

**Bay Area Air Quality Management District**

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**Permit Evaluation  
and  
Statement of Basis  
for  
Minor Revision of**

**MAJOR FACILITY REVIEW PERMIT**

**for  
ConocoPhillips – San Francisco Refinery  
Facility #A0016**

**Facility Address:**

1380 San Pablo Avenue  
Rodeo, CA 94572

**Mailing Address:**

1380 San Pablo Avenue  
Rodeo, CA 94572

July 2007

Application Engineer: Brenda Cabral  
Site Engineer: Brenda Cabral

Application: 12931

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## **Title V Statement of Basis**

### **A. Background**

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

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

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

Each facility in the Bay Area is assigned a facility identifier that consists of a letter and a 4-digit number. This identifier is also considered to be the identifier for the permit. The identifier for this facility is A0016.

This facility received its initial Title V permit on December 1, 2003. The permit was reopened and re-issued on December 16, 2004 and April 12, 2005. Minor revisions were issued on April 12, 2005, January 5, 2006, and March 2, 2006. A significant revision was issued on January 5, 2006. Section X of the permit, Revision History, has a list of these revisions in chronological order.

This application is for a minor revision to the permit. This statement of basis will include all proposed changes to the permit in strikeout/underline format. This statement of basis addresses only the proposed changes to the permit. The statements of basis for the permits issued on December 1, 2003, and December 16, 2004 contain the basis for most of the rest of the permit. Additional issues were addressed in the documents for the revisions listed above.

The US District Court for the Southern District of Texas entered a consent decree against Conoco on January 27, 2005. Conoco submitted Application 12931 on July 1, 2005, to incorporate the following provisions:

- All heaters and boilers that were not previously subject to 40 CFR 60, Subpart J (Subpart J), are now considered to be "affected facilities" even though they were built before June 11, 1973.
- All Claus sulfur recovery units that were not previously subject to Subpart J are now considered to be "affected facilities" even though they were built before October 4, 1976.

- Heaters will not be allowed to burn fuel oil except during periods of natural gas curtailment, test runs, or operator training. This provision affects only sources S3 and S7 because they were the only heaters or boilers that had permits to burn liquid fuels.

The changes to the requirements for Claus units will be handled in Application 10994, which was submitted on October 7, 2004, to incorporate the requirements of a refinery NESHAPS, 40 CFR 63, Subpart UUU. The reformers and Claus units are affected by this application. The changes to heaters and boilers will be handled in Application 12931.

This action does not incorporate all of the provisions in the consent decree. Conoco will have to submit applications in the future to incorporate other provisions. This action will not have an effect on emissions for the following reasons: (1) Conoco's fuel gas system already complies with Subpart J because the facility has heaters that are subject to Subpart J due to their date of construction, and (2) sources S3 and S7 have not burned liquid fuels in the last ten years.

This revision 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.
- 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.
- The limits are not the incorporation of a requirement promulgated by EPA under the authority of the Clean Air Act.

## **B. Facility Description**

This facility is an oil refinery. For a complete description, see the Statement of Basis for Application 9296.

## **C. Permit Content**

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

### **I. Standard Conditions**

This section contains administrative requirements and conditions that apply to all facilities.

#### Changes to permit

There are no changes to Section I in this action.

## **II. Equipment**

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

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

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

All abatement (control) devices that control permitted or significant sources are listed. Each abatement device whose primary function is to reduce emissions is identified by an A and a number (e.g., A24).

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

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

### Changes to permit:

The heaters are shown here for information. The heaters affected by the change are those with source numbers between S2 and S31. The rest of the heaters are shown because some NSPS citations will be corrected in this action.

The mention of naphtha fuel for S3 and S7 has not been deleted because the fuel may still be burned during periods of natural gas curtailment, for test runs, or for operator training.

The fuel used has been added to the engines, S53-S59, for clarification. This is an administrative amendment in accordance with BAAQMD Regulation 2-6-201.

**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
2	U229, B-301 Heater (natural gas, refinery fuel gas)	Petro-Chem	process heater	22 MMbtu/hr
3	U230, B-201 Heater (natural gas, refinery fuel gas, naphtha)	Petro-Chem	process heater	62 MMbtu/hr
4	U231, B-101 Heater (natural gas, refinery fuel gas)	Braun	process heater	96 MMbtu/hr
5	U231, B-102 Heater (natural gas, refinery fuel gas)	Braun	process heater	104 MMbtu/hr
7	U231, B-103 Heater (natural gas, refinery fuel gas, naphtha)	Petro-Chem	process heater	64 MMbtu/hr
8	U240, B-1 Boiler (natural gas, refinery fuel gas)	Combustion Engineering	process heater	256 MMbtu/hr
9	U240, B-2 Boiler (natural gas, refinery fuel gas)	Born	process heater	61 MMbtu/hr
10	U240, B-101 Heater (natural gas, refinery fuel gas)	Foster-Wheeler	process heater	223 MMbtu/hr
11	U240, B-201 Heater (natural gas, refinery fuel gas)	Econo-Therm	process heater	108 MMbtu/hr
12	U240, B-202 Heater (natural gas, refinery fuel gas)	Econo-Therm	process heater	42 MMbtu/hr
13	U240, B-301 Heater (natural gas, refinery fuel gas)	Born	process heater	194 MMbtu/hr
14	U240, B-401 Heater (natural gas, refinery fuel gas)	Selas	process heater	556 MMbtu/hr
15	U244, B-501 Heater (natural gas, refinery fuel gas)	Alcorn	process heater	239.75 MMbtu/hr total for S15 through S19
16	U244, B-502 Heater (natural gas, refinery fuel gas)	Alcorn	process heater	239.75 MMbtu/hr total for S15 through S19
17	U244, B-503 Heater (natural gas, refinery fuel gas)	Alcorn	process heater	239.75 MMbtu/hr total for S15 through S19
18	U244, B-504 Heater (natural gas, refinery fuel gas)	Alcorn	process heater	239.75 MMbtu/hr total for S15 through S19
19	U244, B-505 Heater (natural gas, refinery fuel gas)	Alcorn	process heater	239.75 MMbtu/hr total for S15 through S19
20	U244, B-506 Heater (natural gas, refinery fuel gas)	Econo-Therm	process heater	23 MMbtu/hr
21	U244, B-507 Heater (natural gas, refinery fuel gas)	Econo-Therm	process heater	8.1 MMbtu/hr
22	U248, B-606 Heater (natural gas, refinery fuel gas)	Econo-Therm	process heater	31 MMbtu/hr
29	U200, B-5 Heater (natural gas, refinery fuel gas)	Foster-Wheeler	process heater	103 MMbtu/hr
30	U200, B-101 Heater (natural gas, refinery fuel gas)	Petro-Chem	process heater	50 MMbtu/hr
31	U200, B-501 Heater (natural gas, refinery fuel gas)	Petro-Chem	process heater	20 MMbtu/hr

**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
36	U200, B-102 Heater (natural gas, refinery fuel gas)	NA	process heater	82.1 MMbtu/hr
43	U200, B-202 Heater (natural gas, refinery fuel gas)		process heater	230 MMbtu/hr
44	U200, B-201 PCT Reboil Furnace (natural gas, refinery fuel gas)		process heater	46 MMbtu/hr
53	SPP Emergency Generator G-27 (diesel fuel)	Cummins	6B-5.9, 97 hp	<100 hr/yr operation (excluding emergency use)
54	Pump Station 3 CP-198 Emergency Engine (diesel fuel)	Waukesha Scania	F647DSUF, 258 hp	<100 hr/yr operation (excluding emergency use)
55	Pump Station 3 CP-199 Emergency Engine (diesel fuel)	Waukesha Scania	F647DSUF, 258 hp	<100 hr/yr operation (excluding emergency use)
56	Pump Station 4 G-201A Emergency Engine (diesel fuel)	Caterpillar	3406, 370 hp	<100 hr/yr operation (excluding emergency use)
57	Pump Station 4 G-201B Emergency Engine (diesel fuel)	Caterpillar	3406, 370 hp	<100 hr/yr operation (excluding emergency use)
58	Pump Station 4 G-422A Emergency Engine (diesel fuel)	Caterpillar	3406, 370 hp	<100 hr/yr operation (excluding emergency use)
59	Pump Station 4 G-422B Emergency Engine (diesel fuel)	Caterpillar	3406, 370 hp	<100 hr/yr operation (excluding emergency use)
336	U231 B-104 Heater (natural gas, refinery fuel gas)	Foster-Wheeler	process heater	111 MMbtu/hr
337	U231 B-105 Heater (natural gas, refinery fuel gas)	Foster-Wheeler	process heater	34 MMbtu/hr
351	U267 B-601/602 Tower Pre-heaters (natural gas, refinery fuel gas)			95 MMbtu/hr
352	Combustion Turbine (natural gas, refinery fuel gas)	Westinghouse	191	291,MMbtu/hr continuously
353	Combustion Turbine (natural gas, refinery fuel gas)	Westinghouse	191	291,MMbtu/hr continuously
354	Combustion Turbine (natural gas, refinery fuel gas)	Westinghouse	191	291,MMbtu/hr continuously
355	Supplemental Firing Duct Burners (natural gas, refinery fuel gas)	Coen		175 MMbtu/hr
356	Supplemental Firing Duct Burners (natural gas, refinery fuel gas)	Coen		175 MMbtu/hr

**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
357	Supplemental Firing Duct Burners (natural gas, refinery fuel gas)	Coen		175 MMbtu/hr
371	U228 B-520 (Adsorber Feed) Furnace (natural gas, refinery fuel gas)	Selas		58 MMbtu/hr for S371, 372
372	U228 B-521 (Hydrogen Plant) Furnace (natural gas, refinery fuel gas)	Selas		58 MMbtu/hr for S371, 372
438	U110, H-1 (H2 Plant Reforming) Furnace (natural gas, refinery fuel gas, PSA offgas)	John Zinc PFFG burners	reforming furnace	250 MMbtu/hr
461	U250, B-701 Heater (natural gas, refinery fuel gas)	NA	process heater	50.2 MMbtu/hr

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

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

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

#### Changes to permit

No changes to this section are proposed in this action.

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

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

- District Rules
- SIP Rules (if any) are listed following the corresponding District rules. SIP rules are District rules that have been approved by EPA for inclusion in the California State Implementation Plan. SIP rules are “federally enforceable” and a “Y” (yes) indication will appear in the “Federally Enforceable” column. If the SIP rule is the current District rule, separate citation of the SIP rule is not necessary and the “Federally Enforceable” column will have a “Y” for “yes”. If the SIP rule is not the current District rule, the SIP rule or the necessary portion of the SIP rule is cited separately after the District rule. The SIP portion will be federally enforceable; the non-SIP version will not be federally enforceable, unless EPA has approved it through another program.
- Other District requirements, such as the Manual of Procedures, as appropriate.
- Federal requirements (other than SIP provisions)
- BAAQMD permit conditions. The text of BAAQMD permit conditions is found in Section VI of the permit.
- Federal permit conditions. The text of Federal permit conditions, if any, is found in Section VI of the permit.

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

Changes to permit:

Section G.110 of the Consent Decree requires that all heaters and boilers at the refinery that are not already subject to 40 CFR 60, Subparts A and J, become "affected facilities" as defined in Section 100. Therefore, these requirements will be added to the Section IV tables for these sources.

The substantive requirements are that the combustion devices may not burn fuel gas with an H2S content above 0.10 gr/dscf and that the H2S content of the fuel gas must be continuously monitored. The sources will comply because there is only one source of fuel gas, the fuel gas system. Since other sources at the refinery have been subject to the standard, the refinery maintains all of the fuel gas below the limit and continuously monitors the concentration.

**Tables IV – A.1-A.23**  
**Source-specific Applicable Requirements**  
**COMBUSTION DEVICES-S2-S5, S7-22, S29-S31**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b>40 CFR 60, Subpart A</b>	<b><u>General Provisions (2/12/98)</u></b>		
<u>60.7(b)</u>	<u>Records</u>	<u>Y</u>	
<u>60.7(c)</u>	<u>Notification and recordkeeping for continuous monitoring</u>	<u>Y</u>	
<u>60.7(d)</u>	<u>Summary reports</u>	<u>Y</u>	
<u>60.7(e)</u>	<u>Reduction of frequency of summary reports</u>	<u>Y</u>	
<u>60.7(f)</u>	<u>Records</u>	<u>Y</u>	
<u>60.7(g)</u>	<u>Alternative Notification</u>	<u>Y</u>	
<u>60.7(h)</u>	<u>Specific Provisions</u>	<u>Y</u>	
<u>60.8</u>	<u>Performance Tests</u>	<u>Y</u>	
<u>60.11</u>	<u>Compliance with Standards and Maintenance Requirements</u>	<u>Y</u>	
<u>60.11(a)</u>	<u>Compliance determined by performance tests</u>	<u>Y</u>	
<u>60.11(d)</u>	<u>Control devices operated using good air pollution control practice</u>	<u>Y</u>	
<u>60.13</u>	<u>Monitoring requirements</u>	<u>Y</u>	
<u>60.13(a)</u>	<u>Continuous monitoring systems subject to Appendix B, and Appendix F, (if used to demonstrate compliance with continuous emission limits), of Part 60</u>	<u>Y</u>	
<u>60.13(b)</u>	<u>Continuous monitoring systems and devices operational prior to performance tests required by 60.8</u>	<u>Y</u>	
<u>60.13(d)(1)</u>	<u>Continuous monitoring system zero and span calibration requirements</u>	<u>Y</u>	
<u>60.13(e)</u>	<u>Continuous monitoring system minimum frequency of operation</u>	<u>Y</u>	
<u>60.13(e)(2)</u>	<u>Continuous monitoring system minimum frequency of operation for non-opacity-measuring devices</u>	<u>Y</u>	
<u>60.13(f)</u>	<u>Continuous monitoring system installation location requirement</u>	<u>Y</u>	
<b>NSPS</b>	<b><u>Standards of Performance for Petroleum Refineries (7/1/00)</u></b>		

**Tables IV – A.1-A.23**  
**Source-specific Applicable Requirements**  
**COMBUSTION DEVICES-S2-S5, S7-22, S29-S31**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b><u>40 CFR 60, Subpart J</u></b>			
<u>60.100</u>	<u>Applicability</u>	<u>Y</u>	
<u>60.104</u>	<u>Standards for Sulfur Oxides: Compliance Schedule</u>	<u>Y</u>	
<u>60.104(a)(1)</u>	<u>fuel gas H2S concentration limited to 230 mg/dscm (0.10 gr/dscf) except for gas burned as a result of process upset or gas burned at flares from relief valve leaks or other emergency malfunctions</u>	<u>Y</u>	
<u>60.105</u>	<u>Monitoring of Emissions and Operations</u>	<u>Y</u>	
<u>60.105(a)(4)</u>	<u>monitoring requirement for H2S (dry basis) in fuel gas prior to combustion (in lieu of separate combustion device exhaust SO2 monitors as required by 60.105(a)(3))</u>	<u>Y</u>	
<u>60.105(e)(3)(ii)</u>	<u>Excess H2S emission definitions for 60.7(c)</u>	<u>Y</u>	
<u>60.106(a)</u>	<u>Test methods and procedures</u>	<u>Y</u>	
<u>60.106(e)(1)</u>	<u>Method 11 shall be used to verify compliance with 60.104(a)(1)</u>	<u>Y</u>	
<b><u>NSPS 40 CFR 60, Appendix A</u></b>	<b><u>Appendix A to Part 60 – Test Methods</u></b>	<u>Y</u>	
<b><u>NSPS 40 CFR 60, Appendix B</u></b>	<b><u>Performance Specifications</u></b>		
<u>Performance Specification 7</u>	<u>H2S continuous emission monitoring systems</u>	<u>Y</u>	

Appendix F of the NSPS, Quality Assurance Procedures, does not apply. The standard states that it applies to fluid catalytic cracking unit catalyst regenerators, but does not state that it applies to the H2S monitors for combustion sources.

Appendix B of the NSPS is being added to the Section IV tables for S336, S337, and S461 because it was omitted in error. The appendices contain performance specifications and quality assurance procedures for continuous monitoring systems.

**Tables IV – A.29, A.30, A.35**  
**Source-specific Applicable Requirements**  
**COMBUSTION DEVICES-S336, S337, S461**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<u>NSPS</u> <u>40 CFR 60</u> <u>Appendix B</u>	<u>Performance Specifications</u>		
<u>Performance Specification 7</u>	<u>H2S continuous emission monitoring systems</u>	<u>Y</u>	

Additional Complex Applicability Determinations

40 CFR 63, Subpart DDDDD

The National Emission Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD, was promulgated on September 13, 2004. It was amended and renamed on December 28, 2005. The existing heaters and boilers are not subject to this standard because there are no limits for existing gas-fired heaters. The new heaters, S36 and S461, are subject to the standards. The requirements will be added in a future action. The facility is required to comply with all applicable requirements in the standard even if they are not currently contained in the District or Title V permits.

**V. Schedule of Compliance**

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

“409.10 A schedule of compliance containing the following elements:

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

The permit currently contains the following schedules of compliance:

C. CUSTOM SCHEDULE OF COMPLIANCE

The owner/operator is out of compliance with 40 CFR 61, Subpart FF, National Emission Standard for Benzene Waste Operations because the refinery generates more than 10 Mg benzene/yr. Therefore, the District is imposing the following Schedule of Compliance.

1. The owner/operator shall comply with the "6 BQ" option in accordance with 40 CFR 61.342(e).

Milestones

2. By May 30, 2006, the owner/operator shall submit a plan to EPA and to the District that identifies with specificity, the compliance strategy and schedule that the owner/operator will implement to ensure that the refinery complies with the 6 BQ compliance option by May 30, 2007.
3. By July 31, 2006, the owner/operator shall submit an application to the District that shows the applicable requirements from the Benzene Waste NESHAP in detail for each source within the refinery to which it applies. A copy of the application shall be sent to EPA Region 9.
4. By June 29, 2007, the owner/operator shall submit a certification and a report to the District and to EPA stating that the refinery complies with the Benzene Waste NESHAP.

Reporting Requirements

Progress reports shall be submitted every six months together with the monitoring reports required by Standard Condition I.F. The progress reports shall contain the date by which the item in the custom schedule of compliance was achieved or an explanation of why the item was not achieved by the above date and any corrective measures adopted.

In accordance with 40 Code of Federal Regulations, section 70.5(c)(8)(iii)(c), this schedule of compliance is supplemental to, and does not sanction noncompliance with, the requirements addressed herein.

D. CUSTOM SCHEDULE OF COMPLIANCE

The owner/operator is out of compliance with the requirement in 40 CFR 60 Subpart J 60.105(a)(4) to continuously verify the H<sub>2</sub>S concentration in gas combusted at S438, U110, H-1 (H<sub>2</sub> Plant Reforming) Furnace. Therefore, the District is imposing the following Schedule of Compliance.

Milestones

The proposed alternative monitoring plan was submitted to U.S. EPA in a letter dated May 11, 2004.

#### Reporting Requirements

Progress reports shall be submitted every six months together with the monitoring reports required by Standard Condition I.F. The progress reports shall contain the date by which the item in the custom schedule of compliance was achieved or an explanation of why the item was not achieved by the above date and any corrective measures adopted.

In accordance with 40 Code of Federal Regulations, section 70.5(c)(8)(iii)(c), this schedule of compliance is supplemental to, and does not sanction noncompliance with, the requirements addressed herein.

#### E. CUSTOM SCHEDULE OF COMPLIANCE

The owner/operator is out of compliance with the requirement in 40 CFR 60 Subpart J 60.105(a)(4) to continuously verify the H<sub>2</sub>S concentration in Unicracker (UK) sweet gas. This gas is burned at S438, U110, H-1 (H<sub>2</sub> Plant Reforming) Furnace, and S352-S357, combustion turbines and duct burners. Therefore, the District is imposing the following Schedule of Compliance.

#### Milestones

The proposed alternative monitoring plan was submitted to U.S. EPA in a letter dated May 11, 2004.

#### Reporting Requirements

Progress reports shall be submitted every six months together with the monitoring reports required by Standard Condition I.F. The progress reports shall contain the date by which the item in the custom schedule of compliance was achieved or an explanation of why the item was not achieved by the above date and any corrective measures adopted.

In accordance with 40 Code of Federal Regulations, section 70.5(c)(8)(iii)(c), this schedule of compliance is supplemental to, and does not sanction noncompliance with, the requirements addressed herein.

#### F. CUSTOM SCHEDULE OF COMPLIANCE

The owner/operator is out of compliance with the requirement in 40 CFR 60 Subpart J 60.105(a)(4) to continuously verify the H<sub>2</sub>S concentration in natural gas combusted at S352-S357, combustion turbines and duct burners. Therefore, the District is imposing the following Schedule of Compliance.

#### Milestones

The proposed alternative monitoring plan was submitted to U.S. EPA in a letter dated May 11, 2004.

### Reporting Requirements

Progress reports shall be submitted every six months together with the monitoring reports required by Standard Condition I.F. The progress reports shall contain the date by which the item in the custom schedule of compliance was achieved or an explanation of why the item was not achieved by the above date and any corrective measures adopted.

In accordance with 40 Code of Federal Regulations, section 70.5(c)(8)(iii)(c), this schedule of compliance is supplemental to, and does not sanction noncompliance with, the requirements addressed herein.

The District is proposing no changes to the schedule of compliance section.

### VI. Permit Conditions

The Major Facility Review permit contains conditions that 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.

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

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

All changes to existing permit conditions that are proposed in this action 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.

#### Changes to permit:

#### **CONDITION 1694**

CONDITIONS FOR COMBUSTION SOURCES AND SO<sub>2</sub> CAP, EXCEPT FOR GAS TURBINES AND DUCT BURNERS

##### A. Heater Firing Rate Limits and General Requirements

- 2a. All sources shall use only refinery fuel gas and natural gas as fuel, EXCEPT for S438 which may also use pressure swing adsorption (PSA) off gas as fuel, and EXCEPT for S3 and S7 which may also use naphtha fuel during periods of natural gas curtailment, test runs, or for

operator training. [Regulation 9-1-304 (sulfur content), Regulation 2, Rule 1, Consent Decree Case No. 05-0258, DATE: 1/27/05] Amended Application 12931

- 2b. Sources S3 and S7 are permitted to use naphtha fuel only during periods of natural gas curtailment, test runs, or for operator training. These sources shall be monitored for visible emissions during tube cleaning. If any visible emissions are detected when the operation commences, corrective action shall be taken within one day, and monitoring shall be performed after the corrective action is taken. If no visible emissions are detected, monitoring shall be performed on an hourly basis. [Regulation 2-6-409.2, Consent Decree Case No. 05-0258, DATE: 1/27/05] Amended Application 12931
- 2c. Sources S3 and S7 are permitted to use naphtha fuel only during periods of natural gas curtailment, test runs, or for operator training. These sources shall be monitored for visible emissions before each 1 million gallons of liquid fuel is combusted at each source. If an inspection documents visible emissions, a Method 9 evaluation shall be completed within 3 working days, or during the next scheduled operating period if the specific unit ceases firing on liquid fuel within the 3 working day time frame. [Regulation 2-6-409.2, Consent Decree Case No. 05-0258, DATE: 1/27/05]. Amended Application 12931

6. Sources listed below are affected facilities under NSPS Subpart J and are subject to the application requirements of NSPS Subparts A and J for fuel gas combustion devices. [Consent Decree Case No. 05-0258, DATE: 1/27/05]

<u>S2</u>	<u>U229/B301</u>
<u>S3</u>	<u>U230/B201</u>
<u>S4</u>	<u>U231/B101</u>
<u>S5</u>	<u>U231/B102</u>
<u>S7</u>	<u>U231/B103</u>
<u>S8</u>	<u>U240/B1</u>
<u>S9</u>	<u>U240/B2</u>
<u>S10</u>	<u>U240/B101</u>
<u>S11</u>	<u>U240/B201</u>
<u>S12</u>	<u>U240/B202</u>
<u>S13</u>	<u>U240/B301</u>
<u>S14</u>	<u>U240/B401</u>
<u>S15-S19</u>	<u>U244/B501-B505</u>
<u>S20</u>	<u>U244/B506</u>
<u>S21</u>	<u>U244/B507</u>
<u>S22</u>	<u>U244/B606</u>
<u>S29</u>	<u>U200/B5</u>
<u>S30</u>	<u>U200/B101</u>
<u>S31</u>	<u>U200/B501</u>

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

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

Changes to permit:

The NSPS limit and monitoring has been added to the Section VII tables for these combustion units.

**Tables VII – A.1-A.23**  
**Applicable Limits and Compliance Monitoring Requirements**  
**COMBUSTION DEVICES-S2-S5, S7-22, S29-S31**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
H2S	40 CFR 60.104(a) (1)	Y		fuel gas H2S concentration limited to 230 mg/dscm (0.10 gr/dscf)	40 CFR 60.105(a)(4)	C	H2S analyzer

**VIII. Test Methods**

This section of the permit lists test methods that are associated with standards in District or other rules. It is included only for reference. In most cases, the test methods in the rules are source test methods that can be used to determine compliance but are not required on an ongoing basis. They are not applicable requirements.

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

Changes to permit

No changes are proposed to this section in this action.

**IX. Permit Shield:**

Changes to permit:

This action proposes no changes to permit shields.

**X. Revision History**

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

**XI. Glossary**

Changes to permit:

This action proposes no changes to the glossary.

**D. Alternate Operating Scenarios:**

No alternate operating scenario has been requested for this facility.

APPENDIX A  
GLOSSARY

**ARB**

Air Resources Board

**BAAQMD**

Bay Area Air Quality Management District

**BACT**

Best Available Control Technology

**Basis**

The underlying authority that allows the District to impose requirements.

**CAA**

The federal Clean Air Act

**CAAQS**

California Ambient Air Quality Standards

**CEM**

Continuous Emission Monitor

**CEQA**

California Environmental Quality Act

**CFR**

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

**CO**

Carbon Monoxide

**Cumulative Increase**

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

**District**

The Bay Area Air Quality Management District

**dscf**

Dry Standard Cubic Feet

**EPA**

The federal Environmental Protection Agency.

**Federally Enforceable, FE**

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

**FP**

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

**MOP**

The District's Manual of Procedures.

**NAAQS**

National Ambient Air Quality Standards

**NESHAPS**

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

**NH3**

Ammonia

**NOx**

Oxides of nitrogen.

**NSPS**

Standards of Performance for New Stationary Sources. Federal standards for emissions from new stationary sources. Mandated by Title I, Section 111 of the Federal Clean Air Act, and implemented by 40 CFR Part 60 and District Regulation 10.

**NSR**

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

**Offset Requirement**

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

**POC**

Precursor Organic Compounds

**PM**

Particulate Matter

**PM10**

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

**PSD**

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

**SCR**

Selective Catalytic Reduction

**SIP**

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

**SO2**

Sulfur dioxide

**Title V**

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

**TRMP**

Toxic Risk Management Plan

**VOC**

Volatile Organic Compounds

**Units of Measure:**

bhp	=	brake-horsepower
btu	=	British Thermal Unit
cfm	=	cubic feet per minute
g	=	grams

Permit Evaluation and Statement of Basis: Site A0016, ConocoPhillips, 1380 San Pablo Ave, Rodeo, CA  
Application 12931

gal	=	gallon
gpm	=	gallons per minute
hp	=	horsepower
hr	=	hour
lb	=	pound
in	=	inches
max	=	maximum
m <sup>2</sup>	=	square meter
min	=	minute
mm	=	million
MMbtu	=	million btu
MMcf	=	million cubic feet
ppmv	=	parts per million, by volume
ppmw	=	parts per million, by weight
psia	=	pounds per square inch, absolute
psig	=	pounds per square inch, gauge
scfm	=	standard cubic feet per minute
yr	=	year