

Bay Area Air Quality Management District

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**Permit Evaluation
and
Statement of Basis
for
MAJOR FACILITY REVIEW PERMIT
Reopening – Revision 3**

for
**Tesoro Refining and Marketing Company
Facility B2758 & B2759**

Facility Addresses:

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Application: 12599

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Title V Statement of Basis

A. Background

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

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

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

The District issued the initial Title V permit to this facility on December 1, 2003. The District issued a reopened permit, Revision 1, that amended flare and Regulation 9-10 requirements, corrected errors, and incorporated some new sources and permit conditions on December 16, 2004. EPA did not object to the issuance of that permit.

The District published another draft permit, Revision 2, for public comment on April 12, 2005. That draft permit addressed a number of issues raised by EPA in a letter dated October 8, 2004. . (Note that EPA commented on five refineries in this letter. Not all comments concern this facility.) In addition, some issues raised in the refinery's appeal to the December 16, 2004 permit and some refinery comments on that permit were addressed. The draft permit revisions have not yet been finalized.

In response to petitions to reconsider its decision to not object to Revision 1, EPA issued an order on March 15, 2005. That order directed the District to reopen the permit to address possible deficiencies that EPA had identified based upon the petitions. The current draft permit, Revision 3, addresses the deficiencies identified in the March order that were not already addressed in Revision 2.

The draft permit for this action contains the changes that were proposed on April 12, 2005. These draft changes to the permit are clearly shown in "strikeout/underline" format. The changes that are proposed in this action are clearly shown in "double-strikeout/double-underline." When the permit is finalized, the tracking marks will be removed.

The District is soliciting public comment on the revisions proposed in this action.

The reopening is limited to the changes made in this proposal. This statement of basis discusses the changes made by this reopening. It also provides additional analysis supporting certain applicability determinations. Where the additional analysis did not result in a permit change, the analysis is provided for information only. The permit is not being reopened with respect to those issues.

This statement of basis does not address the factual and legal basis for any other permit terms. These are addressed in the comprehensive statements of basis that were prepared for the initial issuance of the permit and for the reopening issued on December 16, 2004. These are available on request.

B. Facility Description

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

C. Permit Content

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

I. Standard Conditions

The District will delete Miscellaneous Conditions I.J.5 through I.J.10 in the permit. The Conditions referred to determinations that the District had intended to make by February 15, 2005 concerning the applicability of certain regulations to the Facility's processes and equipment. The District has made the determinations, which are set forth below in the section entitled "Source-Specific Applicable Requirements," and modified the permit as appropriate.

II. Equipment

Basis for Tank Exemptions:

The basis for the exemptions for sources S22, S59, S131, S212, and S654 have been added to Table IID Tank Sources Exempt From Permitting. In the proposed reopening noticed on April 15, 2005, a column was added to Table IID to add the citation or reason for the tank exemptions.

Missing Information on Tanks:

S223 Tank A-223 was demolished.
S231 Tank A-231 was demolished.
S240 Tank A-240 was demolished.
S276 Tank A-276 was demolished.
S370 Tank A-370 was demolished.
S371 Tank A-371 was demolished.
S372 Tank A-372 was demolished.
S373 Tank A-373 was demolished.
S375 Tank A-375 was demolished.
S376 Tank A-376 was demolished.

S384 Tank A-384 was demolished.

S387 Tank A-387 was demolished.

S388 Tank A-388 was demolished.

S389 Tank A-389 was demolished.

S390 Tank A-390 was demolished.

The District is proposing to add S506 Tank A-506 to Table IID with the basis for exemption.

S507 Tank A-507 was demolished.

S539 Tank A-539 was demolished.

S615 Tank A-615 was demolished.

S718 Tank A-718 was demolished.

A8 Coker CO Boiler Precipitator and A806 Electrostatic Precipitator for S806 Coker Fluid Coking

S903 No. 5 CO Boiler followed by a single stage electrostatic precipitator abates the S806 Coker. There has been some confusion as to the abatement device number and description of the electrostatic precipitator. The precipitator has been referred to as both “A8 Coker CO Boiler Precipitator” and “A806 Electrostatic Precipitator for S806 Coker Fluid Coking”. Both abatement device numbers appear in Table IIB, condition #22150, and in Table VII-M. To resolve this issue, the District proposes to use A8 Coker CO Boiler Precipitator to refer to the electrostatic precipitator. The District proposes to delete A806 from Table IIB and condition #22150 and change A806 to A8 in Table II-M.

III. Generally Applicable Requirements

No change will be made to this section.

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

- BAAQMD permit conditions. The text of BAAQMD permit conditions is found in Section VI of the permit.
- Federal permit conditions. 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.

Proposed changes to Section IV are primarily routine and include the updating of text to the current standard and updating the applicable requirements tables to reflect the current versions of the cited regulations. However, in some cases the District is proposing to add or remove applicable requirements at the request of Tesoro where there were errors or omissions in the initial permit. A discussion of these "non-routine" changes follows.

40 CFR 61 Subpart FF Language in Table IV-A

The language summarizing the requirements of 40 CFR 61.342(e)(2), 61.342(e)(2)(i), and 61.342(e)(2)(ii) has been corrected in Table IV-A Facility #B2758.

Exemption of Flares from Regulation 8

On page 20 of EPA's Order, EPA states that the District must either conduct a design review of the refinery flares to better demonstrate that the flares consistently meet a 90% control efficiency to qualify for the Regulation 8-1-110.3 exemption from Regulation 8-2 or include Regulation 8-2 as an applicable requirement for those sources. The Order further provides that the permit lacks periodic monitoring for compliance with permit conditions added to ensure that flares are properly operated. Neither of these changes is necessary.

In issuing the permit, the District determined that on the basis of available information, refinery flares when properly operated easily meet a 90% reduction efficiency. In response to concerns previously raised by EPA, the District added permit conditions to ensure the flares are operated in a manner consistent with the operational parameters assumed in determining that they qualify for the exemption. Because the permit conditions were not intended to ensure compliance with an applicable requirement, however, they should not have been identified as federally enforceable; the District has modified the permits to reflect this conclusion. For the same reason, periodic monitoring to ensure compliance with the permit conditions is not necessary.

The District has previously explained that the design of the flares has been dictated by requirements of another agency charged with ensuring the protection of refinery workers and that a properly operating flare so designed will consistently meet the 90% reduction efficiency by a significant margin. In the Order EPA provides no discussion of its apparent rejection of the

explanations and supporting information previously submitted by the District in support of the permits as written.

In response to the Order, the District undertook further consideration of this issue and on reconsideration has determined that Regulation 8, Rule 2 does not apply to refinery flares and, consequently, that there is no need to consider whether the flares qualify for an exemption from Regulation 8 requirements under section 110.3. This determination is driven by a review of the regulatory history of this provision, which demonstrates that Regulation 8-2 was never intended to apply to refinery flares. Unfortunately, focus on the question whether refinery flares qualify for the Regulation 8-1-110.3 exemption has masked the more fundamental applicability issue.

Moreover, even if it is assumed that that flares are generally subject to Regulation 8-2, which would trigger an analysis of whether the flares qualify for an exemption under Regulation 8-1-110.3, the benefits of a design review for this purpose are not apparent. EPA did not rely on the studies referenced by the petitioners. It would be inappropriate to do so because the studies do not provide a basis for making conclusions regarding the performance of refinery flares. In fact, the District is not aware of any credible data that suggests a properly operating refinery flare will not achieve combustion efficiencies significantly better than 90%; nor is it clear how a design review would address such issues if they existed.

Furthermore, recent events – the District’s adoption of the Flare Control Rule (Regulation 12, Rule 12) on July 20, 2005– obviate any need or purported benefit from application of Regulation 8-2 or the exemption criteria in Regulation 8-1-110.3 to refinery flares. The course of the rulemaking was arduous due to the complexities of regulating these sources, which are first and foremost safety devices used when there is a need to release refinery gases to avoid more serious consequences. While it is clear that minimizing the use of flares is possible – and the new regulation requires just this – the mechanism for achieving this result required careful crafting. The refinery is now in the process of developing a Flare Minimization Plan, with the first quarterly status report due in mid-October 2005. Requiring the District and the refineries to engage in competing exercises such as the design review called for by EPA is unnecessary and will detract from the effort to implement the rule.

Finally, in adopting the flare control rule, the District adopted an amendment to Regulation 8, Rule 2, to clarify that the rule does not apply to refinery flares. This amendment was intended to reflect existing regulatory policy. The amendment is consistent with the underlying logic of Regulation 8-2 as a requirement of general applicability intended to fill gaps until source-specific regulations are adopted. In the case of the flare control rule, it was not strictly necessary, given that flares have never been subject to Regulation 8-2. However, the District expects this amendment will put to rest any uncertainty regarding applicability of this regulation to refinery flares.

Monitoring for NSPS Subpart J at Flares

The Orders for Chevron and Valero state that the Air District must either impose the requirements contained in 40 CFR § 60.105(a)(3) or (4), or add monitoring to assure compliance with Chevron permit Condition 18656, Part 7 and Valero Condition 20806, Part 7 (referred to below as “prohibitory conditions”). The Orders for Tesoro and ConocoPhillips indicate EPA’s

intent to treat those permits similarly in the near future. The Air District interprets the Order, in this respect, to assert the need for monitoring to determine whether the refineries are properly claiming that certain flares continue to be exempt from the H₂S standard of § 60.104(a)(1), i.e., that the flares are not used to combust gases on a “routine” basis. The Order does not assert that the exemption has been improperly claimed, but rather that Title V monitoring is required to verify on an ongoing basis whether the exemption is properly claimed. As explained below, the Air District in Revision 3 is proposing to delete the prohibitory conditions, and is otherwise deferring response on this issue until there is new guidance from EPA.

Regarding this issue, the order reflects views expressed in earlier comments from EPA. In an October 6, 2004, letter responding to these comments, the Air District affirmed the importance of determining applicability of Subpart J on a continuing basis but noted that, as a Title V matter, the imposition of monitoring is authorized only for requirements determined to be applicable. The Air District reasoned that therefore, to the extent a flare is, as a factual matter, exempt per § 60.104(a)(1), then the H₂S standard of Subpart J is not applicable and Title V monitoring is not authorized. The October 6 letter sought clarification from EPA on three points: 1) articulation of the broader Title V implementation principle being asserted by EPA, 2) the legal rationale for that principle, and 3) EPA’s plan for ensuring national consistency. To date, EPA has not addressed the first two points.

Concurrent with the March 15, 2005, Orders, EPA also issued guidance addressing the same issue. This guidance would have served to address the Air District’s concern regarding national consistency. However, on May 16, 2005, EPA issued a brief statement withdrawing the March 15 guidance and stating that new guidance would be issued “in the upcoming weeks.” The Air District interprets this to mean either that EPA is reconsidering its position or, at the least, that the new guidance will serve to clarify EPA’s position and rationale. The Air District therefore believes the most efficient course is to defer its response to the Orders until new guidance is issued.

Regarding the prohibitory conditions referred to above, the Air District will propose deletion of these conditions because they are neither required nor helpful. The Air District initially believed these conditions might obviate the need to resolve the disagreement over monitoring for applicability of Subpart J described above. This belief has proven false. Judging from the March 15 Orders, the effect was merely to transpose the very same monitoring issue onto the new prohibitory conditions themselves. In general, there is no requirement in Title V or the implementing regulations to impose such prohibitions. Whether the exemption from the Subpart J H₂S standard has been properly claimed is determined based upon actual events at the refinery, not upon what the refinery is legally authorized to do. Consistent with this principle, if “routine” flaring does occur, then the flare is subject to the H₂S standard of Subpart J and the monitoring requirements of § 60.105(a) regardless of whether any such prohibition exists in the Title V permit. The prohibitory conditions are simply redundant. Deletion of the conditions should facilitate further discussions on this issue by returning the focus to the exemption language of Subpart J.

The permit is not being reopened with respect to this issue.

Monitoring for 6-311 for Cooling Towers:

On page 35 of EPA’s order responding to OCE’s petition that the Administrator object to issuance of Tesoro’s Title V permit, EPA states the the District should add periodic monitoring to assure compliance with BAAQMD Regulation 6-311.

BAAQMD Regulation 6-311 limits the maximum particulate emission from a source even if the grain loading limitation of BAAQMD Regulation 6-310 is satisfied. The following emission calculations for the cooling towers at Tesoro demonstrate a significant margin for compliance with BAAQMD Regulation 6-311. Therefore, periodic monitoring is not justified. The Revision 3 proposal does not include revisions to the permit regarding this item.

The PM10 factors in AP-42 are not the proper factors to use since the factor is based on a total dissolved solids content of 11,500 ppm in the cooling water. Furthermore, AP-42 states “a conservatively high PM-10 emission factor can be obtained by (a) multiplying the total liquid drift factor by the total dissolved solids (TDS) fraction in the circulating water and (b) assuming that, once the water evaporates, all remaining solid particles are within the PM-10 size range.” While this method would be conservative in predicting PM-10 emissions, it would be adequate to estimate total particulate emissions. The calculations below, using the largest cooling tower, S976 No. 5 Gas Plant Cooling Tower, use this method of determining particulate emissions.

Cooling Tower Operating Data for S846 No. 3 HDS Cooling Tower:

Design Circulation Rate: 75,000 gpm $[x(8.34 \text{ lb/gal})x(60 \text{ min/hr}) = 37,530,000 \text{ lb/hr}]$

Drift Rate: 0.02%, or 0.0002 lb drift per lb of cooling water (AP-42, Fifth Edition, Table 13.4-1)

Total Dissolved Solids (TDS) = 387.5 ppm

Regulation 6-311 limit for Process wt rate > 57,320 lb/hr = 40 lb/hr particulate emissions

Particulate Emissions = (circulation rate)x(drift rate)x(measured TDS)

= (75,000 gal/min)x(60min/hr)x(8.34 lb/gal) x (0.0002 lb drift/lb water)x(387.5/1000000)

= 2.91 lb/hr average particulate emissions

This calculation demonstrates that S976 Cooling Tower has a significant margin for compliance with BAAQMD Regulation 6-311. The results of the same calculations for each of the cooling towers at Tesoro are tabulated below. As can be seen, all emissions are substantially below 40 lb/hr. Therefore, periodic monitoring of the cooling towers to assure compliance with BAAQMD Regulation 6-311 is not justified.

Source	Cooling Tower Description	Circulation (gpm)	Drift (lb/hr)	TDS (ppm)	PM10 (lb/hr)
846	3 HDS	12,125	1214	812.5	1
975	4 Gas Plant	69,000	6,906	1698	12
976	5 Gas Plant	75,000	7,506	387.5	3
977	3 Crude	22,000	2,202	812.5	2
978	FWS	4,100	410	783	0.32
979	2 Feed Prep	15,000	1502	1637.5	3
980	Isocracker	12,000	1201	712.5	1

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981	1 HDS	14,000	1,401	762.5	1
982	2 HDS	18,000	1,801	2100	4
983	Alky/2 Ref	34,900	3,493	750	3
985	1 Gas/MTBE	16,000	1,601	762.5	1
987	50 Crude	15,000	1,501	462.5	1
988	3 Reformer	10,000	1,001	825	1

The permit is not being reopened with respect to this issue.

Monitoring for 6-301 and 6-310 for Diesel Backup Engines S1487 and S1488:

On page 40 of EPA's order responding to OCE's petition that the Administrator object to issuance of Tesoro's Title V permit, EPA states that the District should add monitoring for the limit in BAAQMD Regulation 6-310 or explain in the Statement of Basis why it is not needed. Both will be addressed below.

The District has determined that no periodic monitoring is required for the engines for several reasons.

First, the potential to emit (PTE) for particulate for these engines is low. The following table shows the emissions using the factor of 0.0022 lb PM10/hp-hr for diesel engines in Chapter 3, Stationary Internal Combustion Engines, of AP-42, Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Area Sources, Fifth Edition. Each engine is assumed to operate for 500 hours, using the guidance in John Seitz' memo of September 6, 1995 entitled Calculating Potential to Emit (PTE) for Emergency Generators, which states that "...500 hours is an appropriate default assumption for estimating the number of hours that an emergency generator could be expected to operate under worst-case conditions."

Source #	HP	lb/yr @ 500 hr/yr	tons/yr @ 500 hr/yr
1486	420	462	0.231
1488	538	592	0.296
Total			0.527

The emissions would likely be lower than the above estimates because engines in California generally use low-sulfur fuel containing less than 0.05% S, which lowers emissions by some additional amount.

Second, the engines are not subject to BAAQMD Regulation 6-301, which does not allow sources to exceed Ringelmann 1 for more than 3 minutes in any hour, but rather are subject to BAAQMD Regulation 6-303.1, which does not allow sources to exceed Ringelmann 2 for more than 3 minutes in any hour. This standard is roughly equivalent to 40% opacity. The engines are not likely to exceed Ringelmann 2 at any time, particularly because they are likely to use low-sulfur fuel containing less than 0.05% S.

Third, the grain loading is not likely to exceed the limit in BAAQMD Regulation 6-310.

BAAQMD Regulation 6-310 limits PM emissions to 0.15 gr/dscf. If it is assumed that the diesel engine exhaust gases contain 15% excess oxygen under normal operating conditions, the Regulation 6-310 limit can be compared to the AP-42 PM emission factor as follows:

From 40 CFR 60, Appendix A, Method 19, Table 19-1, a stoichiometric dry gas combustion factor of 9,190 dscf/MMBTU is given for distillate oil combustion. At 15% excess O₂ this factor becomes:

$$9,190 \times [21\% / (21\% - 15\%)] = 32,165 \text{ dscf (combustion products)/MMBTU}$$

The conversion of 0.15 gr/dscf @ 15% O₂ to lb/MMBTU is then:

$$(32,165 \text{ dscf/MMBTU}) \times (0.15 \text{ gr/dscf}) \times (\text{lb}/7,000 \text{ gr}) = 0.689 \text{ lb/MMBTU}$$

In the absence of actual emissions data for these engines, the District considers the AP-42 PM10 emission factor for diesel IC engines to be representative. From AP-42 Table 3.3-1, "Emission Factors For Uncontrolled Gasoline And Diesel Industrial Engines", the PM10 emission factor (based on fuel consumption) is 0.31 lb/MMBTU. Since this assumed emission factor is well below the converted Regulation 6-310 emission rate, compliance is assumed.

Fourth, the "CAPCOA/CARB/EPA Region IX Recommended Periodic Monitoring for Generally Applicable Grain Loading Standards in the SIP: Combustion Sources" dated July 2001 recommends that the only monitoring necessary for grain-loading for non-utility distillate-oil-fueled emergency piston-type IC engines is recordkeeping for fuel usage, which is already required for these engines.

The permit is not being reopened with respect to this issue.

Monitoring for 6-301 and 6-310 for S802 FCCU:

A30 Electrostatic Precipitator abates emissions from S802 FCCU/S901 CO Boiler. Table IV – K S802 contains permit condition 11433 part 2B, which requires a continuous opacity monitor. In the reopening noticed on April 15, 2005, Condition 22150 was added to the table. Condition 22150 part 1 requires continuous monitoring of A30 ESP operating parameters for reasonable assurance of compliance with Regulations 6-310. Condition 22150 also requires the operator to conduct an initial compliance demonstration that will establish a correlation between chosen parameters of the continuous opacity meter (voltage/current or opacity) and particulate emissions. The continuous opacity monitor will also be used to assure compliance with Regulations 6-301 and 6-310 in Table VII – K S802. The opacity meter will determine compliance with Regulation 6-301. Once the correlation is established between the chosen parameter of the continuous opacity meter and particulate emissions, the opacity meter will be used to calculate particulate emissions to demonstrate compliance with Regulation 6-310.

The permit is not being reopened with respect to this issue.

Monitoring for 6-301 and 6-310 for S97 FCCU Catalyst Fines Hopper and S98 FCCU East Catalyst Hopper:

Table IV – B S97-Catalyst Fines Hopper, S98-FCCU: Catalyst Fines Hopper, S99-FCCU:Catalyst Fines Hopper

A4 Catalytic Cracker Fines Cyclone and Baghouse abates all three hoppers at the FCCU: S97, S98, and S99. Table IV-B lists condition 19528 part 13 as an applicable requirement for S99. Condition 19528 part 13 requires monitoring of A4 when abating S99. Table VII-D for S99 cites condition 19528 part 13 for monitoring for Regulations 6-301 and 6-310. To require the same monitoring for the other FCCU hoppers, the District is proposing to add S97 and S98 to Condition 19528 part 13. This change will be reflected in applicable requirements in Table IV-B. S97 and S98 will be added to Table VII-D S99 to require the same monitoring for Regulations 6-301 and 6-310. Monthly visible inspections are already required for A4 when abating S99. The same monthly visible inspections will be required when A4 is abating S97 and S98. Monthly visible inspections and the procedures in condition 19528 part 13 shall ensure that the abatement ducting and A-4 Cyclone and Baghouse are properly maintained and operated to demonstrate compliance with Regulations 6-301 and 6-310.

Monitoring for 6-301 and 6-304 for S823 Heat Exchanger Cleaning Pit North and S824 Heat Exchanger Cleaning Pit South:

Table IV – P S823–Heat Exchanger Cleaning Pit North, S824–Heat Exchanger Cleaning Pit South

Regulation 6 applicable requirements will be added to Table IV-P. The District is proposing to create condition 22227 to ensure compliance with Regulation 6-301 and 6-304 when cleaning heat exchanger tubes at S823 and S824. Condition 22227 would be added to Table IV-P. Hourly visual emissions checks while tube cleaning during daylight hours shall ensure that there are no visible emissions and ensure compliance with Regulation 6-301 and 6-304. If visible emissions are detected, corrective action shall be taken to prevent emissions from improper cleaning of soot from furnace tubes. Hourly visual inspections are required after corrective action is taken. The hourly frequency is expected to ensure compliance with Regulations 6-301 and 6-304 since both regulations are based on limitations of visible emissions of three minutes in an hour long period.

V Schedule of Compliance

The facility is currently engaging in an ongoing pattern of recurring violations of various District regulations as a result of emissions of flue gas from its Coker, S-806. The District has opted to pursue the matter by petitioning the District’s Hearing Board for a conditional order for abatement to require Tesoro to address this problem. The Hearing Board approved the Stipulated Conditional Order for Abatement (Docket No. 3492) on May 5, 2005. The terms of the conditional order for abatement have been incorporated into the permit as a schedule of compliance.

VI. Permit Conditions

As part of the Title V permit reopening, the District is proposing changes made to several permit conditions, these include: conditions regarding flares and Regulation 9-10 requirements, and, as appropriate, revised conditions for clarity and enforceability. The Title V permit is being updated to accurately reflect these applicable requirements. All changes to existing permit conditions are clearly shown in “strike-out/underline” format in the proposed permit. When the permit is issued, all ‘strikeout’ language will be deleted; all “underline” language will be retained, subject to consideration of comments received. Where changes will be made more than once as a result of comments from Tesoro, the original underlined text will be struck through and the proposed new text is italicized and underlined.

The District is proposing to update condition 19528 part 13 to require monitoring of S97 Catalyst Fines Hopper and S98 FCCU Catalyst Fines Hopper to ensure compliance with Regulations 6-301 and 6-310.

The District is proposing to create condition 22227 to ensure compliance with Regulation 6-301 and 6-304 at S823 and S824 Heat Exchanger Cleaning Pits. Monitoring will be required when cleaning heat exchanger tubes at S823 and S824.

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 being proposed to this section of the permit generally reflect the changes to other parts of the permit that have previously been discussed. The "Future Effective Dates" for the Permit Conditions will be entered.

Monitoring for 6-301 and 6-310 for S802 FCCU

A30 Electrostatic Precipitator abates emissions from S802 FCCU/S901 CO Boiler. Table IV – K S802 contains permit condition 11433 part 2B, which requires a continuous opacity monitor. In the reopening noticed on April 15, 2005, Condition 22150 was added to the table. Condition 22150 part 1 requires continuous monitoring of A30 ESP operating parameters for reasonable assurance of compliance with Regulations 6-310. Condition 22150 also requires the operator to conduct an initial compliance demonstration that will establish a correlation between chosen parameters of the continuous opacity meter (voltage/current or opacity) and particulate emissions. The continuous opacity monitor will also be used to assure compliance with Regulations 6-301 and 6-310 in Table VII – K S802.

Monitoring for 6-301 and 6-310 for S97 FCCU Catalyst Fines Hopper and S98 FCCU East Catalyst Hopper:

A-4 Catalytic Cracker Fines Cyclone and Baghouse abates all three hoppers at the FCCU: S97, S98, and S99. Table IV-B lists condition 19528 part 13 as an applicable requirement for S99.

Condition 19528 part 13 requires monitoring of A-4 when abating S99. Table VII-D for S99 cites condition 19528 part 13 for monitoring for Regulations 6-301 and 6-310. To require the same monitoring for the other FCCU hoppers, the District is proposing to add S97 and S98 to Condition 19528 part 13. This change will be reflected in applicable requirements in Table IV-B. S97 and S98 will be added to Table VII-D S99 to require the same monitoring for Regulations 6-301 and 6-310.

Monitoring for 6-301 and 6-304 for S823 Heat Exchanger Cleaning Pit North and S824 Heat Exchanger Cleaning Pit South:

Table VII – O S823–Heat Exchanger Cleaning Pit North-Tank M286 and S824–Heat Exchanger Cleaning Pit South-Tank M287

The District is proposing to create condition 22227 to ensure compliance with Regulation 6-301 and 6-304 when cleaning heat exchanger tubes at S823 and S824. Condition 22227 would be added to Table VII-O.

VIII. Test Methods

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

If a rule or permit condition requires ongoing testing, the requirement will also appear in Section VI of the permit. Inspection procedures from Appendix A of the NSPS Title 40 Part 60 was moved from Table IV – U for flares to Table VIII.

No change will be made to this section.

IX. Permit Shield:

No change will be made to this section.

D. Alternate Operating Scenarios:

No change will be made to this section.

E. Compliance Status:

EPA required the District to address the NOVs that the District had issued to the facility – and, in particular, NOVs that had not been resolved at the time of permit issuance – because they may evidence ongoing non-compliance with applicable regulatory requirements.

There were no NOVs that are unresolved because they involve continuing non-compliance. All instances of noncompliance documented in NOVs issued to the facility have been corrected. Some NOV files remain unresolved, but only because settlement of penalties has not yet been completed.

Four-Year Compliance Review

The District has conducted a compliance review of the 159 Notices of Violation (covering 171 violations) issued to Tesoro from January 1, 2001, through December 31, 2004. With the exception of the Coker flue gas issue discussed below, the District has found no instances of noncompliance that would justify imposition of a schedule of compliance. While the refinery received numerous violations over this 4-year period, that is not unexpected for large, complex, and heavily-regulated facilities such as refineries. It is important to note that all of the 171 violations were cured and brought back into compliance. Furthermore, the District's analysis of all the violations for the 4-year period indicated that there is no ongoing violation or pattern of recurring violation that would require a compliance schedule.

Understanding how the District handles violations is important to understanding how the District evaluated the facility's compliance status. Whenever the District discovers a violation, it begins a two-step process. The first step is to ensure that the violation ceases and the violator comes back into compliance. Once compliance is achieved, the second step is to proceed with penalty assessment. It is District policy to not proceed with penalty assessment until compliance has been achieved. If a facility has not achieved compliance in a timely fashion, the District proceeds with additional enforcement action. The vast majority of Notice of Violation penalties are resolved through settlement negotiations. Therefore, a violation indicating a "Pending" resolution does not indicate ongoing violation; it simply indicates that the penalty assessment is still pending a final disposition.

The results of the District's compliance review are shown in Appendix A, which identifies each violation that was evaluated and indicates how and when compliance was achieved. As stated earlier, all of the 171 violations have been brought back into compliance. For 71% of the violations, compliance was achieved within 1 day of discovery of the violation. In the remaining 29% of the violations, the violation occurred over a multi-day period, but compliance was eventually achieved and the violation is not ongoing. 58% of the violations involved sources that experienced multiple violations during the period reviewed, but causal analysis indicated different causes for each violation and there was no recurrent pattern that would require a compliance schedule. Based on this review and analysis of all the violations for the 4-year period, the District has concluded that no schedule of compliance is necessary (other than for the Coker flue gas issue) because in each case the facility returned to compliance, the violation did not evidence on-going non-compliance, there was no pattern of recurring violations with a common cause, and the source involved is currently in compliance with all applicable permit requirements.

The permit is not being reopened with respect to this issue.

See Appendix A for details.

Coker Flue Gas Issue

The one exception to the foregoing analysis is that Tesoro has been engaged in an ongoing pattern of repeated, recurring violation involving flue gas emissions from its Coker, Source S-806, which requires additional enforcement action. On January 12, 2005, after the current Title V permit was issued in December of 2004, Tesoro experienced a boiler tube failure on the #5 CO Boiler on the fluid coker unit following a major turnaround of the boiler in November of 2004.

This multi-day violation was the 4th incident in 18 months and confirmed the facility's inability to handle coker flue gases in an adequate manner. The excessively recurrent violation was deemed to be an ongoing pattern of repeated violations requiring additional enforcement action.

The District has opted to pursue the matter by petitioning the District's Hearing Board for a conditional order for abatement to require Tesoro to address the problem. The Hearing Board approved a Stipulated Conditional Order for Abatement (Docket No. 3492) on May 5, 2005. This Order requires Tesoro to develop and implement an improved system to handle coker emissions during upsets. The refinery must also take interim steps to reduce the likelihood of further upsets and to minimize impacts should an upset occur, including revision of operating procedures and retraining of staff. The Order is intended as an interim measure that will be finalized once Tesoro has evaluated different technologies that could solve the problem and has determined which is the most appropriate. A final order is expected in the fall of 2005.

The District is incorporating the terms of the Order into the permit as a schedule of compliance. See Section C, V of this Statement of Basis and Section V of the Title V permit. When the final order is issued, the District will reopen the permit to add any additional or amended requirements, as appropriate.

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APPENDIX A Compliance Division Summary of NOV Review

Key to Abbreviations used in this Appendix:

<u>Column Title:</u>	<u>Description:</u>
V#	The District violation identification number
S#	The District permitted source identification number
Occur	The violation or occurrence date
Issued	The date the Notice of Violation was issued
Reg	The regulation allegedly violated
Violation Comments	Summarized description of the alleged violation
Compliance Achieved	The date the District determined the violation to cease and/or to be back in compliance
# NOVs	The number of violations issued during the 4-year period for this source (1/1/2001-12/31/2004)
Ongoing	Ongoing Violations Code: A-Single-day Violation, Single Violation in 4-year period B- Single-day Violation, Multiple/Repeat Violations in 4-year period, Different Causes C-Multi-day Violation, Single Violation in 4-year period D-Multi-day Violation, Multiple/Repeat Violations in 4-year period, Different Causes E-Ongoing/recurring violation requiring a compliance schedule