO	Y	
8-5-111.1.1	Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO; 3 day prior notification	Y	
8-5-111.1.2	Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO; Telephone notification	Y	
8-5-111.2	Limited Exemption, Tank Removal From and Return to Service; Compliance before notification	Y	
8-5-111.4	Limited Exemption, Tank Removal From and Return to Service; Use of vapor recovery	Y	
8-5-111.5	Limited Exemption, Tank Removal From and Return to Service; Minimization of emissions	Y	
8-5-111.6	Limited Exemption, Tank Removal From and Return to Service; Written notice of completion not required	Y	
8-5-111.7	Limited Exemption, Tank Removal From and Return to Service; Compliance with Section 8-5-328	Y	
8-5-112	Limited Exemption, Tanks in Operation	Y	
8-5-112.1	Limited Exemption, Tanks in Operation; Notice to the APCO	Y	
8-5-112.1.1	Limited Exemption, Tanks in Operation; Notice to the APCO; 3 day prior notification	Y	
8-5-112.1.2	Limited Exemption, Tanks in Operation; Notice to the APCO; Telephone notification	Y	
8-5-112.2	Limited Exemption, Tanks in Operation; Compliance and certification before commencement of work	Y	
8-5-112.3	Limited Exemption, Tanks in Operation; No product movement; minimization of emissions	Y	
8-5-112.4	Limited Exemption, Tanks in Operation; Exemption does not exceed 7 days	Y	
8-5-301	Storage Tank Control Requirements (internal floating roof, external floating roof, or approved emission control system)	Y	
8-5-303	Requirements for Pressure Vacuum Valves	Y	
8-5-303.1	Requirements for Pressure Vacuum Valves; Set pressure	Y	

Table IV – BB.11
Source-Specific Applicable Requirements
NSPS Kb Fixed Roof Tanks with Vapor Recovery to Fuel Gas
S135 (Tank 200), S360 (Tank 223), S445 (Tank 271), S449 (Tank 285)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-303.2	Requirements for Pressure Vacuum Valves; Installation, maintenance, operation	Y	
8-5-306	Requirements for Approved Emission Control Systems	Y	
8-5-328	Tank Degassing Requirements	Y	
8-5-328.1	Tank Degassing Requirements; Tanks > 75 cubic meters	Y	
8-5-328.1.2	Tank Degassing Requirements; Tanks > 75 cubic meters; Concentration of <10,000 ppm as methane after degassing	Y	
8-5-328.2	Tank degassing requirements; Ozone excess day prohibition	Y	
8-5-403	Inspection Requirements for Pressure Vacuum Valves	Y	
8-5-404	Certification	Y	
8-5-501	Records	Y	
8-5-501.1	Records; Type and amounts of liquid; true vapor pressure; Retain 24 months	Y	
8-5-503	Portable hydrocarbon detector	Y	
8-5-602	Analysis of Samples, True Vapor Pressure	Y	
8-5-603	Determination of emissions	Y	
8-5-603.1	Determination of Emissions; Organic compounds specified in 8-5-306	Y	
8-5-604	Determination of Applicability	Y	
8-5-605	Pressure Vacuum Valve Gas Tight Determination	Y	
NESHAPS Title 40 Part 63 Subpart CC	**National Emission Standards for Hazardous Air Pollutants for Petroleum Refining (8/18/95) EXEMPTION FOR TANKS VENTED TO FUEL GAS SYSTEM**		
40 CFR 63.640(c)(2)	Applicability and Designation of Storage Vessels	Y	
40 CFR 63.640(d)(5)	Exemption for emission points routed to fuel gas system	Y	
NSPS Title 40 Part 60 Subpart Kb	**NSPS Subpart Kb for Tanks (12/14/2000) REQUIREMENTS FOR FIXED ROOF TANKS**		
40 CFR 60.110b(a)	Applicability and Designation of Affected Facility; Volatile organic liquid storage vessels > or = to 40 cu m, after 7/23/1984	Y	
40 CFR 60.112b(a)(3)	Standard for Volatile Organic Compounds (VOC); Closed vent system and control device	Y	
40 CFR 60.112b(a)(3)(i)	Standard for Volatile Organic Compounds (VOC); Closed vent system and control device no detectable emissions per 40 CFR 60.485(b) (Subpart VV)	Y	
40 CFR 60.112b(a)(3)(ii)	Standard for Volatile Organic Compounds (VOC); Closed vent system and control device >= 95% inlet VOC emission reduction	Y	
40 CFR 60.113b(c)	Testing and Procedures; Closed vent system and control device (not flare)	Y	
40 CFR 60.113b(c)(1)	Testing and Procedures; Closed vent system and control device (not flare) operating plan submission	Y	
40 CFR 60.113b(c)(1)(i)	Testing and Procedures; Closed vent system and control device (not flare) operating plan--efficiency demonstration	Y	
40 CFR 60.113b(c)(1)(ii)	Testing and Procedures; Closed vent system and control device (not flare) operating plan--monitoring parameters	Y	
40 CFR 60.113b(c)(2)	Testing and Procedures; Closed vent system and control device (not flare) operate in accordance with operating plan	Y	
40 CFR 60.115b	Reporting and Recordkeeping Requirements; 40 CFR 60.112b(a) tanks;	Y	

Table IV – BB.11
Source-Specific Applicable Requirements
NSPS Kb Fixed Roof Tanks with Vapor Recovery to Fuel Gas
S135 (Tank 200), S360 (Tank 223), S445 (Tank 271), S449 (Tank 285)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	Record retention		
40 CFR 60.115b(c)	Reporting and Recordkeeping Requirements; Closed vent system and control device (not flare)	Y	
40 CFR 60.115b(c)(1)	Reporting and Recordkeeping Requirements; Closed vent system and control device (not flare) operating plan copy – Retain for life of control device	Y	
40 CFR 60.115b(c)(2)	Reporting and Recordkeeping Requirements; Closed vent system and control device (not flare) operating records – Retain for at least 2 years	Y	
40 CFR 60.116b(a)	Monitoring of Operations; Record retention	Y	
40 CFR 60.116b(b)	Monitoring of Operations; Permanent record requirements	Y	
40 CFR 60.116b(e)	Monitoring of Operations; Determine TVP	Y	
40 CFR 60.116b(e)(2)	Monitoring of Operations; Determine TVP-crude oil or refined petroleum products	Y	
40 CFR 60.116b(g)	Monitoring of Operations; Exemption from 40 CFR 60.116b(c) and 40 CFR 60.116b(d) for tanks with closed vent system and control device	Y	
BAAQMD Condition 12130	**APPLICABLE TO S445**		
Part 1	Requirement to vent emissions to fuel gas system [Basis: Cumulative Increase]	Y	
BAAQMD Condition 11219	**APPLICABLE TO S449**		
Part 1	Requirement to vent emissions to fuel gas system [Basis: Cumulative Increase]	Y	
BAAQMD Condition 20989, Part A	Throughput limits for sources S360 [Basis: 2-1-234.3]	Y	
BAAQMD Condition 22518	**APPLICABLE TO S135**		
Part 1	Vapor pressure limit [Cumulative increase]	Y	
Part 3	Throughput limit [Cumulative increase]	Y	
Part 4	Control requirement [Cumulative increase]	Y	
Part 5	Prohibition on tank cleaning when switching products [Cumulative increase]	Y	

Table IV – BB.15
Source-Specific Applicable Requirements
MACT FIXED ROOF TANKS WITH VAPOR RECOVERY TO FUEL GAS
S137 (Tank 202), S139 (Tank 204), S140 (Tank 205), S182 (Tank 294)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 5	**Organic Compounds, Storage of Organic Liquids (11/27/02) REQUIREMENTS FOR FIXED ROOF TANKS**		
8-5-111	Limited Exemption, Tank Removal From and Return to Service	Y	
8-5-111.1	Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO	Y	
8-5-111.1.1	Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO; 3 day prior notification	Y	
8-5-111.1.2	Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO; Telephone notification	Y	
8-5-111.2	Limited Exemption, Tank Removal From and Return to Service; Compliance before notification	Y	
8-5-111.4	Limited Exemption, Tank Removal From and Return to Service; Use of vapor recovery	Y	
8-5-111.5	Limited Exemption, Tank Removal From and Return to Service; Minimization of emissions	Y	
8-5-111.6	Limited Exemption, Tank Removal From and Return to Service; Written notice of completion not required	Y	
8-5-111.7	Limited Exemption, Tank Removal From and Return to Service; Compliance with Section 8-5-328	Y	
8-5-112	Limited Exemption, Tanks in Operation	Y	
8-5-112.1	Limited Exemption, Tanks in Operation; Notice to the APCO	Y	
8-5-112.1.1	Limited Exemption, Tanks in Operation; Notice to the APCO; 3 day prior notification	Y	
8-5-112.1.2	Limited Exemption, Tanks in Operation; Notice to the APCO; Telephone notification	Y	
8-5-112.2	Limited Exemption, Tanks in Operation; Compliance and certification before commencement of work	Y	
8-5-112.3	Limited Exemption, Tanks in Operation; No product movement; minimization of emissions	Y	
8-5-112.4	Limited Exemption, Tanks in Operation; Exemption does not exceed 7 days	Y	
8-5-301	Storage Tank Control Requirements (internal floating roof, external floating roof, or approved emission control system)	Y	
8-5-303	Requirements for Pressure Vacuum Valves	Y	
8-5-303.1	Requirements for Pressure Vacuum Valves; Set pressure	Y	
8-5-303.2	Requirements for Pressure Vacuum Valves; Installation, maintenance, operation	Y	
8-5-306	Requirements for Approved Emission Control Systems	Y	
8-5-328	Tank Degassing Requirements	Y	
8-5-328.1	Tank Degassing Requirements; Tanks > 75 cubic meters	Y	
8-5-328.1.2	Tank Degassing Requirements; Tanks > 75 cubic meters; Concentration of <10,000 ppm as methane after degassing	Y	
8-5-328.2	Tank degassing requirements; Ozone excess day prohibition	Y	
8-5-403	Inspection Requirements for Pressure Vacuum Valves	Y	
8-5-404	Certification	Y	
8-5-501	Records	Y	
8-5-501.1	Records; Type and amounts of liquid; true vapor pressure; Retain 24	Y	

Table IV – BB.15
Source-Specific Applicable Requirements
MACT FIXED ROOF TANKS WITH VAPOR RECOVERY TO FUEL GAS
S137 (Tank 202), S139 (Tank 204), S140 (Tank 205), S182 (Tank 294)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	months		
8-5-503	Portable hydrocarbon detector	Y	
8-5-602	Analysis of Samples, True Vapor Pressure	Y	
8-5-603	Determination of emissions	Y	
8-5-603.1	Determination of Emissions; Organic compounds specified in 8-5-306	Y	
8-5-604	Determination of Applicability	Y	
8-5-605	Pressure Vacuum Valve Gas Tight Determination	Y	
NESHAPS Title 40 Part 63 Subpart CC	**National Emission Standards for Hazardous Air Pollutants for Petroleum Refining (8/18/95) EXEMPTION FOR TANKS VENTED TO FUEL GAS SYSTEM**		
40 CFR 63.640(c)(2)	Applicability and Designation of Storage Vessels	Y	
40 CFR 63.640(d)(5)	Exemption for emission points routed to fuel gas system	Y	
NSPS Title 40 Part 60 Subpart K	**NSPS Subpart K for Tanks (4/4/1980) EXEMPTION FOR TANKS NOT CONTAINING PETROLEUM LIQUIDS (Applicable to S139 only)**		
40 CFR 60.111(b)	Definitions: Petroleum liquids	Y	
BAAQMD Condition 13184	**APPLICABLE TO S182**		
Part 1	Requirement to vent emissions to fuel gas system [Basis: Cumulative Increase]	Y	
BAAQMD Condition 20989, Part A	Throughput limits for sources S139, S140 [Basis: 2-1-234.3]	**N**	
BAAQMD Condition 22518	**APPLICABLE TO S137**		
Part 2	Vapor pressure limit [Cumulative increase]	Y	
Part 3	Throughput limit [Cumulative increase]	Y	
Part 4	Control requirement [Cumulative increase]	Y	
Part 5	Prohibition on tank cleaning when switching products [Cumulative increase]	Y	

Table IV – BB.21
Source-Specific Applicable Requirements
EXEMPT TANKS SUBJECT TO MACT RECORDKEEPING
S91 (TANK 73), S94 (TANK 78), S98 (TANK 101), S99 (TANK 102), S103 (TANK 106), S120 (TANK 165), S130 (TANK 188), S131 (TANK 189), S132 (TANK 191), S136 (TANK 201), ~~S137 (TANK 202),~~ S138 (TANK 203), S141 (TANK 213), S142 (TANK 214), S143 (TANK 215), S144 (TANK 216), S145 (TANK 217), S148 (TANK 231), S149 (TANK 232), S157 (TANK 252), S162 (TANK 262), S164 (TANK 264), S165 (TANK 265), S166 (TANK 266), S167 (TANK 268), S168 (TANK 269), S169 (TANK 270), S171 (TANK 273), S172 (TANK 279), S173 (TANK 280), S174 (TANK 281), S179 (TANK 291), S180 (TANK 292), S187 (TANK 299), S191 (TANK 303), S192 (TANK 304), S202 (TANK 521), S204 (TANK 528), S205 (TANK 529), S206 (TANK 530), S207 (TANK 531), S209 (TANK 674), S224 (TANK 746), S225 (TANK 747), S226 (TANK 748), S227 (TANK 749), S228 (TANK 750), S229 (TANK 751), S230 (TANK 752), S231 (TANK 753), S236 (TANK 770), S237 (TANK 771), S240 (TANK 774), S241 (TANK 775), S260 (TANK 1009), S262 (TANK 1011), S263 (TANK 1012), S266 (TANK 1345), S267 (TANK 1346), S286 (F3), S287 (F10), S293 (F805)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD · Regulation 8, Rule 5	**Organic Compounds, Storage of Organic Liquids (11/27/02) EXEMPT**		
8-5-117	Exemption, Low Vapor Pressure	Y	
NESHAPS Title 40 Part 63 Subpart G	**SOCMI HON G (01/27/1995) REQUIREMENTS FOR GROUP 2 RECORDKEEPING ONLY**		
40 CFR 63.119(a)(3)	Storage Vessel Provisions – Reference Control Technology – Group 2 storage vessels comply only with recordkeeping requirements in 40 CFR 63.123(a)	Y	
40 CFR 63.123(a)	Storage Vessel Provisions – Recordkeeping – Group 2 storage vessels only required to keep tank dimensions and capacity analysis. Retain for life of source.	Y	
NESHAPS Title 40 Part 63 Subpart CC	**National Emission Standards for Hazardous Air Pollutants for Petroleum Refining (8/18/95) REQUIREMENTS FOR GROUP 2 RECORDKEEPING ONLY**		
40 CFR 63.640(c)(2)	Applicability and Designation of Storage Vessels	Y	
40 CFR 63.646(b)(1)	Storage Vessel Provisions--Determine stored liquid % OHAP for group determination	Y	
40 CFR 63.646(b)(2)	Storage Vessel Provisions--Determine stored liquid % OHAP-method 18 to resolve disputes	Y	
40 CFR 63.654(h)(6)	Reporting and Recordkeeping Requirements--Other reports--Determination of Applicability	Y	
40 CFR 63.654(h)(6)(ii)	Reporting and Recordkeeping Requirements--Other reports--Determination of Applicability	Y	
40 CFR 63.654(i)(1)	Reporting and Recordkeeping Requirements--Recordkeeping for storage vessels – Keep records specified in 40 CFR 63.123	Y	
40 CFR 63.654(i)(1)(iv)	Reporting and Recordkeeping Requirements--Recordkeeping for storage vessels – Data and assumptions used to determine Group 2 classification	Y	
40 CFR 63.654(i)(4)	Reporting and Recordkeeping Requirements--Recordkeeping--Record retention – 5 years	Y	

Table IV – BB.21
Source-Specific Applicable Requirements
EXEMPT TANKS SUBJECT TO MACT RECORDKEEPING
S91 (TANK 73), S94 (TANK 78), S98 (TANK 101), S99 (TANK 102), S103 (TANK 106), S120 (TANK 165), S130 (TANK 188), S131 (TANK 189), S132 (TANK 191), S136 (TANK 201), ~~S137 (TANK 202),~~ S138 (TANK 203), S141 (TANK 213), S142 (TANK 214), S143 (TANK 215), S144 (TANK 216), S145 (TANK 217), S148 (TANK 231), S149 (TANK 232), S157 (TANK 252), S162 (TANK 262), S164 (TANK 264), S165 (TANK 265), S166 (TANK 266), S167 (TANK 268), S168 (TANK 269), S169 (TANK 270), S171 (TANK 273), S172 (TANK 279), S173 (TANK 280), S174 (TANK 281), S179 (TANK 291), S180 (TANK 292), S187 (TANK 299), S191 (TANK 303), S192 (TANK 304), S202 (TANK 521), S204 (TANK 528), S205 (TANK 529), S206 (TANK 530), S207 (TANK 531), S209 (TANK 674), S224 (TANK 746), S225 (TANK 747), S226 (TANK 748), S227 (TANK 749), S228 (TANK 750), S229 (TANK 751), S230 (TANK 752), S231 (TANK 753), S236 (TANK 770), S237 (TANK 771), S240 (TANK 774), S241 (TANK 775), S260 (TANK 1009), S262 (TANK 1011), S263 (TANK 1012), S266 (TANK 1345), S267 (TANK 1346), S286 (F3), S287 (F10), S293 (F805)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Condition 20773			
Part 1	Requirement to verify exempt status of tank based on true vapor pressure of contents [Basis: Regulation 8-5-117, 2-6-409.2]	Y	
Part 2	Record retention requirement [Basis: Regulation 2-6-409.2]	Y	

~~Table IV – BB.26~~
~~Source-Specific Applicable Requirements~~
~~NSPS KB EXEMPT FIXED ROOF TANKS VENTED TO FUEL GAS~~
~~S135 (TANK 200)~~

~~Applicable Requirement~~	~~Regulation Title or Description of Requirement~~	~~Federally Enforceable (Y/N)~~	~~Future Effective Date~~
~~**BAAQMD - Regulation 8, Rule 5**~~	~~**Organic Compounds, Storage of Organic Liquids (11/27/02) EXEMPT**~~		
~~8-5-117~~	~~Exemption, Low Vapor Pressure~~	~~Y~~	
~~**NESHAPS Title 40 Part 63 Subpart CC**~~	~~**National Emission Standards for Hazardous Air Pollutants for Petroleum Refining (8/18/95) REQUIREMENTS FOR TANKS VENTED TO FUEL GAS SYSTEM**~~		
~~40 CFR 63.640(c)(2)~~	~~Applicability and Designation of Storage Vessels~~	~~Y~~	
~~40 CFR 63.640(d)(5)~~	~~Exemption for emission points routed to fuel gas system~~	~~Y~~	
~~**NSPS Title 40 Part 60 Subpart Kb**~~	~~**NSPS Subpart Kb for Tanks (12/14/2000) REQUIREMENTS FOR RECORDKEEPING ONLY**~~		

~~Table IV – BB.26~~
~~Source-Specific Applicable Requirements~~
~~NSPS KB EXEMPT FIXED ROOF TANKS VENTED TO FUEL GAS~~
~~S135 (TANK 200)~~

~~Applicable Requirement~~	~~Regulation Title or Description of Requirement~~	~~Federally Enforceable (Y/N)~~	~~Future Effective Date~~
~~40 CFR 60.110b(a)~~	~~Applicability and Designation of Affected Facility; Volatile organic liquid storage vessels > or = to 40 cu m, after 7/23/1984~~	~~Y~~	
~~40 CFR 60.110b(c)~~	~~Applicability and Designation of Affected Facility; Exemptions for storage vessels > or = to 75 cu m~~	~~Y~~	
~~40 CFR 60.116b(a)~~	~~Monitoring of Operations; Record retention~~	~~Y~~	
~~40 CFR 60.116b(b)~~	~~Monitoring of Operations; Permanent record requirements~~	~~Y~~	
~~40 CFR 60.116b(e)~~	~~Monitoring of Operations; Determine TVP~~	~~Y~~	
~~40 CFR 60.116b(e)(2)~~	~~Monitoring of Operations; Determine TVP crude oil and refined petroleum~~	~~Y~~	
~~40 CFR 60.116b(g)~~	~~Monitoring of Operations; Exemption from 40 CFR 60.116b(c) and 40 CFR 60.116b(d) for tanks with closed vent system and control device~~	~~Y~~	
~~**BAAQMD Condition 20773**~~			
~~Part 1~~	~~Requirement to verify exempt status of tank based on true vapor pressure of contents [Basis: Regulation 8-5-117, 2-6-409.2]~~	~~Y~~	
~~Part 2~~	~~Record retention requirement [Basis: Regulation 2-6-409.2]~~	~~Y~~	

V. Schedule of Compliance

A schedule of compliance is required in all Title V permits pursuant to BAAQMD Regulation 2-6-409.10 that 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."

No changes to this section are proposed in this action.

VI. Permit Conditions

Each permit condition is identified with a unique numerical identifier, up to five digits.

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.

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.

The proposed changes to permit conditions are in the evaluation report for Application 12216, which is attached and which is part of this statement of basis. The conditions will appear in this statement of basis for clarity.

Changes to permit conditions

Permit condition 20773, shown below, applies to tanks that do not hold organic liquids with a true vapor pressure over 0.5 psia. Therefore, it no longer applies to these tanks. BAAQMD Regulation 8, Rule 5, which now applies to these tanks, requires similar recordkeeping.

CONDITION 20773

This condition applies to tanks that are exempt from Regulation 8, Rule 5, Storage of Organic Liquids, due to the exemption in Regulation 8-5-117 for storage of organic liquids with a true vapor pressure of less than or equal to 25.8 mm Hg (0.5 psia).

1. Whenever the type of organic liquid in the tank is changed, the owner/operator shall verify that the true vapor pressure at the storage temperature is less than or equal to 25.8 mm Hg (0.5 psia). The owner/operator shall use Lab Method 28 from Volume III of the District's Manual of Procedures, Determination of the Vapor Pressure of Organic Liquids from Storage Tanks. For materials listed in Table 1 of Regulation 8 Rule 5, the owner/operator

may use Table 1 to determine vapor pressure, rather than Lab Method 28. If the results are above 25.8 mm Hg (0.5 psia), the owner/operator shall report non-compliance in accordance with Standard Condition I.F and shall submit an application to the District for a new permit to operate for the tank as quickly as possible. [Basis: 8-5-117 and 2-6-409.2]

2. The results of the testing shall be maintained in a District-approved log for at least five years from the date of the record, and shall be made available to District staff upon request. [Basis: 2-6-409.2]

The new permit condition for these tanks is shown below. The tanks have new limits to ensure that the emissions will be no greater than represented in Application 12216.

CONDITION 22518
For Sources S135 (Tank 200), S137 (Tank 202)

1. The owner/operator shall ensure that S135 contains only petroleum liquid with a true vapor pressure less than or equal to 11 psia. [Cumulative Increase]

2. The owner/operator shall ensure that S137 contains only petroleum liquid with a true vapor pressure less than or equal to 11 psia. [Cumulative Increase]

3. The owner/operator shall ensure that the throughput of petroleum liquids at S135 and S137 does not exceed 10,000,000 barrels/yr at each tank. [Cumulative Increase]

4. The owner/operator shall ensure that S135 and S137 are controlled at all times that petroleum fluids are stored in the tanks by A7, Vapor Recovery System. [Cumulative Increase]

5. The owner/operator shall not clean S135 and S137 when switching from one petroleum fluid to another. [Cumulative Increase]

VII. Applicable Limits and Compliance Monitoring Requirements

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

Changes to permit:
S135 will be added to Table VII-BB.11 for tanks that are: subject to 40 CFR 60, Subpart Kb, fixed roof tanks routed to the fuel gas system, and subject to BAAQMD Regulation 8, Rule 5. Table IV-BB.26, which previously only contained this tank, will be deleted. The throughput and vapor pressure limits in the new permit conditions will be added to Table VII-BB.11.

S137 will be added to Table VII-BB.15 for tanks that are fixed roof tanks routed to the fuel gas system and subject to BAAQMD Regulation 8, Rule 5. S137 will be deleted from Table VII-BB.21 for tanks that are exempt from District permits and BAAQMD Regulation 8, Rule 5, but

subject to MACT recordkeeping. The throughput and vapor pressure limits in the new permit conditions will be added to Table VII-BB.15.

Table VII – BB.11
Applicable Limits and Compliance Monitoring Requirements
NSPS Kb Fixed Roof Tanks with Vapor Recovery to Fuel Gas
S135 (Tank 200), S360 (Tank 223), S445 (Tank 271), S449 (Tank 285)

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD Regulation 8, Rule 5: Organic Compounds - STORAGE OF ORGANIC LIQUIDS LIMITS AND MONITORING FOR CVS & CONTROL DEVICES						
VOC	BAAQMD 8-5-301	Y		Record of liquids stored and true vapor pressure	BAAQMD 8-5-501.1	periodic initially and upon change of service	records
VOC	BAAQMD 8-5-303.1	Y		Pressure vacuum valve set pressure within 10% of maximum allowable working pressure of the tank, or at least 0.5 psig	BAAQMD 8-5-403	P/SA	visual inspection
VOC	BAAQMD 8-5-303.2	Y		Pressure vacuum valve must be gas-tight: < 500 ppm (as methane) above background	BAAQMD 8-5-403 8-5-503 8-5-605	P/SA	Method 21 portable hydrocarbon detector
VOC	BAAQMD 8-5-306	Y		Control device standards; includes 95% efficiency requirement	BAAQMD 8-5-603.1	not specified	MOP Volume IV ST-4
VOC	BAAQMD 8-5-328.1.2	Y		Organic concentration in tank <10,000 ppm as methane after cleaning	BAAQMD 8-5-503	periodic each time emptied & degassed	portable hydrocarbon detector
VOC		Y		Determination of applicability	BAAQMD 8-5-604	P/E	look-up table or sample analysis
NONE	**40 CFR 63 Subpart CC – NESHAPS for Petroleum Refineries Exempt per 63.640(d)(5). Emission point routed to fuel gas system.**						
NSPS Kb	**40 CFR 60 Subpart Kb – NSPS for VOL Storage Vessels LIMITS AND MONITORING FOR CVS & CONTROL DEVICES (NOT A FLARE)**						
VOC	40 CFR 60.112b (a)(3)(i)	Y		Closed vent system leak tightness standards (< 500 ppmw)	40 CFR 60.112b (a)(3)(i)	as required in 40 CFR 60.485(b) [Subpart VV]	Method 21
VOC	40 CFR 60.112b (a)(3)(ii)	Y		Control device standards; includes 95% efficiency requirement	40 CFR 60.113b (c)(2)	as approved	specified parameter
BAAQMD Permit	**PERMIT CONDITIONS**						
The following applies to S135 only							

Table VII – BB.11
Applicable Limits and Compliance Monitoring Requirements
NSPS Kb Fixed Roof Tanks with Vapor Recovery to Fuel Gas
S135 (Tank 200), S360 (Tank 223), S445 (Tank 271), S449 (Tank 285)

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC	BAAQMD Condition 22518, Part 1	Y		Vapor pressure < 11 psia	BAAQMD 8-5-501.1	periodic initially and upon change of service	records
	BAAQMD Condition 22518, Part 3	Y		10 E 6 bbl/yr	BAAQMD 8-5-501.1	P/E	Records
The following applies to S360 only							
throughput	BAAQMD Condition 20989, Part A	Y		2.78 E 6 bbl/yr	BAAQMD Condition 20989, Part A	P/M	records
The following applies to S445 only							
VOC	BAAQMD Condition 12130, Part 1	Y		Requirement to vent working emissions to fuel gas system	None	N	None
The following applies to S449 only							
VOC	BAAQMD Condition 11219, Part 1	Y		Requirement to vent working emissions to fuel gas system	None	N	None

Table VII – BB.15
Applicable Limits and Compliance Monitoring Requirements
MACT Fixed Roof Tanks with Vapor Recovery to Fuel Gas
S137 (Tank 202), S139 (Tank 204), S140 (Tank 205), S182 (Tank 294)

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD Regulation 8, Rule 5: Organic Compounds - STORAGE OF ORGANIC LIQUIDS LIMITS AND MONITORING FOR CVS & CONTROL DEVICES						
VOC	BAAQMD 8-5-301	Y		Record of liquids stored and true vapor pressure	BAAQMD 8-5-501.1	periodic initially and upon change of service	records
VOC	BAAQMD 8-5-303.1	Y		Pressure vacuum valve set pressure within 10% of maximum allowable working pressure of the tank, or at least 0.5 psig	BAAQMD 8-5-403	P/SA	visual inspection

Table VII – BB.15
Applicable Limits and Compliance Monitoring Requirements
MACT FIXED ROOF TANKS WITH VAPOR RECOVERY TO FUEL GAS
S137 (Tank 202), S139 (Tank 204), S140 (Tank 205), S182 (Tank 294)

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC	BAAQMD 8-5-303.2	Y		Pressure vacuum valve must be gas-tight: < 500 ppm (as methane) above background	BAAQMD 8-5-403 8-5-503 8-5-605	P/SA	Method 21 portable hydrocarbon detector
VOC	BAAQMD 8-5-306	Y		Control device standards; includes 95% efficiency requirement	BAAQMD 8-5-603.1	not specified	MOP Volume IV ST-4
VOC	BAAQMD 8-5-328.1.2	Y		Organic concentration in tank <10,000 ppm as methane after cleaning	BAAQMD 8-5-503	periodic each time emptied & degassed	portable hydrocarbon detector
VOC		Y		Determination of applicability	BAAQMD 8-5-604	P/E	look-up table or sample analysis
NONE	**40 CFR 63 Subpart CC – NESHAPS for Petroleum Refineries Exempt per 63.640(d)(5). Emission point routed to fuel gas system.**						
BAAQMD Permit	**PERMIT CONDITIONS**						
The following applies to S137 only							
VOC	BAAQMD Condition 22518, Part 2	Y		Vapor pressure < 11 psia	BAAQMD 8-5-501.1	periodic initially and upon change of service	records
	BAAQMD Condition 22518, Part 3	Y		10 E 6 bbl/yr	BAAQMD 8-5-501.1	P/E	Records
The following applies to S139 and S140 only							
throughput	BAAQMD Condition 20989, Part A	N		S139: 2.74 E 6 bbl/yr S140: 2.74 E 6 bbl/yr	BAAQMD Condition 20989, Part A	P/M	records
The following applies to S182 only							
VOC	BAAQMD Condition 13184, Part 1	Y		Requirement to vent working emissions to fuel gas system		N	

Table VII – BB.21
Applicable Limits and Compliance Monitoring Requirements
EXEMPT TANKS SUBJECT TO MACT RECORDKEEPING
S91 (TANK 73), S94 (TANK 78), S98 (TANK 101), S99 (TANK 102), S103 (TANK 106), S120 (TANK 165), S130 (TANK 188), S131 (TANK 189), S132 (TANK 191), S136 (TANK 201), ~~S137 (TANK 202),~~ S138 (TANK 203), S141 (TANK 213), S142 (TANK 214), S143 (TANK 215), S144 (TANK 216), S145 (TANK 217), S148 (TANK 231), S149 (TANK 232), S157 (TANK 252), S162 (TANK 262), S164 (TANK 264), S165 (TANK 265), S166 (TANK 266), S167 (TANK 268), S168 (TANK 269), S169 (TANK 270), S171 (TANK 273), S172 (TANK 279), S173 (TANK 280), S174 (TANK 281), S179 (TANK 291), S180 (TANK 292), S187 (TANK 299), S191 (TANK 303), S192 (TANK 304), S202 (TANK 521), S204 (TANK 528), S205 (TANK 529), S206 (TANK 530), S207 (TANK 531), S209 (TANK 674), S224 (TANK 746), S225 (TANK 747), S226 (TANK 748), S227 (TANK 749), S228 (TANK 750), S229 (TANK 751), S230 (TANK 752), S231 (TANK 753), S236 (TANK 770), S237 (TANK 771), S240 (TANK 774), S241 (TANK 775), S260 (TANK 1009), S262 (TANK 1011), S263 (TANK 1012), S266 (TANK 1345), S267 (TANK 1346), S286 (F3), S287 (F10), S293 (F805)

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD Regulation 8, Rule 5: Organic Compounds - STORAGE OF ORGANIC LIQUIDS Exempt per 8-5-117. Low vapor pressure						
POC	8-5-117 & Condition 20773, Part 1	Y		Exemption from Regulation 8-5 when true vapor pressure is less than 25.8 mm Hg (0.5 psia).	2-6-409.2 & Condition 20773, Part 2	P/E	Vapor pressure determination upon material change
NESHAPS CC	**40 CFR 63 Subpart CC – NESHAP for Petroleum Refineries MONITORING FOR RECORDKEEPING ONLY**						
HAP	40 CFR 63.641	Y		Retain weight percent total organic HAP in stored liquid for Group 2 determination.	40 CFR 63.654(i)(1)(iv)	periodic initially and upon change in service	Records

~~Table VII – BB.26~~
~~Applicable Limits and Compliance Monitoring Requirements~~
~~NSPS KB EXEMPT FIXED ROOF TANK VENTED TO FUEL GAS~~
~~S135 (TANK 200)~~

~~Type of Limit~~	~~Emission Limit Citation~~	~~FE Y/N~~	~~Future Effective Date~~	~~Emission Limit~~	~~Monitoring Requirement Citation~~	~~Monitoring Frequency (P/C/N)~~	~~Monitoring Type~~
	~~**BAAQMD Regulation 8, Rule 5 - Organic Compounds - STORAGE OF ORGANIC LIQUIDS Exempt per 8-5-117. Low vapor pressure**~~						
~~POC~~	~~8-5-117 & Condition 20773, Part 1~~	~~Y~~		~~Exemption from Regulation 8-5 when true vapor pressure is less than 25.8 mm Hg (0.5 psia).~~	~~2-6-409.2 & Condition 20773, Part 2~~	~~P/E~~	~~Vapor pressure determination upon material change~~

~~Table VII – BB.26~~
~~Applicable Limits and Compliance Monitoring Requirements~~
~~NSPS Kb Exempt Fixed Roof Tank Vented to Fuel Gas~~
~~S135 (Tank 200)~~

~~Type of Limit~~	~~Emission Limit Citation~~	~~FE Y/N~~	~~Future Effective Date~~	~~Emission Limit~~	~~Monitoring Requirement Citation~~	~~Monitoring Frequency (P/C/N)~~	~~Monitoring Type~~
~~NONE~~	~~40 CFR 63 Subpart CC – NESHAPS for Petroleum Refineries~~ ~~Exempt per 63.640(d)(5). Emission point routed to fuel gas system.~~						
~~*NSPS Kb*~~	~~40 CFR 60 Subpart Kb – NSPS for VOL Storage Vessels at Petroleum Refineries~~ ~~RECORDKEEPING ONLY~~						
~~Vapor pressure~~	~~40 CFR 60.110b(c)~~	~~Y~~		~~True vapor pressure less than 3.5 kPa.~~	~~40 CFR 60.116b(b)~~	~~P/E~~	~~Record~~

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 VI of the permit.

No changes to the test method section are proposed.

IX. Permit Shield:

No changes to permit shields are proposed in this revision.

X. Revision History

The revision history will be updated when the minor revision is issued.

XI. Glossary

No changes to the glossary are proposed in this revision.

D. Alternate Operating Scenarios

No alternate operating scenario has been requested for this facility.

APPENDIX A

ENGINEERING EVALUATION FOR APPLICATION 12216

ENGINEERING EVALUATION
CONOCOPHILLIPS SAN FRANCISCO REFINERY; PLANT 16
APPLICATION 12216

BACKGROUND

ConocoPhillips has applied for a permit for the following tanks:

S135, Tank #200, Fixed Roof, 79K barrels
S137, Tank #202, Fixed Roof, 88K barrels

These tanks were exempt from permits pursuant to BAAQMD Regulation 2-1-123.3.2 because they held light coker gas oil (LCGO), which has an initial boiling point over 302^{o}F. and because the boiling point exceeds the storage temperature by more than 180 ^{o}F.

The tanks will also store cracked naphtha with a vapor pressure up to 11 psia and so now require permits.

This is a minor revision of the Major Facility Review permit for the following reasons:

- The change is not considered a major modification under 40 CFR Parts 51 (NSR) or 52 (PSD).
- The change is not considered a modification under 40 CFR Parts 60 (NSPS), 61 (NESHAPS), or Section 112 of the Clean Air Act (HAP).
- There is no significant change or relaxation of monitoring. All proposed monitoring is new.
- No term is established to allow the facility to avoid an applicable requirement.
- No case-by-case determination has been made.
- No facility-specific determination for ambient impacts, visibility analysis, or increment analysis on portable sources has been made.
- No new federal requirement has been imposed.

EMISSION CALCULATIONS

ConocoPhillips states that the tanks are blanketed with natural gas and are routed to A7, the fuel gas vapor recovery system. Therefore, the facility concluded that there would be no increase in emissions. The District concurs that the emissions that are routed to the fuel gas system merely displace natural gas that would be burned in the heaters. Therefore, there will be no emissions increase at the heaters. However, the fugitive emissions at the various components will increase. ConocoPhillips has supplied counts of the

components associated with these tanks that will have an increase in emissions due to the higher vapor pressure of the cracked naphtha.

The emissions in kg/hr are estimated using the "Correlation Equation" method in the California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Refineries, 1999. The following equations were used:

Valves:	(number of valves) 2.27E-06 $(SV)^{0.747}$
Connectors:	(number of connectors) 7.5E-06 $(SV)^{0.736}$
Hatches (Other)	(number of hatches) 8.69E-06 $(SV)^{0.642}$
Breather Valves (Other)	(number of breather valves) 8.69E-06 $(SV)^{0.642}$

SV is the screening value, in ppm. It refers to the value measured by Method 21 testing. Since BAAQMD Regulation 8, Rule 18, limits the valves, connectors, and hatches to 100 ppm, and the breather valves to 500 ppm, these values were used.

S135	# of components	Screening value, ppm	kg/hr	kg/yr	lb/yr
Valves	18	100	1.27E-03	11	25
Connectors	72	100	3.27E-03	29	63
Breather valve	1	500	4.70E-04	4	9
Hatches	2	100	3.34E-04	3	6

S137	# of components	Screening value, ppm	kg/hr	kg/yr	lb/yr
Valves	25	100	1.77E-03	16	34
Connectors	112	100	5.08E-03	45	98
Breather valve	1	500	4.70E-04	4	9
Hatches	2	100	3.34E-04	3	6

Total VOC Emissions	251

No pumps were affected by the proposed change.

The HAP concentrations below were supplied by the facility. The table compares the emissions to the trigger levels in BAAQMD Regulation 2, Rule 1, as amended on December 21, 2004. No trigger is exceeded.

Compound	Wt. Fraction	Emissions lb/hr	Emissions lb/yr	Chronic Trigger Level lb/yr
Benzene	0.0159	0.0005	4.0	6.7
Naphthalene	0.0003	0.0000	0.1	270
Toluene	0.0157	0.0004	3.9	39,000.0
Xylenes	0.0185	0.0005	4.6	58,000.0

No emissions have been calculated for cleaning the tank when switching between various petroleum fluids because the applicant has stated that the tanks will not be cleaned before switching. Cleaning the tanks when switching will be prohibited by a permit condition.

CUMULATIVE INCREASE AND OFFSETS

The cumulative increase for this change is 251 lbs or 0.126 tons POC. In accordance with BAAQMD Regulation 2-2-302, POC offsets must be provided at a ratio of 1.15:1. The cumulative increase at the facility will remain at 0. The offsets will come from Certificate 921.

TOXIC RISK MANAGEMENT

This application will not be subject to BAAQMD Regulation 2, Rule 5, New Source Review of Toxic Air Contaminants, because it was submitted before the rule was effective (July 1, 2005).

It is not subject to a risk screen because the emissions increases are below all triggers in Table 2-1-316 of BAAQMD Regulation 2, Rule 1, as amended on December 21, 2004.

The increases would not have been subject to a risk screen under BAAQMD Regulation 2, Rule 5, if it had been submitted on or after July 15, 2005.

STATEMENT OF COMPLIANCE

BACT

The sources are not subject to BACT because they will each emit less than 10 lb POC/day.

REGULATION 8, RULE 5, STORAGE OF ORGANIC LIQUIDS

The tanks are larger than 39,626 gallons and will store liquids that have a true vapor pressure up to 11 psia, therefore they must be controlled with an internal floating roof, external floating roof, or approved emission control system. The tanks are fixed roof tanks that are vented to the fuel gas system, A7, which is an

approved emission control system with a VOC control efficiency of at least 98% by weight. This estimate is based on similar control efficiencies at Evergreen Oil and Tesoro.

The tanks will be subject to Sections 8-5-301, 8-5-303, 8-5-306, 8-5-328, 8-5-403, 8-5-404, 8-5-501.2, 8-5-503, and 8-5-605. Section 8-5-307 does not apply because it does not apply to tanks that are blanketed with natural gas.

The tanks will comply with Sections 8-5-301 and 8-5-306 because they are controlled with an approved emission control system that has an abatement efficiency of at least 95%.

The pressure/vacuum valves on the tanks will comply with the requirement to be set to a pressure within 10% of the maximum allowable working pressure in Section 8-5-303.1. The valves are expected to comply with the "gas-tight" requirement in Section 8-5-303.2 because they will be inspected twice per year in accordance with Section 8-5-403. The facility has stated that the tanks will comply with this requirement.

Section 8-5-328.1 applies only when the tank is degassed. In this case, the tanks will not be degassed when switching from low vapor pressure fluids to high vapor pressure fluids.

Monitoring and recordkeeping conditions will not be written for these tanks because BAAQMD Regulation 8, Rule 5, already contains sufficient monitoring and recordkeeping.

MONITORING ANALYSIS

BAAQMD Regulation 8, Rule 5, contains the sufficient monitoring and recordkeeping to ensure compliance with all requirements. Section 8-5-501.1 requires records of the type and amount of liquids stored, type of blanket gases used, and the true vapor pressure ranges of such liquids and gases. Section 8-5-403 requires inspection of the pressure/vacuum valves twice per year. Monitoring of the destruction efficiency of the fuel gas system is not technically feasible, but the abatement efficiency is presumed to be at least 98%, which is higher that the requirement for 95% in Section 8-5-306.

NSPS

Subparts K, Ka, Kb

S135 was built in 1992 and is therefore subject to Subpart Kb.

S137 was built in 1941 and therefore is not subject to Subpart Kb.

Although the emissions will increase at S137, it is not considered an increase for the purposes of these standards because EPA has determined in the May 17, 1999 letter from Gerald Potamis of EPA Region 1 to Paul Flaherty of Arthur D. Little (attached) that switching from one petroleum fluid to another is not a modification pursuant to 40 CFR 60.14. Therefore, this tank will not be subject to Subpart Kb.

S135 will comply with the requirements of Subpart Kb for fixed roof tanks with a closed vent system and control device. Section 60.112b(a)(3)(i) requires that the closed vent system collect all vapors and operate with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in part 60, Subpart VV, Section 60.485(b).

Section 60.112b(a)(3)(i) requires that VOC emissions be controlled by 95% or greater. The tank emissions are routed to the fuel gas system, which is expected to achieve 98% control or greater.

Subpart J

40 CFR 60, Subpart J defines "fuel gas" as " any gas which is generated at a petroleum refinery and which is combusted." Fuel gas includes natural gas when it is combined with other fuel gas and burned. The tanks are vented to the fuel gas system; therefore all of the gas vented is subject to Subpart J. The standard is that the fuel gas may not contain more than 0.10 gr S/dscf.

The fuel gas system desulfurizes the gases prior to combustion and therefore this project will not cause non-compliance with Subpart J.

CEQA

This application is not subject to CEQA because the modification of tanks is considered ministerial pursuant to BAAQMD Regulation 2-1-311.

NESHAPS

The tanks are not subject to 40 CFR 63, Subpart CC, because Section 63.640(d)(5) states that emission points routed to a fuel gas system are not subject.

PSD

The emissions increase is not large enough to trigger PSD.

PERMIT CONDITIONS

The tanks were subject to Condition 20773, which requires recordkeeping to ensure that tanks that are not subject to BAAQMD Regulation 8, Rule 5, do not contain organic liquids with a vapor pressures over 0.5 psia. Since these tanks are now subject to the rule, they are no longer subject to the condition below:

CONDITION 20773

This condition applies to tanks that are exempt from Regulation 8, Rule 5, Storage of Organic Liquids, due to the exemption in Regulation 8-5-117 for storage of organic liquids with a true vapor pressure of less than or equal to 25.8 mm Hg (0.5 psia).

1. Whenever the type of organic liquid in the tank is changed, the owner/operator shall verify that the true vapor pressure at the storage temperature is less than or equal to 25.8 mm Hg (0.5 psia). The owner/operator shall use Lab Method 28 from Volume III of the District's Manual of Procedures, Determination of the Vapor Pressure of Organic Liquids from Storage Tanks. For materials listed in Table 1 of Regulation 8 Rule 5, the owner/operator may use Table 1 to determine vapor pressure, rather than Lab Method 28. If the results are above 25.8 mm Hg (0.5 psia), the owner/operator shall report non-compliance in accordance with Standard Condition I.F and shall submit an application to the District for a new permit to operate for the tank as quickly as possible. [Basis: 8-5-117 and 2-6-409.2]

2. The results of the testing shall be maintained in a District-approved log for at least five years from the date of the record, and shall be made available to District staff upon request. [Basis: 2-6-409.2]

The new permit condition for these tanks is shown below. The tanks have new limits to ensure that the emissions will be no greater than represented in Application 12216.

CONDITION 22518
For Sources S135 (Tank 200), S137 (Tank 202)

1. The owner/operator shall ensure that S135 contains only petroleum liquid with a true vapor pressure less than or equal to 11 psia. [Cumulative Increase]

2. The owner/operator shall ensure that S137 contains only petroleum liquid with a true vapor pressure less than or equal to 11 psia. [Cumulative Increase]

3. The owner/operator shall ensure that the throughput of petroleum liquids at S135 and S137 does not exceed 10,000,000 barrels/yr at each tank. [Cumulative Increase]

4. The owner/operator shall ensure that S135 and S137 are controlled at all times that petroleum fluids are stored in the tanks by A7, Vapor Recovery System. [Cumulative Increase]

5. The owner/operator shall not clean S135 and S137 when switching from one petroleum fluid to another. [Cumulative Increase]

RECOMMENDATION

Waive the authority to construct and issue a permit to operate for the following sources:

S135, Tank 200, 75,000 bbl fixed roof tank containing petroleum liquids; abated by A7, Vapor Recovery System

S137, Tank 202, 88,000 bbl fixed roof tank containing petroleum liquids; abated by A7, Vapor Recovery System

Impose permit condition 22518 as shown above.

Delete the link to permit condition 20773 for tanks S135 and S137

By: _____

Brenda Cabral **Date**

Senior Air Quality Engineer

APPENDIX 1

5/17/99 Letter from Gerald Potamis of EPA Region 1 to Paul Flaherty of Arthur D. Little

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U.S. Environmental Protection Agency Applicability Determination Index

Control Number: 0200044

Category: NSPS
EPA Office: Region 1
Date: 05/17/1999
Title: Modification of Petroleum Storage Vessels
Recipient: Paul Flaherty
Author: Gerald POTAMIS

Subparts: Part 60, A, General Provisions

References: 60.14

Abstract:

Q1. Does a change in liquid service of a storage vessel at a facility from a low vapor pressure material (stormwater or diesel fuel) to a high vapor pressure material (crude oil or gasoline) constitute a modification under 40 CFR 60.14?

A1. In recent determinations, EPA found the activity of a petroleum vessel storage facility changing the type of petroleum product stored (i.e., diesel fuel to gasoline) was equivalent to the use of an alternative fuel and exempted from the definition of modification as provided in 40 CFR Sec. 60.14(e)(4). These determinations were based on the assumption that petroleum products were essentially equivalent and therefore, any petroleum storage vessel could reasonably accommodate an alternative petroleum product. Please note that EPA's determinations only pertained to petroleum storage vessels. A storage vessel converting from water or other non- petroleum liquid storage over to petroleum storage would not be exempted from the NSPS modification definition. With regards to the example, EPA would find the activity of a vessel changing from diesel fuel storage to gasoline storage was not a modification as defined in 40 CFR 60.14 and therefore the vessel would not be subject to the NSPS, Subpart Kb.

Q2. What are the specific criteria for determining whether a vessel was designed to accommodate an alternative use? If the original construction specification are not available - how is such a determination made?

A2. EPA did not develop any specific criteria for determining if a fuel storage vessel could accommodate an alternative petroleum material in these determinations. As described previously, EPA's determinations centered on assuming that petroleum products are similar and that a petroleum storage vessel could reasonablely accommodate different types of petroleum products. However, if EPA did receive a request for a determination on a specific storage vessel significantly altering its design to accommodate an alternative petroleum product, EPA may adjust its determination considering the specific facts of the case.

Letter:

May 7, 1999

Paul E. Flaherty
Arthur D. Little, Inc.
Acorn Park
Cambridge, Massachusetts 02140-2390

Dear Mr. Flaherty:

Thank you for your letter dated August 24, 1998 requesting EPA applicability guidance and clarification regarding the New Source Performance Standard (NSPS), Subparts K, Ka, and Kb. The letter requests guidance, through a series of questions, on whether the conversion of a storage vessel that formally stored diesel fuel to crude oil or gasoline constituted a modification under 40 CFR 60.14. Our answers are provided below.

Question 1a and 1b. Change in a liquid service of a storage vessel: In recent determinations, EPA found the activity of a petroleum vessel storage facility changing the type of petroleum product stored (i.e., diesel fuel to gasoline) was equivalent to the use of an alternative fuel and exempted from the definition of modification as provided in 40 CFR Sec. 60.14(e)(4). These determinations were based on the assumption that petroleum products were essentially equivalent and therefore, any petroleum storage vessel could reasonably accommodate an alternative petroleum product. Please note that EPA's determinations only pertained to petroleum storage vessels. A storage vessel converting from water or other non-petroleum liquid storage over to petroleum storage would not be exempted from the NSPS modification definition.

With regards to the problem described in 1b, EPA would find the activity of a vessel changing from diesel fuel storage to gasoline storage was not a modification as defined in 40 CFR 60.14 and therefore the vessel would not be subject to the NSPS, Subpart Kb.

Question 2a and 2b. Development of criteria used to determine accommodation: EPA did not develop any specific criteria for determining if a fuel storage vessel could accommodate an alternative petroleum material in these determinations. As describe previously, EPA's determinations centered on the assuming that petroleum products are similar and that a petroleum storage vessel could reasonablely accommodate different types of petroleum products. However, if EPA did receive a request for a determination on a specific storage vessel significantly altering its design to accommodate an alternative petroleum product, EPA may adjust its determination considering the specific facts of the case.

EPA was also requested to determine if installation of an internal floating roof was considered an NSPS modification. In this case, EPA considered the floating roof to be a pollution control device and exempt from the definition of an NSPS modification (ref: 40 CFR Sec. 60.14(e)(5)). If you have any questions concerning this matter, please contact Allen Jarrell of my staff at (617) 918-1314.

Sincerely,

Gerald C. POTAMIS, P.E.
Manager, Air Permits Program