1. Permit Condition Regarding ESP Monitoring at CO Boilers

In Section VI, Condition #22165 contains new monitoring requirements for particulate emissions from the CO Boilers (S1507, S1509 and S1512). Specifically, Shell must conduct an initial compliance demonstration to establish a correlation between selected ESP operating parameters and particulate mass emissions and then continuously monitor the ESP operating parameters.

As currently written, continuous monitoring and recordkeeping the of ESP operating parameters must commence "no later than the ESP monitoring commencement date required under 40 CFR Part 63, Subpart UUU." Subpart UUU does not require any ESP (or control device) operating parameter monitoring. Therefore, as currently written, this requirement will never become applicable.

As currently written, a correlation between selected parameters and particulate mass emissions must be established "by the deadline set forth in 40 CFR Part 63, Subpart UUU." There is no such deadline in Subpart UUU. Therefore, as currently written, this requirement will never become applicable.

Additionally, under Subpart UUU, the effective date of the particulate emissions limit has already passed (it occurred on 4/11/05). Therefore, this date cannot be used as the effective date for Condition #22165. Shell recommends re-wording Condition #22165 to require that the ESP monitoring and particulate mass emissions correlation development occur within one year after issuance of the permit. A year is needed for several reasons - (1) it will take time to develop the correlation because emission source testing will likely be involved; (2) annual source testing for the CO Boilers is scheduled for the 1st quarter of 2006; and (3) a similar correlation must be developed for the Department of Toxics Substances Control (DTSC) also in about the 1st quarter of 2006 (a proposed Trial Burn Plan for this testing has been submitted to the BAAQMD for review). The testing for Condition #22165, annual compliance testing, and the DTSC testing would be the most efficient if it could be scheduled at the same time.

As currently written, Condition #22165 requires continuous monitoring of ESP operating parameters and development of a correlation between the selected parameters and particulate emissions. Shell has not yet developed a detailed compliance strategy for Condition #22165 (it is only a proposed condition at this time), but there is a significant possibility that a single ESP operating parameter will be selected (either ESP kVA or opacity). We do not believe that it is the intent of the BAAQMD to require that multiple parameters are selected when a single parameter will be effective. Therefore, Shell recommends re-wording Condition #22165 to clarify that a single ESP parameter would be acceptable.

2. Changes to Applicable Requirements for Refinery MACT II (NESHAP, Subpart UUU)

Subpart UUU provides for several different ways to comply with emission limits. For catalytic cracking units (CCUs) and sulfur recovery units (SRUs) that are subject to NSPS, compliance with MACT emission limits is achieved by complying with the NSPS limits. For those sources not subject to NSPS, the MACT regulation allows several options for emission limits, one of which is to meet the NSPS limit.

SRU3 and SRU4 (S1765 and S4180, respectively) were subject to NSPS when they were constructed. For these sources, there is no alternative for compliance, they must comply with the "subject to NSPS" requirements of Subpart UUU. Construction of SRU1, SRU2 and CCU (S1431, S1432 and S1426, respectively) predates the NSPS applicability date. However, as a result of a Consent Decree with the EPA, Shell agreed to comply with NSPS for these sources. Initially, Shell thought that the appropriate Subpart UUU requirements were the "elect to comply with NSPS" rather than "subject to NSPS" requirements. Shell has re-evaluated the applicability of Subpart UUU and concluded that the "subject to NSPS" requirements are the appropriate applicable requirements. As a result, the Major Facility Review Permit must be modified to reflect the "subject to NSPS" requirements.

For sources subject to Subpart UUU at Shell, all of the required performance tests have been completed and the required Notices of Compliance Status (NOCSs) have been submitted, including those not yet due. Thus, all performance test and NOCS references should be deleted from the Major Facility Review Permit.

The deadlines for many of the applicable requirements have past (mostly April and May, 2005). Thus, for all requirements with "future effective dates" that have passed, the date needs to be removed from the Section IV and VII tables.

Additionally, changes to the Major Facility Review Permit are needed to reflect amendment Subpart UUU on February 9, 2005.

Attached are revised versions of the Section IV and VII tables that incorporate the above comments. A detailed summary of the changes is provided below:

- In Table IV-AOa:
 - Delete references to performance tests that have been completed
 - Delete "future effective dates" that have passed
 - ❖ Delete references to NOCSs that have already been submitted
 - Delete initial compliance demonstration requirements that have been completed
 - Add requirement to submit notification of intent to construct or reconstruct
 - Add alkalinity monitoring as a monitoring option as allowed by the amended rule
 - Change 63.1572(c)(1) to reflect changed monitoring requirements in amended rule
- In Tables IV-AP and IV-AQa:
 - Change all emission limitations to "subject to NSPS"
 - ❖ Delete references to performance tests that have been completed
 - Delete "future effective dates" that have passed

- Delete references to NOCSs that have already been submitted
- Delete initial compliance demonstration requirements that have been completed
- ❖ Add specific monitoring alternatives provided in 63.1573
- Delete 63.1572(a)(2) and (b)(2), since they only apply to sources that are not subject to the NSPS
- Delete 63.1569(c)(2) since it does not apply
- In Table IV-AQb:
 - Delete "future effective dates" that have passed
 - Delete references to NOCSs that have already been submitted
 - Delete all initial compliance demonstration requirements that have been completed
- In Tables VII-AFa, VII-AG, VII-AHa and VII-AHb:
 - Delete "future effective dates" that have passed
 - Delete monitoring requirements associated with initial compliance demonstration requirements that have been completed
 - ❖ Delete requirements that were deleted from the Section IV tables
 - Correct some inconsistencies in the requirements listed in Tables VII-AHa and AHb

3. Monitoring Requirements for Flares

Condition #18618, Parts 12 through 19 includes specific monitoring requirements for flares. The following table summarizes the applicable requirements for each flare.

Source	Name	Applicable Conditions(1)
S1470(2)	LOG LPG Loading Flare	Part 19
S1471	LOP Auxiliary Flare	Part 12, 13, 14, 15, 16 and 17
S1472	LOP Main Flare	Part 12, 13, 14, 15, 16 and 17
S1771	OPCEN Flexigas Flare	Part 12, 13, 16, 17 and 18
S1772	OPCEN Hydrocarbon Flare	Part 12, 13, 14, 15, 16 and 17
S4201	DC Clean Fuels Flare	Part 12, 13, 14, 15, 16 and 17
A101	Flare for Vine Hill Vapor Recovery System	Part 19
A102	Flare for Crude String Vapor Recovery System	Part 19
A103	Flare for Interim Gasoline Vapor Recovery System	Part 19

- (1) Applicable Parts of Condition #18618, Part 12 through 19
- (2) Even though S1470 has an "S" instead of an "A" designation, S1470 is a control device to control LPG loading emissions.

Parts 14 and 15 of Condition #18618, state that they apply to the flares listed in Part 12. However, S1771 is subject to Part 12, but should not be subject to Parts 14 and 15 because it is instead subject to Part 18. The following changes are needed to correct this problem:

- In Condition #18618, Part 14, replace "for the sources listed in Part 12" with "for S1471, S1472, S1772 and S4201"
- In Condition #18618, Part 15, replace "for those sources listed in Part 12" with "for S1471, S1472, S1772 and S4201"

For the flares, many of the tables in Sections IV and VII do not contain the correct references to the applicable Parts of Condition #18618, Parts 12 through 19. The following table shows the Parts that are currently listed in the Section IV and VII

tables as well as the correct Parts that should be listed. The Section IV and VII tables should be updated to reflect the "Correct Parts" column of the following table.

Source	Table	Currently Listed Parts(1)	Correct Parts(2)
S1470	IV-AW	None	19
	VII-AN	15 for 6-301 and 6-310	19 for 6-301 and 6-310
S1471 and	IV-AXc	12, 13, 14, 15, 16 and 17	12, 13, 14, 15, 16 and 17
S1472	VII-AOb	15 for 6-301 and 6-310	14 ,15, 16 and 17 for 6-301
			and 6-310
		None	13 for 12
S1771	IV-BW	12, 13, 14 , 15 , 16, 17 and 18	12, 13, 16, 17 and 18
	VII-BI	18 for 6-301 and 6-310	16 , 17 and 18 for 6-301 and
			6-310
		None	13 for 12
S1772	IV-BX	12, 13, 14, 15, 16 and 17	12, 13, 14, 15, 16 and 17
	VII-BJ	15 for 6-301 and 6-310	14 ,15, 16 and 17 for 6-301
			and 6-310
		13 for 12	13 for 12
A101, A102	IV-AXa and AXb	19	19
and A103	VII-AOa	15 for 6-301 and 6-310	19 for 6-301 and 6-310

⁽¹⁾ Parts of Condition #18618 that are currently listed in the Section IV and VII tables

4. Some Lubs Sources Not Completely Removed

On October 7, 2004, Shell submitted an application for an administrative amendment to the Major Facility Review Permit. This application requested that the BAAQMD remove a number of Lubs sources from the Major Facility Review Permit because they have been permanently removed from service. Some of the requested changes were made. However the following changes must still be completed:

- Remove S1050 from Table VII-P
- Remove S1409 and S1415 from Permit Condition 18618
- Remove S1478 and S1479 from Table IV-AY
- Remove S1478 and S1479 from Table IV-AZ
- Remove S1478 and S1479 from Table IV-CSa

5. Removal of Additional Sources at Lubs

Shell recently submitted an application for an administrative amendment to the Major Facility Review Permit. This application requested that the BAAQMD remove four additional Lubs sources from the Major Facility Review Permit because they have been permanently removed from service. These sources include:

- S1411, LUBS Atmospheric Distillation Unit including A11, Mist Eliminator serving S1411
- S1412. LUBS Vacuum Distillation Unit
- S1476. LUBS F-24 Atmospheric Feed
- S1477. LUBS F-25 Vacuum Feed

⁽²⁾ The correct Parts of Condition #18618 that should be listed in the Section IV and VII tables **Bold** indicates the differences between the current and correct versions

The BAAQMD has already removed S1411 and A11 from the Major Facility Review Permit. The following changes must be made to remove S1412, S1476 and S1477:

- Remove S1412 from Tables II-A, IV-AL and VII-AE
- Remove S1476 and S1477 from Tables II-A, IV-AY and VII-AP
- Remove S1476 and S1477 from Conditions 7618, 16688, 18265 and 18618 in Section VI

6. Alternative Monitoring Plans

Many sources at Shell are subject to the Fuel Gas Combustion Device provisions of NSPS Subpart J including a standard for SO_2 as specified by 40 CFR 60.104(a)(1) and monitoring requirements specified by 40 CFR 60.105. For several sources, Shell has EPA approved Alternative Monitoring Plans (AMPs) that were obtained in accordance with 40 CFR 60.13(i). For these sources, the AMPs replace the monitoring requirements specified by 40 CFR 60.105. Shell has previously submitted these AMPs to the BAAQMD. The following table provides a summary of AMP requirements as they are currently incorporated into the Major Facility Review.

		Actual AMP	AMP Requirements in Current Major Facility Review Permit		
		Applic-		Section	
Source	Name	ability	Section IV	VI	Section VII
S1470	LOG LPG Loading Flare	No	Table IV-AW	None	Table VII-AN
S1480	LUBS F-69 Asphalt	No (1)	Table IV-AZa	None	Table VII-AQa
	Circulation				
S1481	OPCEN F-30 DSU	No	None	None	Table VII-AQa
S1484	LUBS F-34 LHT Charge	Yes	Table IV-AZa	None	Table VII-AQa
S1506	CP F-61 CGP Feed	No	Table IV-AZa	None	Table VII-AQa
S1772	OPCEN Hydrocarbon	No	Table IV-BX	None	None
	Flare				
S2001	LOG Marine Loading	Yes (2)	Table IV-CF	Condition	Table VII-BR
	Berth 1			#4288	
S2002	LOG Marine Loading	Yes (2)	Table IV-CF	Condition	Table VII-BR
	Berth 2			#4288	
S2003	LOG Marine Loading	Yes (2)	Table IV-CF	Condition	Table VII-BR
	Berth 3			#4288	
S2004	LOG Marine Loading	Yes (2)	Table IV-CF	Condition	Table VII-BR
	Berth 4			#4288	
S4002	DC F-13425-A DCU	Yes	Table IV-CP	None	Table VII-BY
S4003	DC F-13425-B DCU	Yes	Table IV-CP	None	Table VII-BY
S4021	DC F-13909 DHT	No	Table IV-CSa	None	None
	Recycle				
S4141	DC F-14011 HGHT Feed	Yes	Table IV-CTa	None	Table VII-CDa
S4161	DC H-101 HP3 Steam	Yes	Table IV-CU	None	Table VII-CE
	Methane Reformer				
S4171	LUBS F-13000 LHT2	Yes	Table IV-CSa	None	Table VII-CC
	Feed				

⁽¹⁾ S1480 was previously subject to an AMP, but the vent gas sent to this furnace is no longer generated at the refinery.

^{(2) \$2001, \$2002, \$2003} and \$2004 are not subject to an AMP. However, the thermal oxidizer (A100) is subject to an AMP.

The following changes to Shell's Major Facility Review Permit are needed to correctly identify APM and NSPS Subpart J requirements:

- S1481, S1506, S1772 and S4021 are subject to 40 CRF 60.104(a)(1) and comply with the monitoring requirements specified by 40 CFR 60.105(a)(4). Therefore, these sources are not (and have never been) subject to an AMP. Additionally, these sources are not subject to 40 CFR 60.13(i). S1481 should be deleted from Table VII-AQa, S1506 should be deleted from Tables IV-AZa and VII-AQa, and S4021 should be deleted from Table IV-CSa. For S1481, S1506 and S4021, other tables already include the correct references to 40 CFR 60.104(a)(1) and 105(a)(4). For S1772, delete 40 CFR 60.13(i) from Table VI-BX, but leave other references to NSPS Subpart J and A.
- S1470 is not subject to 40 CRF 60.104(a)(1) because it was constructed prior to June 11, 1973 (the applicability date for fuel gas combustion devices in NSPS Subpart J). Since this source is not subject to Subpart J, it cannot be subject to an AMP for Subpart J. For S1470, delete all references to NSPS Subpart J and A in Tables IV-AW and VII-AN.
- S1480 use to be subject to an AMP because this furnaces use to receive a vent gas (Sulfonation Unit SO₂ absorber vent) which was governed by an AMP. However, this vent gas is no longer generated at the refinery because the Sulfonation Unit has been permanently removed from service. Therefore, Shell requests that references to this AMP be removed for the Major Facility Review Permit by removing S1480 from Tables IV-AZa and VII-AQa. S1480 is fueled by refinery fuel gas and is therefore, subject to 40 CRF 60.104(a)(1) and complies with the monitoring requirements specified by 40 CFR 60.105(a)(4). For S1480, the correct references to NSPS Subpart J and A are already listed in Tables IV-AZ and VII-AQ.
- The Marine Loading Berths (S2001, S2002, S2003 and S2004) are not subject to NSPS Subpart J and an AMP because they are not fuel gas combustion devices. The Thermal Oxidizer for the Marine Vapor Recovery System (A100) is subject to NSPS Subpart J and an AMP. New tables should be added to Section IV and VII for A100. All references to NSPS Subpart J and A, and Condition #4288, Parts 12, 13 and 14 should be removed from Tables IV-CF and VII-BR and placed into the new tables for A100.
- For S1484, S4002, S4003, S4141, S4161, and S4171, the specific AMP language has not been incorporated into Section VI. Condition(s) should be added to Section VI to incorporate the AMP language. When the AMPs are added to Section VI, the appropriate tables in Sections IV and VII will also need to be updated to include the correct references.

7. Statement of Basis for NSPS Subpart J

The Statement of Basis includes a four page discussion (pages 7 through 10) regarding the applicability of NSPS Subpart J for Fuel Gas Combustion Devices. In the Major Facility Review Permit for Shell, Subpart J is correctly applied to all Fuel Gas Combustion Devices based on the EPA's interpretation of "fuel gas" and "fuel gas combustion device." Therefore, this four page discussion is not appropriate in the Statement of Basis for Shell's Major Facility Review Permit.

8. Temporary Supplemental Baghouse for Flexicoke

On July 8, 2003, the BAAQMD issued a PTO for abatement of S1769, OPC1-Dry Fines Silo V-1021 by A771, Temporary Supplemental Baghouse for Flexicoke. The following changes are needed to add A771 to the Major Facility Review Permit:

- Add A771 to the list of abatement devices in Table II-B
- Add Condition #20755 to Section VI
- Add a new table in Section IV for S1769 which lists Condition #20755, Part 1 and 2 as applicable requirements
- Add a new table in Section VII for S1768 which lists Condition #20755. Part 2
 as the required monitoring to demonstrate compliance with Condition #20755.
 Part 1

A copy of the permit condition is provided below:

Condition #20755 For S1769, OPC1-Dry Fines Silo V-1021

- 1. The owner/operator shall not route coke fines from S-1769 to the portable filter truck (A-771) more than 96 hours during any consecutive 12-month basis. (Basis: Regulation 6-201, 6-310, and/or 6-311)
- 2. In order to demonstrate compliance with the above permit conditions, the following records shall be maintained in a District approved log. These records shall be kept on site and made available for District inspection for a period of at least five years from the date on which a record is made.
 - a. Date and time when A-771 is put in use; the hours shall be summarized for each consecutive 12-month period.
 - b. Records of all inspections and all maintenance work including filter replacement for the filter truck. Records of each inspection shall consist of a log containing the date of inspection and the initials of the personnel that inspects the filter.

(Basis: Regulation 1-441)

9. Future Effective Dates that Have Already Passed

In the following Section IV and VII tables, delete the "Future Effective Dates" that have already passed:

- Tables IV-AXa, AXb, AXc, AY, AZ, AZb, BA, BC, BD, BG, BK, BL, BW, BX, BZ, CS, CU, CX and DV
- Tables VII-AOb, AP, BB, BI, BJ and CI
- Comment No. 2 already addresses Tables IV-AOa, AP, AQa and AQb
- Comment No. 2 already addresses Tables VII-AFa, AG, AHa and AHb

10. Compliance Monitoring Requirements for FXU Transloading

S6061, Flexicoker Unit (FXU) Transloading, is subject to Regulation 6 (particulate limits) and Condition #21671, Parts 1, 2 and 3. Condition #21671, Part 2 specifies a throughput limit and Part 3 requires recordkeeping to demonstrate compliance with the throughput limit. A line item needs to be added to Table VII-CZ which lists Condition #21671, Parts 2 and 3. Additionally, for Part 1, Table VII-CZ describes the Monitoring Type as "Visible emissions inspection & Records." This description is not correct because Part 1 does not require visible emission inspections or recordkeeping. For the first three line items in Table VII-CZ, change the Monitoring Type to "Ensure that rail cars are equipped with the required filters."

11. Source Test Submittal Deadlines

In most cases throughout the Major Facility Review Permit, source test reports must be submitted to the BAAQMD within 60 days of completing a test. However, there are a few instances where the reports must be submitted within 45 days of the test. For several reasons, Shell requests that a 60-day time limit is provided for submittal of all source test reports. These reasons include the fact that (1) it often takes up to 60 days to prepare a source test report especially if laboratory analysis is required and/or multiple tests are conducted at the same time, (2) Shell has little control over submitting source test reports since they are prepared by contractors, and (3) it is too confusing to have some source test reports due in 45 days and others in 60 days. Change "45 days" to "60 days" in the following locations:

- Condition #18265, Part 6.A
- Condition #18265. Part 7
- Condition #18265, Part 7.A.2
- Condition #21896, Part 1
- Condition #22165, Part 4

12. Particulate Emissions and Sulfur Pits

Particulate emission limitations (Regulation 6) do not apply to fixed roof tanks containing molten sulfur. In Table IV-DE, delete all Regulation 6 requirements.

13. Subpart A of NSPS, NESHAP and MACT

Throughout Section IV, the various requirements of Subpart A are inconsistently listed for sources that are subject to NSPS (40 CFR 60), NESHAP (40 CFR 61) and MACT (40 CFR 63). These inconsistencies should be corrected.

14. Condition #7382

In Section VI, Condition #7382 provides a list of sources that are subject to the condition. However, this list is not correct and does not match the sources included in Section IV with Condition #7382 listed as an applicable requirement. The list of sources in Condition #7382 should be updated to match the sources in Section IV with Condition #7382 listed as an applicable requirement.

15. Monitoring Frequency Codes and Monitoring Type Descriptions

The Monitoring Frequency "codes" and Monitoring Type "descriptions" listed in the Section VII tables sometimes conflict with the specific language of the actual monitoring requirements (regulation or permit condition). It is clear that Shell should follow the required monitoring and frequency that is specifically prescribed by the regulations and permit conditions regardless of what the codes and descriptions indicate. However, conflicting codes and descriptions often lead to confusion regarding the required monitoring and frequency. To correct this problem, either delete both the Monitoring Frequency and Monitoring Type columns or correct the Monitoring Frequency codes and Monitoring Type descriptions in the Section VII tables.

16. Unnecessary Tables

The Major Facility Review Permit includes a number of unnecessary tables that can be combined because they address the same sources which are subject to the same applicable requirements and/or monitoring. The following is a list of tables that can be combined into a single table.

- Table IV-AEa and IV-AF
- Table IV-AXa, IV-AXb, and IV-DO
- Table IV-AZb and IV-BR
- Table IV-CG and IV-DL

17. Miscellaneous Typographical Errors

The Major Facility Review Permit includes some miscellaneous typographical errors. Shell did not search the entire document for these miscellaneous errors. The following is a list of miscellaneous errors that were discovered:

- In Table IV-AB, replace "See Table IV-J & K" with "See Table IV-Ja"
- In Table IV-AR, replace "See Table IV-AQ" with "See Table IV-AQ & AQb"
- In Table IV-BQ, replace "See Table IV-AL & AM" with "See Table IV-AL"
- In Table IV-CC, replace "See Table IV-AE" with "See Table IV-AEb"
- In Table IV-CL, replace "See Table IV-U & V & W" with "See Table IV-U & W"
- In Table IV-CN, replace "See Table IV-R & T & W" with "See Table IV-R & W"
- In Table IV-CR, replace "See Table IV-AL & AM" with "See Table IV-AL"
- In Table IV-DF, replace "See Table IV-AQ" with "See Table IV-AQ & AQb"
- In Table IV-DI, replace "See Table IV-AE" with "See Table IV-AEc"
- In Condition #19097, Part A (Section VI), S5140 is missing from the list of sources that are subject to the 100 hour per calendar year limit for reliabilityrelated activities.
- In Table VII-E, replace "See Table VII-Da, Db and L" with "See Table VII-Da, Db, Dc & L"
- In Table VII-F, add "See Table VII-Da & E for additional requirements."
- In Table VII-O, remove "See Table VII-A for additional requirements."
- In Table VII-U, add "See Table VII-Da for additional requirements."
- In Table VII-V, replace "See Table VII-I & J" with "See Table VII-H"
- In Table VII-Z, add "See Table VII-X for additional requirements."

- In Table VII-AF, add "See Table VII-AE for additional requirements"
- In Table VII-AI, replace "See Table IV-AH" with "See Table IV-AH & AHb"
- In Table VII-AI, Condition #7618, Part A is listed twice
- In Table VII-AS, replace "See Table VII-AQ" with "See Table VII-AR"
- In Table VII-BF, replace "See Table VII-AE & AF" with "See Table VII-AE"
- In Table VII-BK, replace "See Table VII-AJ" with "See Table VII-AK"
- In Table VII-BV, replace "See Table VII-R & S" with "See Table VII-R"
- In Table VII-BY, replace "See Table VII-AW" with "See Table VII-AX"
- In Table VII-CF, replace "See Table VII-AI" with "See Table VII-AH & AHb"
- In Table VII-CI, remove "See Table VII-AN for additional requirements."
- In Table VII-CJ, add "See Table VII-AJ for additional requirements."
- In Table VII-CM, add "See Table VII-CL for additional requirements."
- In Tables VII-AP, AQ, AQb, AR, AT, AU, AX, BA, BB, BL, CB and CE replace "9-10-504.2" with "9-10-504.1"

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	See Table IV – AL for additional requirements.		
40 CFR Part 63 Subpart A	MACT General Provisions		
63.4	Prohibited Activities and Circumvention	Y	4/11/05
63.6	Compliance with Standards and Maintenance Requirements	Y	4/11/05
63.6(e)	Operation and Maintenance Requirements	Y	4/11/05
63.6(f)	Compliance with Nonopacity Emission Standards	Y	4/11/05
63.6(g)	Use of Alternative Nonopacity Emission Standard (optional	Y	4/11/05
63.7	Performance Tests	¥	9/8/05
63.8	Monitoring	Y	4/11/05
63.9	Notifications	Y	4/11/05
63.9(b)(5)	Submit notification of intent to construct or reconstruct	<u>Y</u>	
63.9(e)	Notification of Performance Test	¥	30 days before test
63.9(g)	Notification Requirements for sources with Continuous Monitoring Systems	¥	Simultaneou s with notice of performance test
63.9(h)	Notification of Compliance Status	¥	5/11/05 and Subsequent
63.9(j)	Change in information already provided	Y	4/11/05
63.10	Recordkeeping and Reporting Requirements	Y	4/11/05
63.10(a)	General Information	Y	4/11/05
63.10(b)	General Recordkeeping Requirements	Y	4/11/05
63.10(b)(2)	Records to be maintained	Y	4/11/05
63.10(c)	Recordkeeping requirements for Continuous Monitoring Systems	Y	4/11/05
63.10(d)	General Reporting Requirements	Y	4/11/05
63.10(e)	Additional reports for sources with Continuous Monitoring Systems	Y	4/11/05
63.10(e)(2)	Reporting results of Continuous Monitoring System performance evaluation	¥	9/8/05
63.10(e)(3)	Excess Emissions and Continuous Monitoring System Performance Report and Summary Report	Y	4/11/05

IV. Source Specific Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
40 CFR 63	NESHAP for Petroleum Refineries: Catalytic Reforming Units	(1/11)	Dute
Subpart	NESTIAI for 1 etroicum Reimeries. Catalytic Reforming Omts		
UUU			
63.1567	Requirements for Inorganic HAP Emissions from Catalytic Reforming Units	Y	4/11/05
63.1567(a)	Emission Limitations and Work Practice Standards	Y	4/11/05
63.1567(a)(1)	Sulfur Emission Limitations for Hydrogen Chloride (HCl) during coke burn-off and catalyst rejuvenation using wet scrubber: Reduce uncontrolled HCl emissions by 97% or to a concentration of 10 ppmvd	Y	4/11/05
63.1567(a)(2)	corrected to 3%O ₂ (Table 22 Item 2) Operating limits for daily average pH or alkalinity of water and average liquid-to-gas ratio exiting wet scrubber during coke burn-off and catalyst rejuvenation: daily average pH or alkalinity of scrubbing liquid not fall below the limit established during performance test; daily average liquid-to-gas ratio not to fall below the limit established during performance test (Table 23 Item 1.a)	Y	9/8/05
63.1567(a)(3)	Prepare Operation, Maintenance, and Monitoring Plan and operate in compliance with the plan	Y	4/11/05
63.1567(b)	Initial Compliance Demonstration	¥	4/11/05
63.1567(b)(1)	Install Continuous Parameter Monitoring System to record pH of water and liquid and gas flow rate to scrubber (Table 24, Item 1)	¥	4/11/05
63.1567(b)(2)	Performance Test: measure HCl concentration at the outlet (for the concentration standard) or at the inlet and outlet (for the percent reduction standard) of the scrubber (Table 25, Item 1.a)	¥	9/8/05
63.1567(b)(3)	Establish Operating Limit: measure and record pH of scrubbing liquid and gas and liquid flow rate every 15 minutes during the performance test. Determine hourly average. (Table 25, Items 1.b and 1.e)	¥	9/8/05
63.1567(b)(4)	Demonstrate Initial Compliance with Emission Limitations: reduce HCl concentration by 97% or to 10 ppmv (Table 26, Item 2)	¥	9/8/05
63.1567(b)(5)	Demonstrate Initial Compliance with Work Practice Standard by submitting Operation, Maintenance, and Monitoring Plan	¥	5/11/05
63.1567(b)(6)	Submit Notice of Initial Compliance Status	¥	5/11/05
63.1567(c)	Continuous Compliance Demonstration	Y	4/11/05

IV. Source Specific Applicable Requirements

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
63.1567(c)(1)	Demonstrate Continuous Compliance with Emission Limitation: maintain	Y	9/8/05
	97% control efficiency or 10 ppmv HCl concentration (Table 27, Item 2)		
	and collect hourly and daily pH or alkalinity monitoring data and hourly		
	average liquid-to-gas ratio, and maintain both above the operating limit		
	established during performance test (Table 28, Items 1.a and 1.b)		
63.1567(c)(2)	Demonstrate Continuous Compliance with Work Practice Standard	Y	4/11/05
	through maintaining records to document conformance with the Operation,		
	Maintenance, and Monitoring Plan		
63.1570	General Compliance Requirements	Y	4/11/05
63.1570(a)	Operate in compliance with non-opacity standards at all times except	Y	4/11/05
	during periods of startup, shutdown, and malfunction, as specified in		
	63.6(f)(1)		
63.1570(c)	Operate and maintain source including pollution control and monitoring	Y	4/11/05
	equipment in accordance with 63.6(e)(1). Between 4/11/05 and the date		
	continuous monitoring systems are installed and validated and operating		
	limits have been set, maintain a log detailing operation and maintenance of		
	process and equipment.		
63.1570(d)	Develop and implement startup, shutdown, and malfunction plan (SSMP)	Y	4/11/05
	in accordance with 63.6(e)(3)		
63.1570(e)	Operate in accordance with SSMP during periods of startup, shutdown,	Y	4/11/05
	and malfunction		
63.1570(f)	Report deviations from compliance with this subpart according to the	Y	4/11/05
	requirements of 63.1575		
63.1570(g)	Deviations that occur during startup, shutdown, or malfunction are not	Y	4/11/05
	violations if operating in accordance with SSMP		
63.1571	Performance Tests	Y	4/11/05
63.1571(a)	Conduct Performance Test and submit results no later than 150 days after	¥	9/8/05
	compliance date		
63.1571(a)(1)	For emission limitation or work practice standard where compliance not	¥	5/11/05
	demonstrated using performance test, opacity observation, or visible		
	emission observation, conduct initial compliance demonstration within 30		
	days after compliance date		
63.1571(b)	Requirements for Performance Tests	¥	4/11/05

IV. Source Specific Applicable Requirements

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
63.1571(b)(1)	Conduct performance tests in accordance with the requirements of	¥	9/8/05
	63.7(e)(1)		
63.1571(b)(2)	Except for opacity and visual emissions observations, conduct three	¥	9/8/05
	separate test runs of at least an hour for each performance test		
63.1571(b)(3	Conduct each performance evaluation in accordance with the requirements	¥	9/8/05
	of 63.8(e)		
63.1571(b)(4)	Performance tests not conducted during periods of startup, shutdown, or	¥	9/8/05
	malfunction		
63.1571(b)(5)	Arithmetic average of emission rates	¥	9/8/05
63.1571(c)	Procedures for an Engineering Assessment (optional in lieu of	¥	5/11/05
	performance test)		
63.1571(d)(4)	Adjust process or control device measured values when establishing	¥	9/8/05
	operating limit (optional)		
63.1571(e)	Changes to Operating limits (optional)	Y	9/8/05
63.1572	Monitoring installation, operation, and maintenance requirements	Y	4/11/05
63.1572(c)	Continuous parameter monitoring requirements	Y	4/11/05
63.1572(c)(1)	Locate the air flow and liquid flow sensors and other necessary equipment	Y	4/11/05
	that provides representative flow; use flow rate sensor with ±5% accuracy;		
	reduce abnormal conditions due to up/down stream disturbances; conduct		
	semiannual calibration (Table 41, Item 3); and locate pH sensor in a		
	position that provides a representative measurement; ensure the sample is		
	properly mixed and representative; check calibration every 8 hours;		
	inspect all components; record inspection results (Table 41, Item 5)		
	Install, operate, and maintain continuous parameter monitoring system		
	(online pH/alkalinity meter) in a manner consistent with the		
	manufacturer's specifications or other written procedures that provide		
	adequate assurance that the equipment will monitor accurately.		
63.1572(c)(2)	Complete a minimum of one cycle for each 15-minute period; four cycles	Y	4/11/05
	of operation for a valid hour of data	1	7/11/03
63.1572(c)(3)	Valid hourly data at least 75% of process operating hours	Y	4/11/05
63.1572(c)(4)	Determine and record hourly and daily average of all recorded readings	Y	4/11/05
63.1572(c)(5)	Record results of inspection, calibration, and validation check	Y	4/11/05
63.1572(d)	-		
	Data monitoring and collection requirements	Y	4/11/05

IV. Source Specific Applicable Requirements

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
63.1572(d)(1)	Conduct monitoring at all times source is operating except for monitoring	Y	4/11/05
	malfunctions, repairs, and QA/QC activities		
63.1572(d)(2)	Not use data recorded during monitoring malfunctions, repairs, and	Y	4/11/05
	QA/QC activities		
63.1573	Monitoring Alternatives	Y	4/11/05
63.1573(b)	Alternatives for monitoring for pH (Table 41, Item 5) (optional)	Y	4/11/05
63.1573(c)	Automated data compression system (optional)	Y	4/11/05
63.1573(d)	Monitoring for alternative parameters (optional)	Y	4/11/05
63.1573(e)	Alternative Monitoring Requests (optional)	Y	4/11/05
63.1574	Notification Requirements	Y	4/11/05
63.1574(a)	Notifications Required by Subpart A	Y	5/11/05 and
			subsequent
63.1574(a)(1)	Submit notification of intent to construct or reconstruct according to	<u>Y</u>	•
	<u>63.9(b)(5)</u>		
63.1574(a)(2)	Submit notification of intent to conduct performance test 30 days before	¥	30 days
	scheduled (instead of 60 days)		before test
63.1574(a)(3)	Notification of Compliance Status	¥	5/11/05
63.1574(a)(3)	Submit Notification of Compliance Status for initial compliance	¥	5/11/05
(i)	demonstration that does not include a performance test, no later than 30		
	days following completion of initial compliance demonstration		
63.1574(a)(3)	Submit Notification of Compliance Status for initial compliance	¥	9/8/05
(ii)	demonstration that includes a performance test, no later than 150 days		
	after source compliance date		
63.1574(d)	Information to be Submitted in Notice of Compliance Status (Table 42):	¥	5/11/05
	identification of affected sources and emission points (Item 1); initial		
	compliance demonstration (Item 2); continuous compliance (Item 3)		
63.1574(f)	Requirement to prepare Operation, Maintenance, and Monitoring Plan	Y	4/11/05
63.1574(f)(1)	Submit plan to permitting authority for review and approval along with	¥	5/11/05
	NOCS. Include duty to prepare and implement plan into Part 70 or 71		9/8/05
	permit.		
63.1574(f)(2)	Minimum contents of Operation, Maintenance, and Monitoring Plan	Y	5/11/05
63.1575	Reports	Y	7/31/05
63.1575(a)	Required reports: Statement that there were no deviations or report	Y	7/31/05
	including information in 1575(d) or (e) (Table 43, Item 1)		

IV. Source Specific Applicable Requirements

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
63.1575(b)	Specified semiannual report submittal dates	Y	7/31/05
63.1575(c)	Information required in compliance report	Y	7/31/05
63.1575(d)	Information required for deviations from emission limitations and work practice standards where CEMS or COMS is not used to comply with emission limitation or work practice standard	Y	7/31/05
63.1575(f)	Additional information for compliance reports	Y	7/31/05
63.1575(f)(1)	Requirement to submit performance test reports	¥	1/31/06
63.1575(f)(2)	Submittal of requested change in the applicability of an emission standard	Y	7/31/05
63.1575(g)	Submittal of reports required by other regulations in place of or as part of compliance report if they contain the required information	Y	7/31/05
63.1575(h)	Reporting requirements for startups, shutdowns, and malfunctions	Y	7/31/05
63.1576	Recordkeeping	Y	4/11/05
63.1576(a)	Required Records – General	Y	4/11/05
63.1576(d)	Records required by Tables 20, 21, 27, and 28 of Subpart UUU	Y	4/11/05
63.1576(e)	Maintain copy of Operation, Maintenance, and Monitoring Plan	Y	4/11/05
63.1576(f)	Records of changes that affect emission control system performance	Y	4/11/05
63.1576(g)	Records in a form suitable and readily available for review	Y	4/11/05
63.1576(h)	Maintain records for 5 years	Y	4/11/05
63.1576(i)	Records onsite for two years; may be maintained offsite for remaining 3 years	Y	4/11/05

IV. Source Specific Applicable Requirements

	Regulation Title or	Federally Enforceable	Future Effective
	Description of Requirement	(Y/N)	Date
BAAQMD	General Provisions and Definitions (5/02/01)		
Regulation 1			
1-520	Continuous Emission Monitoring	Y	
1-520.5	SO2 and opacity monitors at catalyst regenerators of CCUs	Y	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures		
1-522.1	Approval of Plans and Specifications	Y	
1-522.2	Installation Scheduling	Y	
40 CFR Part	MACT General Provisions		
63 Subpart A			
63.4	Prohibited Activities and Circumvention	Y	4/11/05
63.6	Compliance with Standards and Maintenance Requirements	Y	4/11/05
63.6(e)	Operation and Maintenance Requirements	Y	4/11/05
63.6(f)	Compliance with Nonopacity Emission Standards	Y	4/11/05
63.6(g)	Use of Alternative Nonopacity Emission Standard (optional	Y	4/11/05
63.6(h)	Compliance with Opacity and Visible Emission Standards	Y	4/11/05
63.7	Performance Tests	¥	9/8/05
63.8	Monitoring	Y	4/11/05
63.9	Notifications	<u>Y</u>	
63.9(b)(5)	Submit notification of intent to construct or reconstruct	<u>Y</u>	
63.9(e)	Notification of Performance Test	¥	30 days
			before test
63.9(g)	Notification Requirements for sources with Continuous Monitoring	¥	Simultaneou
	Systems		s with notice
			of
			performance
			test
63.9(h)	Notification of Compliance Status	¥	5/11/05 and
			Subsequent
63.9(j)	Change in information already provided	Y	4/11/05
63.10	Recordkeeping and Reporting Requirements	Y	4/11/05
63.10(a)	General Information	Y	4/11/05
63.10(b)	General Recordkeeping Requirements	Y	4/11/05
63.10(b)(2)	Records to be maintained	Y	4/11/05

IV. Source Specific Applicable Requirements

	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.10(c)	Recordkeeping requirements for Continuous Monitoring Systems	Y	4/11/05
63.10(d)	General Reporting Requirements	Y	4/11/05
63.10(e)	Additional reports for sources with Continuous Monitoring Systems	Y	4/11/05
63.10(e)(2)	Reporting results of Continuous Monitoring System performance evaluation	¥	9/8/05
63.10(e)(3)	Excess Emissions and Continuous Monitoring System Performance Report and Summary Report	Y	4/11/05
63.10(e)(4)	Reporting COMS data produced during performance test	Y	9/8/05
40 CFR 63 Subpart UUU	NESHAP for Petroleum Refineries: Catalytic Cracking Units		
63.1564	Requirements for metal HAP emissions from catalytic cracking units	Y	4/11/05
63.1564(a)	Emission Limitations and Work Practice Standards	Y	4/11/05
63.1564(a)(1)	PM Emission Limitation for catalytic cracking units electing to meet	¥	4/11/05
(i)	NSPS limit (Option 1): PM emissions must not exceed 1 lb per 1,000 lb of coke burn-off, plus 0.1 lb/MMBtu of heat input to the CO boiler; and opacity must not exceed 30% except for one 6-minute opacity reading in any one hour (Table 1, Item 2)		
63.1564(a)(1)	PM Emission Limitation for catalytic cracking units subject to NSPS limit: PM emissions must not exceed 1 lb per 1,000 lb of coke burn-off, plus 0.1 lb/MMBtu of heat input to the CO boiler; and opacity must not exceed 30% except for one 6-minute opacity reading in any one hour (Table 1, Item 1)	Y	<u>4/11/05</u>
63.1564(a)(3)	Prepare Operation, Maintenance, and Monitoring Plan and operate at all times according to the procedures in the plan	Y	4/11/05
63.1564(b)	Initial Compliance Demonstration	¥	4/11/05
63.1564(b)(1)	Install Continuous Opacity Monitoring System (Table 3, Item 2)	¥	4/11/05
63.1564(b)(2)	Performance Test (Table 4, Items 1.a through 1.e, 2.a through 2.c)	¥	9/8/05
63.1564(b)(4) (i)	Compute PM emission rate (lb/1,000 lb coke burn off rate) for each Performance Test run	¥	9/8/05
63.1564(b)(5)	Initial Compliance Demonstration: Calculate PM emission rate using Equations 1, 2 and 3 of 63.1564(b)(4)(i); Opacity limit met; Continuous Opacity Monitoring System meets applicable requirements (Table 5, Item 2)	¥	9/8/05

IV. Source Specific Applicable Requirements

	Regulation Title or	Federally Enforceable	Future Effective
	Description of Requirement	(Y/N)	Date
63.1564(b)(5)	Initial Compliance Demonstration: Certify compliance with emission limits as part of NOCS (Table 5, Item 1)	Y	9/8/05
63.1564(b)(6)	Demonstrate initial compliance with work practice standard by submitting Operation, Maintenance, and Monitoring Plan	¥	5/11/05
63.1564(b)(7)	Submit Notification of Compliance Status	¥	5/11/05
63.1564(c)	Continuous Compliance Demonstration	Y	4/11/05
63.1564(c)(1)	Demonstration of continuous compliance with emission limitation: Record daily the average coke burn-off rate; maintain PM emission rate below limit; record daily the rate of fuel combustion and hours of fuel combustion; maintain PM emissions from fuel combustion below limits; collect continuous opacity monitoring data and maintain opacity within limit (Table 6, Item 12)	Y	4/11/05
63.1564(c)(2)	Demonstration of continuous compliance with work practice standard by maintaining records to document conformance with Operation, Maintenance, and Monitoring Plan	Y	4/11/05
63.1565	Requirements for organic HAP emissions from catalytic cracking units	Y	4/11/05
63.1565(a)	Emission Limitations and Work Practice Standards	Y	4/11/05
63.1565(a)(1) (i)	Emission limitation for catalytic cracking units electing to meet NSPS standard (Option 1): CO emissions from CO boiler must not exceed 500 ppmvd (Table 8, Item 2.a)	¥	4/11/05
63.1565(a)(1)	Emission limitation for catalytic cracking units subject to NSPS standard: CO emissions from CO boiler must not exceed 500 ppmvd (Table 8, Item 1)	<u>Y</u>	4/11/05
63.1565(a)(3)	Prepare Operation, Maintenance, and Monitoring Plan and operate at all times in accordance with the plan	Y	4/11/05
63.1565(b)	Initial Compliance Demonstration	¥	4/11/05
63.1565(b)(1)	Install, operate and maintain Continuous Emission Monitoring System to measure and record the concentration of CO emissions (Table 10, Item 2.b1)	¥	4/11/05
63.1565(b)(2)	Performance Test (Table 11, Items 1.a through 1.d, 2)	¥	9/8/05
63.1565(b)(4)	Demonstrate initial compliance with CO limit: hourly CO emissions over 24 hour period of performance test not more than 500 ppmvd; performance evaluation shows CEMS meets applicable requirements (Table 12, Item 2.a.ii)	¥	9/8/05

IV. Source Specific Applicable Requirements

	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.1565(b)(4)	Demonstrate initial compliance with CO limit: Certify compliance with emission limits as part of NOCS (Table 12, Item 1)	<u>Y</u>	<u>9/8/05</u>
63.1565(b)(5)	Demonstrate initial compliance with work practice standard by submitting Operation, Maintenance, and Monitoring Plan as part of NOCS.	¥	5/11/05
63.1565(b)(6)	Submit Notice of Compliance Status.	¥	5/11/05
63.1565(c)	Continuous Compliance Demonstration	Y	4/11/05
63.1565(c)(1)	Demonstrate continuous compliance with emission limitation by collecting hourly average CO monitoring data and maintaining hourly average CO concentrations within limit (Table 13, Item 2.i1)	Y	4/11/05
63.1565(c)(2)	Demonstrate continuous compliance with work practice standard by maintaining records to document conformance with Operation, Maintenance, and Monitoring Plan	Y	4/11/05
63.1569	Bypass Lines	Y	4/11/05
63.1569(a)	Work Practice Standards for Bypass Lines	Y	4/11/05
63.1569(a)(1) (i)	Work Practice Standard (Option 1): Install and operate a device (Level Indicator) to continuously detect, at least every hour, whether flow is present in bypass line. (Table 36, Item 1)	Y	4/11/05
63.1569(a)(3)	Prepare Operation, Maintenance, and Monitoring Plan and operate at all times according to the procedures in the plan	Y	4/11/05
63.1569(b)	Initial Compliance Demonstration	¥	4/11/05
63.1569(b)(1)	Performance Test for level monitor: record during the performance test whether the level recorder was operating and whether flow was detected at any time (Table 37, Item 1)	¥	9/8/05
63.1569(b)(2)	Demonstrate Initial Compliance with work practice standard during performance test (Option 1): equipment operates properly during each performance test run (Table 38, Item 1.a)	¥	9/8/05
63.1569(b)(3)	Submit Operation, Maintenance, and Monitoring Plan as part of NOCS	¥	5/11/05
63.1569(b)(4)	Submit Notice of Compliance Status	¥	5/11/05
63.1569(c)	Continuous Compliance Demonstration	Y	4/11/05
63.1569(c)(1)	Demonstrate continuous compliance with (Option 1): Continuously monitor and record whether flow is present in bypass line; record whether device is operating properly (Table 39, Item 1)	Y	4/11/05

IV. Source Specific Applicable Requirements

		Federally	Future
	Regulation Title or	Enforceable	Effective
	Description of Requirement	(Y/N)	Date
63.1569(c)(2)	Demonstrate continuous compliance with Work Practice Standard by	¥	4/11/05
	complying with procedures in Operation, Maintenance, and Monitoring		
	Plan		
63.1570	General Compliance Requirements	Y	4/11/05
63.1570(a)	Operate in compliance with non-opacity standards at all times except	Y	4/11/05
	during periods of startup, shutdown, and malfunction, as specified in		
	63.6(f)(1)		
63.1570(b)	Operate in compliance with opacity and visible emissions standards at all	Y	4/11/05
	times except during periods of startup, shutdown, and malfunction, as		
	specified in 63.6(h)(1)		
63.1570(c)	Operate and maintain source including pollution control and monitoring	Y	4/11/05
	equipment in accordance with 63.6(e)(1). Between 4/11/05 and the date		
	continuous monitoring systems are installed and validated and operating		
	limits have been set, maintain a log detailing operation and maintenance of		
	process and equipment.		
63.1570(d)	Develop and implement startup, shutdown, and malfunction plan (SSMP)	Y	4/11/05
	in accordance with 63.6(e)(3)		
63.1570(e)	Operate in accordance with SSMP during periods of startup, shutdown,	Y	4/11/05
	and malfunction		
63.1570(f)	Report deviations from compliance with this subpart according to the	Y	4/11/05
	requirements of 63.1575		
63.1570(g)	Deviations that occur during startup, shutdown, or malfunction are not	Y	4/11/05
	violations if operating in accordance with SSMP		
63.1571	Performance Tests		
63.1571(a)	Conduct Performance Test and submit results no later than 150 days after	¥	9/8/05
	compliance date		
63.1571(a)(1)	For emission limitation or work practice standard where compliance not	¥	5/11/05
	demonstrated using performance test, opacity observation, or visible		
	emission observation, conduct initial compliance demonstration within 30		
	days after compliance date		
63.1571(b)	Requirements for Performance Tests	¥	9/8/05
63.1571(b)(1)	Conduct performance tests in accordance with the requirements of	¥	9/8/05
,	63.7(e)(1)		

IV. Source Specific Applicable Requirements

	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.1571(b)(2)	Except for opacity and visual emissions observations, conduct three separate test runs of at least an hour for each performance test	¥	9/8/05
63.1571(b)(3	Conduct each performance evaluation in accordance with the requirements of 63.8(e)	¥	9/8/05
63.1571(b)(4)	Performance tests not conducted during periods of startup, shutdown, or malfunction	¥	9/8/05
63.1571(b)(5)	Arithmetic average of emission rates	¥	9/8/05
63.1572	Monitoring installation, operation, and maintenance requirements	Y	4/11/05
63.1572(a)	Requirements for installation, operation, and maintenance of continuous emission monitoring system	Y	4/11/05
63.1572(a)(1)	CO CEMS must meet requirements of Performance Specification 4 (40 CFR Part 60, App B) (Table 40, Item 2)	Y	4/11/05
63.1572(a)(2)	Conduct performance evaluation for CO CEMS according to Performance Specification 4 (Table 40, Item 2)	¥	9/8/05
63.1572(a)(3)	CEMS complete one cycle of operation for each 15-minute period	Y	4/11/05
63.1572(a)(4)	Data reduction per 63.8(g)(2)	Y	4/11/05
63.1572(b)	Requirements for installation, operation, and maintenance of continuous opacity monitoring system	Y	4/11/05
63.1572(b)(1)	COMS must meet requirements of Performance Specification 1 (40 CFR Part 60, App B) (Table 40, Item 1)	Y	4/11/05
63.1572(b)(2)	Conduct performance evaluation for CO CEMS according to Performance Specification 1	¥	9/8/05
63.1572(b)(3)	COMS complete one cycle of sampling and analyzing for each 10-second period and one cycle of data recording for each 6-minute period	Y	4/11/05
63.1572(d)	Data monitoring and collection requirements	Y	4/11/05
63.1572(d)(1)	Conduct monitoring at all times, except for monitoring malfunctions, repairs, and QA/QC activities	Y	4/11/05
63.1572(d)(2)	Data recorded during monitoring malfunctions, repairs, and QA/QC activities not used for compliance purposes	Y	4/11/05
63.1573	Monitoring Alternatives	Y	4/11/05
63.1573(a)(1)	Monitoring Alternative for CCUs that do not introduce any other gas streams into the catalyst regeneration vent	Y	

IV. Source Specific Applicable Requirements

	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.1573(a)(2)	Monitoring Alternative for CCUs with a gas analyzer installed in the catalytic cracking regenerator exhaust vent prior to the addition of air or other gas streams	Y	
63.1573(c)	Monitoring Alternative - automated data compression system	<u>Y</u>	
63.1573(d)	Monitoring for alternative parameters (optional)	Y	4/11/05
63.1573(e)	Alternative Monitoring Requests (optional)	Y	4/11/05
63.1574	Notification Requirements	Y	4/11/05
63.1574(a)	Notifications Required by Subpart A	Y	5/11/05 and subsequent
63.1574(a)(1)	Submit notification of intent to construct or reconstruct according to 63.9(b)(5)	<u>Y</u>	
63.1574(a)(2)	Submit notification of intent to conduct performance test 30 days before scheduled (instead of 60 days)	¥	30 days before test
63.1574(a)(3)	Notification of Compliance Status	¥	5/11/05
63.1574(a)(3)	Submit Notification of Compliance Status for initial compliance	¥	5/11/05
(i)	demonstration that does not include a performance test, no later than 30		
	days following completion of initial compliance demonstration		
63.1574(a)(3)	Submit Notification of Compliance Status for initial compliance	¥	9/8/05
(ii)	demonstration that includes a performance test, no later than 150 days after source compliance date		
63.1574(d)	Information to be Submitted in Notice of Compliance Status (Table 42): identification of affected sources and emission points (Item 1); initial compliance demonstration (Item 2); continuous compliance (Item 3)	¥	5/11/05
63.1574(f)	Requirement to prepare Operation, Maintenance, and Monitoring Plan	Y	<u>9/8/05</u>
			5/11/05
63.1574(f)(2)	Minimum contents of Operation, Maintenance, and Monitoring Plan	Y	5/11/05
63.1575	Reports	Y	4/11/05
63.1575(a)	Required reports: Statement that there were no deviations or report including information in 1575(d) or (e) (Table 43, Item 1)	Y	7/31/05
63.1575(b)	Specified semiannual report submittal dates	Y	7/31/05
63.1575(c)	Information required in compliance report	Y	7/31/05

IV. Source Specific Applicable Requirements

	Description (Ptd)	Federally	Future
	Regulation Title or Description of Requirement	Enforceable (Y/N)	Effective Date
63.1575(d)	Information required for deviations from emission limitations and work practice standards where CEMS or COMS is not used to comply with emission limitation or work practice standard	Y	7/31/05
63.1575(e)	Information required for deviations from emission limitations and work practice standards where CEMS or COMS is used to comply with emission limitation or work practice standard	Y	7/31/05
63.1575(f)	Additional information for compliance reports	Y	7/31/05
63.1575(f)(1)	Requirement to submit performance test reports	¥	1/31/06
63.1575(f)(2)	Submittal of requested change in the applicability of an emission standard	Y	7/31/05
63.1575(g)	Submittal of reports required by other regulations in place of or as part of compliance report if they contain the required information	Y	4/11/05
63.1575(h)	Reporting requirements for startups, shutdowns, and malfunctions	Y	4/11/05
63.1576	Recordkeeping	Y	4/11/05
63.1576(a)	Required Records – General	Y	4/11/05
63.1576(b)	Records for CEMS and COMS	Y	4/11/05
63.1576(c)	Records of visible emissions observations	Y	4/11/05
63.1576(d)	Records required by Tables 6, 7, 13, and 14 of Subpart UUU	Y	4/11/05
63.1576(e)	Maintain copy of Operation, Maintenance, and Monitoring Plan	Y	4/11/05
63.1576(f)	Records of changes that affect emission control system performance	Y	4/11/05
63.1576(g)	Records in a form suitable and readily available for review	Y	4/11/05
63.1576(h)	Maintain records for 5 years	Y	4/11/05
63.1576(i)	Records onsite for two years; may be maintained offsite for remaining 3 years	Y	4/11/05

IV. Source Specific Applicable Requirements

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
Requirement	See Table IV – AQ for additional requirements.	(1/11)	Dute
40 CFR Part	MACT General Provisions		
63 Subpart A	THE General Provisions		
63.4	Prohibited Activities and Circumvention	Y	4/11/05
63.6	Compliance with Standards and Maintenance Requirements	Y	4/11/05
63.6(e)	Operation and Maintenance Requirements	Y	4/11/05
63.6(f)	Compliance with Nonopacity Emission Standards	Y	4/11/05
63.6(g)	Use of Alternative Nonopacity Emission Standard (optional	Y	4/11/05
63.7	Performance Tests	¥	9/8/05
63.8	Monitoring	Y	4/11/05
63.9	Notifications	Y	4/11/05
63.9(b)(5)	Submit notification of intent to construct or reconstruct	<u>Y</u>	1/11/00
63.9(e)	Notification of Performance Test	¥	30 days
	- 10th -		before test
63.9(g)	Notification Requirements for sources with Continuous Monitoring	¥	Simultaneou
(8)	Systems		s with notice
			of
			performance
			test
63.9(h)	Notification of Compliance Status	¥	5/11/05 and
			Subsequent
63.9(j)	Change in information already provided	Y	4/11/05
63.10	Recordkeeping and Reporting Requirements	Y	4/11/05
63.10(a)	General Information	Y	4/11/05
63.10(b)	General Recordkeeping Requirements	Y	4/11/05
63.10(b)(2)	Records to be maintained	Y	4/11/05
63.10(c)	Recordkeeping requirements for Continuous Monitoring Systems	Y	4/11/05
63.10(d)	General Reporting Requirements	Y	4/11/05
63.10(e)	Additional reports for sources with Continuous Monitoring Systems	Y	4/11/05

IV. Source Specific Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.10(e)(2)	Reporting results of Continuous Monitoring System performance evaluation	¥	9/8/05
63.10(e)(3)	Excess Emissions and Continuous Monitoring System Performance Report and Summary Report	Y	4/11/05
40 CFR 63 Subpart UUU	NESHAP for Petroleum Refineries: Sulfur Recovery Units		
63.1568	Requirements for Sulfur Recovery Units	Y	4/11/05
63.1568(a)	Emission Limitations and Work Practice Standards for Sulfur Recovery Units	Y	4/11/05
63.1568(a)(1)	Emission Limitations	Y	4/11/05
63.1568(a)(1) (i)	Sulfur Emission Limitation from Claus sulfur recovery units electing to meet NSPS Limits: 250 ppmvd SO ₂ at 0% excess air. (Table 29, Item 2.a)	¥	4/11/05
63.1568(a)(1)	Sulfur Emission Limitation from Claus sulfur recovery units subject to NSPS Limits: 250 ppmvd SO ₂ at 0% excess air. (Table 29, Item 1)	<u>Y</u>	<u>4/11/05</u>
63.1568(a)(3)	Prepare Operation, Maintenance, and Monitoring Plan and operate at all times according to the procedures in the plan	Y	4/11/05
63.1568(b)	Demonstrate Initial Compliance with Emission Limitation and Work Practice Standard	¥	4/11/05
63.1568(b)(1)	Continuous Emission Monitoring System to measure and record hourly average SO ₂ concentration, with O ₂ monitor to correct excess air concentration (Table 31, Item <u>1</u> 2.a)	¥	4/11/05
63.1568(b)(2)	Performance Test: measure SO ₂ concentration using CEMS every 15 minutes for 24 hours and reduce the data to 1-hr averages (Table 32, Item1)	¥	4/11/05
63.1568(b)(5)	Demonstrate Initial Compliance with Emission Limitation: Average SO ₂ emissions measured by CEMS in initial performance test not greater than 250 ppmvd at 0% excess O ₂ , and monitoring system meets applicable requirements (Table 33, Item 2.a)	¥	9/8/05
63.1568(b)(6)	Demonstrate initial compliance by submitting Operation, Maintenance, and Monitoring Plan	¥	5/11/05
63.1568(b)(7)	Submit Notice of Compliance Status	¥	5/11/05

IV. Source Specific Applicable Requirements

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
63.1568(c)	Demonstrate Continuous Compliance with Emission Limitation and	Y	4/11/05
	Work Practice Standards		
63.1568(c)(1)	Demonstrate Continuous Compliance with Emission Limitation: collect	Y	4/11/05
	hourly average SO ₂ monitoring data; maintain hourly average below		
	applicable limit; determine and record each 12-hour concentration;		
	report 12-hour concentration greater than applicable limitation (Table		
	34, Item <u>21</u> .a)		
63.1568(c)(2)	Demonstrate Continuous Compliance with Work Practice Standards by	Y	4/11/05
	complying with the procedures in Operation, Maintenance, and		
	Monitoring Plan.		
63.1569	Bypass Lines	Y	4/11/05
63.1569(a)	Work Practice Standards for Bypass Lines	Y	4/11/05
63.1569(a)(1)	Work Practice Standard: Option 3 – Install solid blind between flanges	Y	4/11/05
(i)	(Table 36, Item 3)		
63.1569(a)(3)	Prepare Operation, Maintenance, and Monitoring Plan and operate at all	Y	4/11/05
	times according to the procedures in the plan		
63.1569(b)	Initial Compliance Demonstration	¥	5/11/05
63.1569(b)(2)	Initial Compliance Demonstration: as part of Notification of	¥	5/11/05
	Compliance Status, certify that equipment is installed, the equipment		
	operational by compliance date, and identify the type of equipment		
	installed. (Table 38, Item 1.c)		
63.1569(b)(3)	Submit Operation, Maintenance, and Monitoring Plan as part of NOCS	¥	5/11/05
63.1569(b)(4)	Submit Notification of Compliance Status	¥	4/11/05
63.1569(c)	Continuous Compliance Demonstration	Y	4/11/05
63.1569(c)(1)	Visually inspect the blind at least once a month and record whether the	Y	4/11/05
	blind is maintained in the correct position (Table 39, Item 3)		
63.1569(c)(2)	Comply with procedures in Operation, Maintenance, and Monitoring	¥	4/11/05
	Plan	_	
63.1570	General Compliance Requirements	Y	4/11/05
63.1570(a)	Operate in compliance with non-opacity standards at all times except	Y	4/11/05
	during periods of startup, shutdown, and malfunction, as specified in	1	1,11,03
	63.6(f)(1)		
63.1570(c)	Operate and maintain source including pollution control and monitoring	Y	4/11/05
. ,	Operate and maintain source including pollution control and monitoring	1	T/ 1 1/ U.J

IV. Source Specific Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Kequirement	equipment in accordance with 63.6(e)(1). Between 4/11/05 and the date continuous monitoring systems are installed and validated and operating	(1/11)	Duc
	limits have been set, maintain a log detailing operation and maintenance of process and equipment.		
63.1570(d)	Develop and implement startup, shutdown, and malfunction plan (SSMP) in accordance with 63.6(e)(3)	Y	4/11/05
63.1570(e)	Operate in accordance with SSMPP during periods of startup, shutdown, and malfunction	Y	4/11/05
63.1570(f)	Report deviations from compliance with this subpart according to the requirements of 63.1575	Y	4/11/05
63.1570(g)	Deviations that occur during startup, shutdown, or malfunction are not violations if operating in accordance with SSMP	Y	4/11/05
63.1571	Performance Tests	¥	5/11/05
63.1571(a)	Conduct Performance Test and submit results no later than 150 days after compliance date	¥	9/8/05
63.1571(a)(1)	For emission limitation or work practice standard where compliance not demonstrated using performance test, opacity observation, or visible emission observation, conduct initial compliance demonstration within 30 days after compliance date	¥	5/11/05
63.1571(b)	Requirements for Performance Tests	¥	9/8/05
63.1571(b)(1)	Conduct performance tests in accordance with the requirements of 63.7(e)(1)	¥	9/8/05
63.1571(b)(2)	Conduct three separate test runs of at least an hour for each performance test	¥	9/8/05
63.1571(b)(3	Conduct each performance evaluation in accordance with the requirements of 63.8(e)	¥	9/8/05
63.1571(b)(4)	Performance tests not conducted during periods of startup, shutdown, or malfunction	¥	9/8/05
63.1571(b)(5)	Arithmetic average of emission rates	¥	9/8/05
63.1572	Monitoring installation, operation, and maintenance requirements	Y	4/11/05
63.1572(a)	Requirements for installation, operation, and maintenance of continuous emission monitoring system	Y	4/11/05
63.1572(a)(1)	SO ₂ CEMS must meet requirements of Performance Specification 2 (40	Y	4/11/05

IV. Source Specific Applicable Requirements

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
1	CFR Part 60, App B) (Table 40, Item 4)	(=/- ()	
63.1572(a)(2)	Conduct performance evaluation for SO ₂ CEMS according to	¥	9/8/05
	Performance Specification 2 (Table 40, Item 4)	_	3,0,00
63.1572(a)(3)	CEMS complete one cycle of operation for each 15-minute period	Y	4/11/05
63.1572(a)(4)	Data reduction per 63.8(g)(2)	Y	4/11/05
63.1572(d)	Data monitoring and collection requirements	Y	4/11/05
63.1572(d)(1)	Conduct monitoring at all times, except for monitoring malfunctions, repairs, and QA/QC activities	Y	4/11/05
63.1572(d)(2)	Data recorded during monitoring malfunctions, repairs, and QA/QC activities not used for compliance purposes	Y	4/11/05
63.1573	Monitoring Alternatives	Y	4/11/05
63.1573(d)	Monitoring for alternative parameters (optional)	Y	4/11/05
63.1573(e)	Alternative Monitoring Requests (optional)	Y	4/11/05
63.1574	Notification Requirements	Y	5/11/05
63.1574(a)	Notifications Required by Subpart A	Y	5/11/05 and
	1 7 1		subsequent
63.1574(a)(1)	Submit notification of intent to construct or reconstruct according to 63.9(b)(5)	<u>Y</u>	1
63.1574(a)(2)	Submit notification of intent to conduct performance test 30 days before	¥	30 days
	scheduled (instead of 60 days)	-	before test
63.1574(a)(3)	Notification of Compliance Status	¥	5/11/05
63.1574(a)(3)	Submit Notification of Compliance Status for initial compliance	¥	5/11/05
(i)	demonstration that does not include a performance test, no later than 30		
	days following completion of initial compliance demonstration		
63.1574(a)(3)	Submit Notification of Compliance Status for initial compliance	¥	9/8/05
(ii)	demonstration that includes a performance test, no later than 150 days		
	after source compliance date		
63.1574(d)	Information to be Submitted in Notice of Compliance Status (Table 42):	¥	5/11/05
	identification of affected sources and emission points (Item 1); initial		
	compliance demonstration (Item 2); continuous compliance (Item 3)		
63.1574(f)	Requirement to prepare Operation, Maintenance, and Monitoring Plan	Y	5/11/05
63.1574(f)(1)	Submit plan to permitting authority for review and approval along with	¥	5/11/05
	NOCS. Include duty to prepare and implement plan into Part 70 or 71		9/8/05

IV. Source Specific Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	permit.		
63.1574(f)(2)	Minimum contents of Operation, Maintenance, and Monitoring Plan	Y	5/11/05
63.1575	Reports	Y	7/31/05
63.1575(a)	Required reports: Statement that there were no deviations or report	Y	7/31/05
	including information in 1575(d) or (e) (Table 43, Item 1)		
63.1575(b)	Specified semiannual report submittal dates	Y	7/31/05
63.1575(c)	Information required in compliance report	Y	7/31/05
63.1575(d)	Information required for deviations from emission limitations and work	Y	7/31/05
	practice standards where CEMS or COMS is not used to comply with		
	emission limitation or work practice standard		
63.1575(e)	Information required for deviations from emission limitations and work	Y	7/31/05
	practice standards where CEMS or COMS is used to comply with		
	emission limitation or work practice standard		
63.1575(f)	Additional information for compliance reports	Y	7/31/05
63.1575(f)(1)	Requirement to submit performance test reports	¥	1/31/06
63.1575(f)(2)	Submittal of requested change in the applicability of an emission	Y	7/31/05
	standard		
63.1575(g)	Submittal of reports required by other regulations in place of or as part	Y	4/11/05
	of compliance report if they contain the required information		
63.1575(h)	Reporting requirements for startups, shutdowns, and malfunctions	Y	7/31/05
63.1576	Recordkeeping	Y	4/11/05
63.1576(a)	Required Records – General	Y	4/11/05
63.1576(b)	Records for CEMS	Y	4/11/05
63.1576(d)	Records required by Tables 34 and 35 of Subpart UUU	Y	4/11/05
63.1576(e)	Maintain copy of Operation, Maintenance, and Monitoring Plan	Y	4/11/05
63.1576(f)	Records of changes that affect emission control system performance	Y	4/11/05
63.1576(g)	Records in a form suitable and readily available for review	Y	4/11/05
63.1576(h)	Maintain records for 5 years	Y	4/11/05
63.1576(i)	Records onsite for two years; may be maintained offsite for remaining 3	Y	4/11/05
	years		

IV. Source Specific Applicable Requirements

Table IV – AQb Source-specific Applicable Requirements S1765– OPCEN SULFUR PLANT3 (SRU3) S4180 – OPCEN SULFUR PLANT4 (SRU4)

	See Table IV – AQ for additional requirements.		
40 CFR Part 63 Subpart A	MACT General Provisions		
63.4	Prohibited Activities and Circumvention	Y	4/11/05
63.6	Compliance with Standards and Maintenance Requirements	Y	4/11/05
63.6(e)	Operation and Maintenance Requirements	Y	4/11/05
63.6(f)	Compliance with Nonopacity Emission Standards	Y	4/11/05
63.6(g)	Use of Alternative Nonopacity Emission Standard (optional	Y	4/11/05
63.8	Monitoring	Y	4/11/05
63.9	Notifications	Y	4/11/05
63.9(b)(5)	Submit notification of intent to construct or reconstruct	<u>Y</u>	1/11/05
63.9(h)	Notification of Compliance Status	¥	5/11/05 and
03.7(11)	rotification of compliance status	-	Subsequent
63.9(j)	Change in information already provided	Y	4/11/05
63.10	Recordkeeping and Reporting Requirements	Y	4/11/05
63.10(a)	General Information	Y	4/11/05
63.10(b)	General Recordkeeping Requirements	Y	4/11/05
63.10(b)(2)	Records to be maintained	Y	4/11/05
63.10(c)	Recordkeeping requirements for Continuous Monitoring Systems	Y	4/11/05
63.10(d)	General Reporting Requirements	Y	4/11/05
63.10(e)	Additional reports for sources with Continuous Monitoring Systems	Y	4/11/05
63.10(e)(2)	Reporting results of Continuous Monitoring System performance evaluation	¥	9/8/05
63.10(e)(3)	Excess Emissions and Continuous Monitoring System Performance Report and Summary Report	Y	4/11/05
40 CFR 63	NESHAP for Petroleum Refineries: Sulfur Recovery Units		
Subpart UUU			
63.1568	Requirements for Sulfur Recovery Units	Y	4/11/05
63.1568(a)	Emission Limitations and Work Practice Standards for Sulfur Recovery Units	Y	4/11/05
63.1568(a)(1)	Sulfur Emission Limitation from Claus sulfur recovery units subject to NSPS: 250 ppmvd SO ₂ at 0% excess air (Table 29, Item 1.a)	Y	4/11/05
63.1568(a)(3)	Prepare Operation, Maintenance, and Monitoring Plan and operate at all times according to the procedures in the plan	Y	4/11/05
63.1568(b)	Demonstrate Initial Compliance with Emission Limitation and Work Practice Standard	¥	4/11/05
63.1568(b)(1)	Continuous Emission Monitoring System to measure and record hourly average SO ₂ concentration, with O ₂ monitor to correct excess air concentration (Table 31, Item 1.a)	¥	4/11/05
63.1568(b)(5)	Demonstrate Initial Compliance with Emission Limitation: Certification that vent meets NSPS SO ₂ limit; certification that CEMS meets applicable requirements of 63.1572. (Table 33, Item 1.a)	¥	5/11/05
63.1568(b)(6)	Demonstrate initial compliance by submitting Operation, Maintenance, and Monitoring Plan	¥	5/11/05
63.1568(b)(7)	Submit Notice of Compliance Status	¥	5/11/05
63.1568(c)	Demonstrate Continuous Compliance with Emission Limitation and Work Practice Standards	Y	4/11/05

IV. Source Specific Applicable Requirements

Table IV – AQb Source-specific Applicable Requirements S1765– OPCEN SULFUR PLANT3 (SRU3) S4180 – OPCEN SULFUR PLANT4 (SRU4)

63.1568(c)(1)	Demonstrate Continuous Compliance with Emission Limitation: collect hourly average SO ₂ monitoring data; maintain hourly average below	Y	4/11/05
	applicable limit; determine and record each 12-hour concentration;		
	report 12-hour concentration greater than applicable limitation (Table		
	34, Item 1.a)		
63.1568(c)(2)	Demonstrate Continuous Compliance with Work Practice Standards by	Y	4/11/05
. , , ,	complying with the procedures in Operation, Maintenance, and		
	Monitoring Plan.		
63.1570	General Compliance Requirements	Y	4/11/05
63.1570(a)	Operate in compliance with non-opacity standards at all times except	Y	4/11/05
	during periods of startup, shutdown, and malfunction, as specified in		
	63.6(f)(1)		
63.1570(c)	Operate and maintain source including pollution control and	Y	4/11/05
	monitoring equipment in accordance with 63.6(e)(1). Between 4/11/05		
	and the date continuous monitoring systems are installed and validated		
	and operating limits have been set, maintain a log detailing operation		
	and maintenance of process and equipment.		
63.1570(d)	Develop and implement startup, shutdown, and malfunction plan	Y	4/11/05
	(SSMP) in accordance with 63.6(e)(3)		
63.1570(e)	Operate in accordance with SSMPP during periods of startup,	Y	4/11/05
	shutdown, and malfunction		
63.1570(f)	Report deviations from compliance with this subpart according to the	Y	4/11/05
(0.1550()	requirements of 63.1575	* 7	4/11/07
63.1570(g)	Deviations that occur during startup, shutdown, or malfunction are not	Y	4/11/05
62.1572	violations if operating in accordance with SSMP	3.7	4/11/07
63.1572	Monitoring installation, operation, and maintenance requirements	Y Y	4/11/05
63.1572(a)	Requirements for installation, operation, and maintenance of	ĭ	4/11/05
62 1572(a)(1)	continuous emission monitoring system SO ₂ CEMS must meet requirements of Performance Specification 2 (40)	Y	4/11/05
63.1572(a)(1)	CFR Part 60, App B) (Table 40, Item 4)	1	4/11/03
63.1572(a)(3)	CEMS complete one cycle of operation for each 15-minute period	Y	4/11/05
63.1572(a)(4)	Data reduction per 63.8(g)(2)	Y	4/11/05
63.1572(d)	Data monitoring and collection requirements	Y	4/11/05
63.1572(d)(1)	Conduct monitoring at all times, except for monitoring malfunctions,	Y	4/11/05
03.1372(u)(1)	repairs, and QA/QC activities	1	4/11/03
63.1572(d)(2)	Data recorded during monitoring malfunctions, repairs, and QA/QC	Y	4/11/05
03.13 / 2(4)(2)	activities not used for compliance purposes	•	1/11/05
63.1573	Monitoring Alternatives	Y	4/11/05
63.1573(d)	Monitoring for alternative parameters (optional)	Y	4/11/05
63.1573(e)	Alternative Monitoring Requests (optional)	Y	4/11/05
63.1574	Notification Requirements	Y	4/11/05
63.1574(a)	Notifications Required by Subpart A	Y	5/11/05 and
		•	subsequent
63 1574(a)(1)	Submit notification of intent to construct or reconstruct according to	v	
63.1574(a)(1)	- 1	<u>Y</u>	
	<u>63.9(b)(5)</u>		
63.1574(a)(3)	Notification of Compliance Status	¥	5/11/05
63.1574(d)	Information to be Submitted in Notice of Compliance Status (Table	¥	5/11/05
	42): identification of affected sources and emission points (Item 1);		İ

IV. Source Specific Applicable Requirements

Table IV – AQb Source-specific Applicable Requirements S1765– OPCEN SULFUR PLANT3 (SRU3) S4180 – OPCEN SULFUR PLANT4 (SRU4)

	initial compliance demonstration (Item 2); continuous compliance		
	(Item 3)		
63.1574(f)	Requirement to prepare Operation, Maintenance, and Monitoring	Y	4/11/05
	Manual		
63.1574(f)(1)	Submit plan to permitting authority for review and approval along with	¥	5/11/05
	NOCS. Include duty to prepare and implement plan into Part 70 or 71		9/8/05
	permit.		
63.1574(f)(2)	Minimum contents of Operation, Maintenance, and Monitoring Plan	¥	5/11/05
			<u>4/11/05</u>
63.1575	Reports	Y	4/11/05
63.1575(a)	Required reports: Statement that there were no deviations or report	Y	7/31/05
	including information in 1575(d) or (e) (Table 43, Item 1)		
63.1575(b)	Specified semiannual report submittal dates	Y	7/31/05
63.1575(c)	Information required in compliance report	Y	7/31/05
63.1575(d)	Information required for deviations from emission limitations and work	Y	7/31/05
	practice standards where CEMS or COMS is not used to comply with		
	emission limitation or work practice standard		
63.1575(e)	Information required for deviations from emission limitations and work	Y	7/31/05
	practice standards where CEMS or COMS is used to comply with		
	emission limitation or work practice standard		
63.1575(f)	Additional information for compliance reports	Y	7/31/05
63.1575(f)(2)	Submittal of requested change in the applicability of an emission	Y	7/31/05
	standard		
63.1575(g)	Submittal of reports required by other regulations in place of or as part	Y	4/11/05
	of compliance report if they contain the required information		
63.1575(h)	Reporting requirements for startups, shutdowns, and malfunctions	Y	7/31/05
63.1576	Recordkeeping	Y	4/11/05
63.1576(a)	Required Records – General	Y	4/11/05
63.1576(b)	Records for CEMS	Y	4/11/05
63.1576(d)	Records required by Tables 34 and 35 of Subpart UUU	Y	4/11/05
63.1576(e)	Maintain copy of Operation, Maintenance, and Monitoring Plan	Y	4/11/05
63.1576(f)	Records of changes that affect emission control system performance	Y	4/11/05
63.1576(g)	Records in a form suitable and readily available for review	Y	4/11/05
63.1576(h)	Maintain records for 5 years	Y	4/11/05
63.1576(i)	Records onsite for two years; may be maintained offsite for remaining	Y	4/11/05
. ,	3 years		

Table VII – AFa

Applicable Limits and Compliance Monitoring Requirements
S1425 – DH CATALYTIC REFORMER UNIT (CRU)

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	1			ble AE for additional requir		ı	T
HCl	MACT	Y	4/11/05	Reduce HCl emissions by	MACT	P/E (Initial	Continuous
	Subpart			97% (wt) or HCl emissions	Subpart UUU	compliance	alkalinity or
	UUU			of 10 ppmv at $3\%O_2$	63.1567(b)	demonstratio	pH and
	63.1567(a)(63.1567(c)	n,	water/gas
	1)				63.1570(c)	performance	flow
					63.1571(b)	test, CPM	monitors,
					63.1572(c)	installation	Performance
					63.1572(d)	and	test, Records,
					63.1574(a)(2)	performance	and reports
					63.1574(a)(3)	evaluation,	
					(i)	establish	
					63.1574(a)(3)	operating	
					(ii)	limits,	
					63.1574(d)	submit	
					63.1575(a)	initial	
					63.1575(b)	notifications	
					63.1575(c)	and NOCS),	
					63.1575(d)	P/Semi-	
					63.1575(f)(1)	Annual (
					63.1576(a)	compliance	
					63.1576(b)	report), and	
					63.1576(d)	С	
					63.1576(f)	(parameter	
					63.1576(g)	monitoring,	
					63.1576(h)	maintain	
					22.122 / 0(11)	records)	

Table VII - AG
Applicable Limits and Compliance Monitoring Requirements
S1426 - CP CATALYTIC CRACKING UNIT (CCU)

	Emission		Future		Monitoring	Monitoring	
Type of	Limit	FE	Effective		Requirement	Frequency	Monitoring
Limit	Citation	Y/N	Date	Limit	Citation	(P/C/N)	Type
Opacity	BAAQMD	Y		Ringelmann No. 1 for no	NSPS	C	Opacity
	6-301			more than 3	Subpart J		monitor and
				minutes/hour	60.105(a)(1),		Records
					60.105(e)(1)		
					BAAQMD 6-		
					501, 6-502		
					and 1-522		

Table VII - AG
Applicable Limits and Compliance Monitoring Requirements
S1426 - CP CATALYTIC CRACKING UNIT (CCU)

Type of	Emission Limit	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Citation	Y/N	Date	Limit	Citation	(P/C/N)	Type
Opacity	BAAQMD	Y		Ringelmann No. 1 for no	BAAQMD	C	Water seal
	Condition			more than 3	Condition #		monitoring
	# 12911			minutes/hour	12911		and Records
	Part 4				Part 5		
Opacity	BAAQMD	Y		20% opacity for no more	NSPS	С	Opacity
	6-302			than 3 minutes/hour	Subpart J		monitor and
					60.105(a)(1),		Records
					60.105(e)(1)		
					BAAQMD 6-		
					501, 6-502		
					and 1-522		
Opacity	NSPS	Y		30 % opacity, except for	NSPS	С	Opacity
I	Subpart J			one 6 minute average	Subpart J		monitor and
	60.102(a)			opacity reading in 1 hour	60.105(a)(1),		records
	(2)				60.105(e)(1))		
Opacity	BAAQMD	Y		Ringelmann No. 0.5 for	BAAQMD	P/E	Visible
	Condition			no more than 3	Condition #		emissions
	#12911			minutes/hour for	12911		inspection
	Part 2			Catalyst Storage and	Part 3 and		
				Injection System	Part 4		
Opacity	MACT	Y	4/11/05	Opacity of emissions	63.1564(b)(1)	P/E (Initial	Records,
(Surrogate	Subpart			must not exceed 30%,	63.1564(c)(1)	Compliance	calculations,
for Metal	UUU			except for one 6-minute	63.1570(c)	demonstrati	Performance
HAPs)	63.1564(a)(opacity reading in any 1-	63.1572(b)	on, COMS	Tests, and
	1)(i)			hour period	63.1572(d)	installation	Reports
					63.1574(a)(3)	and	
					(I)	performance	
					63.1574(d)	test, submit	
					63.1575(a)	initial	
					63.1575(b)	notifications	
					63.1575(c)	and NOCS),	
					63.1575(d)	P/D	
					63.1576(a)	(operational	
					63.1576(b)	records),	
					63.1576(c)	P/Semi-	
					63.1576(d)	Annual	
					63.1576(f)	(compliance report), and	
					63.1576(g)		
					63.1576(h)	C (opacity monitoring,	
					63.1576(i)	maintain	
					,	records)	
FP	Degulation	Y		0.15 grain per dscf	BAAQMD	P/A	Source Test
гr	Regulation 6-310	1		0.15 gram per usci	Condition #	г/А	Source Test
	0-310				18618 Part 9		
					& Condition		
i e	ll .	l		l l	12911 Part 3		

Table VII - AG
Applicable Limits and Compliance Monitoring Requirements
S1426 - CP CATALYTIC CRACKING UNIT (CCU)

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
FP	BAAQMD 6-311	Y		4.10 P ^{0.67} lb/hr particulate, where P is process weight rate in ton/hr	BAAQMD Condition # 18618 Part 9 & Condition 12911 Part 3	P/A	Source Test
PM	NSPS Subpart J 60.102(a)(1) and 60.102(b)	Y		PM emissions shall not exceed 1.0 lb per 1000 lb of coke burn-off plus incremental emissions of 0.10 lb/MMBtu for liquid or solid auxiliary fuel burned in downstream boilers	NSPS Subpart J 60.105(c), 60.105(d))	P/D	Recordkeepin g
PM	BAAQMD Condition # 18407 Part 2	Y		During periods when the spent catalyst hopper is blinded off from the CO Boilers, the amount of catalyst loaded into the spent catalyst hopper shall not exceed 2000 tons in any consecutive 12-month period	BAAQMD Condition # 18407 Part 3	P/D	Records
PM (Surrogate for Metal HAPs)	MACT Subpart UUU 63.1564(a)(1)(i)	Y	4/11/05	PM emissions must not exceed 1.0 lb per 1000 lb of coke burn-off plus incremental emissions of 0.10 lb/MMBtu for liquid or solid auxiliary fuel burned in downsteam boilers	Subpart UUU 63.1564(b)(2) 63.1564(b)(4) (i) 63.1564(c)(1) 63.1570(c) 63.1571(a)(1) 63.1571(a)(1) 63.1574(d) 63.1575(a) 63.1575(b) 63.1575(d) 63.1575(d) 63.1576(d) 63.1576(d) 63.1576(f) 63.1576(g)	P/E (Initial Compliance demonstrati on: performance test, emission calculation, submit initial notifications and NOCS); P/D (operational records); P/Semi- Annual (compliance report); and C (maintain records)	Records, calculations, Performance Test, and Reports
SO ₂	BAAQMD 9-1-310.1	Y		SO ₂ emissions shall not exceed 1000 ppmv	63.1576(i) BAAQMD 9-1-502 and 1-522	С	SO ₂ CEM and records

Table VII - AG
Applicable Limits and Compliance Monitoring Requirements
S1426 - CP CATALYTIC CRACKING UNIT (CCU)

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO ₂	NSPS	Y	Date	Without add-on control	NSPS	P	Records
502	Subpart J	1		device, maintain SO ₂	Subpart J	1	Records
	60.104(b)(emissions to atmosphere	60.104(c),		
	2)			at less than or equal to	60.105(c),		
	2)			9.8 kg of SO ₂ per 1000	60.106(i)(12),		
				kg of coke burn-off	60.108(d) and		
				ing of cone cum off	60.108(e)		
VOC	BAAQMD	Y		Abatement of emissions	BAAQMD	P/E	Records
, 50	8-10-301	-		from process vessel	8-10-401.2	1,2	11000145
				depressurization is	(SIP) and		
				required until pressure is	8-10-501 &		
				reduced to less than 1000	502 (non- SIP)		
				mm Hg	((((((((((((((((((((
VOC	BAAQMD	Y		Equipment that leaks >	BAAQMD	P/A	Visual
	8-18-301			100 ppm shall not be	8-18-401,	-,	inspections,
				used unless the leak is	8-18-402,		portable HC
				discovered and	8-18-501,		detector (EPA
				minimized within 24	8-18-502 and		Method 21)
				hours and repaired	8-18-602		and records of
				within 7 days			inspections
							and repairs
VOC	BAAQMD	Y		Valves that leak > 100	BAAQMD	P/Q or A	Visual
	8-18-302			ppm shall not be used	8-18-306,		inspections,
				unless the leak is	8-18-401,		portable HC
				discovered and	8-18-402,		detector (EPA
				minimized within 24	8-18-404,		Method 21)
				hours and repaired	8-18-501,		and records of
				within 7 days	8-18-502 and		inspections
					8-18-602		and repairs
VOC	BAAQMD	Y		Pumps and compressors	BAAQMD	P/D – visual	Visual
	8-18-303			that leak > 500 ppm shall	8-18-306,	inspection	inspections,
				not be used unless the	8-18-401,	and Q -	portable HC
				leak is discovered and	8-18-402,	monitoring	detector (EPA
				minimized within 24	8-18-403,		Method 21)
				hours and repaired	8-18-501,		and records of
				within 7 days	8-18-502 and		inspections
					8-18-602		and repairs
VOC	BAAQMD	Y		Connections that leak >	BAAQMD	P/Q	Visual
	8-18-304			100 ppm shall not be	8-18-401,		inspections,
				used unless the leak is	8-18-402,		portable HC
				discovered by an	8-18-501,		detector (EPA
				operator and minimized	8-18-502 and		Method 21)
				within 24 hours and	8-18-602		and records of
				repaired within 7 days or			inspections
				if the leak is discovered			and repairs
				by an APCO and			
				repaired within 24 hours			

Table VII - AG
Applicable Limits and Compliance Monitoring Requirements
S1426 - CP CATALYTIC CRACKING UNIT (CCU)

	Emission		Future		Monitoring	Monitoring	
Type of	Limit	FE	Effective		Requirement	Frequency	Monitoring
Limit	Citation	Y/N	Date	Limit	Citation	(P/C/N)	Type
VOC	BAAQMD	Y		Pressure release devices	BAAQMD	P/Q or A	Visual
	8-18-305			that leak > 500 ppm shall	8-18-306,		inspections,
				not be used unless the	8-18-401,		portable HC
				leak is discovered by an	8-18-402,		detector (EPA
				operator and minimized	8-18-501,		Method 21)
				within 24 hours and	8-18-502 and		and records of
				repaired within 15 days	8-18-602		inspections
				or if the leak is			and repairs
				discovered by an APCO and repaired within 7			
				days			
VOC	BAAQMD	Y		Limitations on non-	BAAQMD	P/5 years or	Records
	8-18-306			repairable equipment	8-18-501,	next	And
					8-18-502 and	turnaround	Sampling
TIO C	D + + 61 (D	* 7		T	8-18-602	D/O 4	T. 1
VOC	BAAQMD	Y		Equipment that leaks liquid > 3 drops per	BAAQMD	P/Q or A	Visual inspections,
	8-18-307 and			minute and > 100 ppm	8-18-306, 8-18-401,		portable HC
	8-18-211			VOC shall not be used	8-18-402,		detector (EPA
	0-10-211			unless the leak is	8-18-501,		Method 21)
				discovered and	8-18-502 and		and records of
				minimized within 24	8-18-602		inspections
				hours and repaired			and repairs
				within 7 days			
VOC	BAAQMD	N		Pressure relief devices	BAAQMD	С	Records and
	8-28-303			shall be vented to vapor	8-28-403,		testing with
				recovery or disposal	8-28-404, 8-		approved
				system with a control	28-405, and 8-28-602		methods
				efficiency of 95% by weight	8-28-002		
VOC	BAAQMD	N		If one reportable Release	BAAQMD	P/E	Reporting and
. 30	8-28-304	- '		Event from a pressure	8-28-401,		prescribed
				relief device in any	8-28-402,		measures.
				consecutive 5 year	8-28-403,		
				period, shall meet	8-28-404 and		
				specified conditions	8-28-405		
CO	NSPS	Y		CO emissions shall not	NSPS	C and P/D	CO CEM and
	Subpart J			exceed 500 ppmv	Subpart J		records
	60.103(a)				60.105(a)(2), 60.105(c),		
NOx, SO2,	BAAQMD	Y		Daily emission increases	BAAQMD	P/D	Calculation,
CO and PM	Condition	I		over baseline profile	Condition	1,1	reporting and
	#7618,			shall be offset by	#7618 ,		records
	Part A			reductions below profile	Part B, F and		
				at a ratio of at least 2.0:1	G		

Facility Name: [Name of Facility]
Permit for Facility #: [IRIS #]

Table VII - AG Applicable Limits and Compliance Monitoring Requirements S1426 - CP CATALYTIC CRACKING UNIT (CCU)

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring
		Y	Date			(P/C/N) P/E	Type Records
NOx, SO2, CO and PM	BAAQMD Condition	ĭ		If profile has more than	BAAQMD Condition	P/E	Records
CO and PM	#7618,			5 non-complying days, the refinery shall not	#7618, Part G		
	Part C.c			process more than	#/016, Fait G		
	ran C.C			65,000 barrels of			
				catalytic cracker feed per			
				stream day			
CO	MACT	Y	4/11/05	CO emissions shall not	MACT	P/E (Initial	Records,
(Surrogate	Subpart	1	4/11/03	exceed 500 ppmv	Subpart UUU	Compliance	Performance
for HAP	UUU			execed 500 ppinv	63.1565(b)(1)	Demonstrati	Test, and CO
VOC)	63.1565(a)(63.1565(b)(2)	on,	CEM
100)	1)				63.1565(b)(4)	performance	CLIVI
	1)				63.1565(b)(6)	test, CEMS	
					63.1565(c)	installation	
					63.1570(c)	and	
					63.1571(a)(1)	performance	
					63.1571(b)	evaluation.	
					63.1572(a)	submit	
					63.1572(d)	initial	
					63.1574(a)(ii)	notifications	
					63.1574(d)	and NOCS),	
					63.1575(a)	P/Semi-	
					63.1575(b)	Annual	
					63.1575(c)	(compliance	
					63.1575(e)	report), and	
					63.1575(f)(1)	C (emissions	
					63.1576(a)	monitoring,	
					63.1576(b)	maintain	
					63.1576(d)	records)	
					63.1576(f)		
					63.1576(g)		
					63.1576(h)		

Table VII – AHa
Applicable Limits and Compliance Monitoring Requirements
S1431 –CP SULFUR PLANT 1 (SRU1), S1432 – CP SULFUR PLANT 2 (SRU2)

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	I		AH for additional requir		T		
SO_2	MACT	Y	4/11/05	SO ₂ emissions shall not	MACT	P/E (Initial	Records,
	Subpart UUU			exceed 250 ppmv at 0%	Subpart UUU	compliance	SO_2 and O_2
	63.1568(a)(1)			excess O ₂	63.1568(b)(1)	demonstrati	CEM,
	(i)				63.1568(b)(2)	on,	Performance
					63.1568(b)(5)	performance	Test,
					63.1568(c)(1)	test, CEMs	Reports
					63.1570(c)	installation	
					63.1571(b)	and	
					63.1572(a)	performance	
					63.1572(d)	evaluation,	
					63.1574(a)(2)	submit	
					63.1574(a)(3)	initial	
					63.1574(d)	notifications	
					63.1574(f)(1)	and NOCS),	
					63.1575(a)	P/D	
					63.1575(b)	(records)	
					63.1575(c)	P/Semi-	
					63.1575(e)	Annual	
					63.1575(f)(1)	(compliance	
					63.1576(a)	report) and	
					63.1576(b)	C (emissions	
					63.1576(d)	monitoring,	
					63.1576(f)	maintain	
					63.1576(g)	records)	
					63.1576(h)		
					63.1576(i)		

Table VII – AHb Applicable Limits and Compliance Monitoring Requirements S1765 – OPCEN SULFUR PLANT 3(SRU3), S4180 – OPCEN SULFUR PLANT 4 (SRU4)

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
			See Table	AH for additional requir	ements.	, ,	31

Facility Name: [Name of Facility]
Permit for Facility #: [IRIS #]

Table VII – AHb Applicable Limits and Compliance Monitoring Requirements S1765 – OPCEN SULFUR PLANT 3(SRU3), S4180 – OPCEN SULFUR PLANT 4 (SRU4)

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO_2	MACT	Y	4/11/05	250 ppmv SO ₂ at 0%	MACT	P/E (Initial	Records,
	Subpart UUU			$excess O_2$	Subpart UUU	Compliance	SO ₂ and O ₂
Ì	63.1568(a)(1)				63.1568(b)(1)	Demonstrati	CEM,
					63.1568(b)(5)	on, Submit	Reports
					63.1568(b)(7)	initial	
					63.1568(c)(2)	notifications	
					63.1568(c)(1)	and NOCS),	
					63.1570(c)	P/D	
					63.1572(a)(1)	(records),	
					63.1572(a)(3)	P/Semi-	
					63.1572(a)(4)	Annual	
					63.1572(d)	(compliance	
					63.1574(a)	report), and	
					63.1574(d)	C (emissions	
					63.1575(a)	monitoring, maintain	
					63.1575(b) 63.1575(c)	records)	
					63.1575(e)	records)	
					63.1575(e)		
					63.1575(g)		
					63.1576(a)		
					63.1576(b)		
					63.1576(d)		
					63.1576(e)		
					63.1576(f)		
					63.1576(g)		
					63.1576(h)		
					63.1576(i)		
					, ,		