

July 31, 2002

Ken Kloc
Staff Scientist
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Environmental Law and Justice Clinic

Dear Mr. Kloc:

Thank you for your comments on the proposed major facility permit for the Tosco Refining Company (4/22/02 letter from Ken Kloc). We have the following responses to your comments.

1. Statement of Basis

a) **Comment:** The facility description does not contain enough detail. Suggested additional information:

- A list of pollutants and quantities emitted for each source
- Chemical composition of the materials processed.
- History of the construction and modification

Response: While it would be interesting, and possibly even useful, the suggested discussion is far beyond the scope of the Title V program. District staff is prepared to answer specific questions if the requested information is in our records. District records are also available through our public records access program.

The District believes the statement of basis is adequate. The District views the statement of basis as an opportunity to explain decisions made in the Title V permitting process. As such, it forms an important part of the record for the permitting action, but it is not intended as a stand-alone support for the permit. Though the statement of basis contains some description of the source, it does not function as a comprehensive source description. The source list in the permit contains most of the required source description, as stated in the permit evaluation/statement of basis. Also, a complete application for a Title V permit should provide a source description and emissions characterization sufficient to determine applicable requirements. The application, and any supplements to the application submitted either at the initiative of the source or the District's request, is a part of the permitting record and is available for public review at the District office.

It is possible to respond to some of your specific questions here.

- Since no NOx limit applies to the plant, and since applicability of any NOx limit would not depend on the quantity or rate of emissions, there is no need to describe and analyze NOx emissions in the statement of basis.
- The coke stockpiles are described in Table II-A. Applicable requirements are in Table IV-E. Permit condition #17540 for the coke stockpiles are in Section VI. The limits and monitoring are summarized in Table VII-E.
- The de-dust oil is stored in exempt source S-13, Asphalt Storage Tank. The name will be changed in the District's databank to De-dust Oil Tank.

- The composition of the green coke is fixed carbon with a sulfur impurity. The purpose of the calcination process is to strip the sulfur from the solid carbon. Since the coke is **mostly fixed carbon, hydrocarbon emissions should not be significant.**

The commenter suggests the statement of basis should explain the history of the process system “to help the reviewer determine whether or not a specific regulation applies to a source.” This comment essentially would require that the statement of basis provide a basis for the reviewer to exercise independent judgment regarding any and all potentially applicable requirements. In other words, the comment asks the District to prove a negative assertion, or rather a series of negative assertions, for the myriad of potentially applicable requirements. The suggestion is impractical given District resources. Such a practice is not required under Title V and, to the District’s knowledge, is not done by any Title V permitting authority.

- b) **Comment:** The discussion of the facility’s compliance history and status is inadequate. For example, review of the last year of compliance is inadequate.

Response: We disagree. The purpose of the compliance review is to determine *current* compliance, and to determine whether *future* compliance is reasonably assured. A review of non-compliance issues over the last year will be sufficient in most instances to reveal any continuing compliance issues, and is thus presumptively a sufficient basis on which to look forward. A non-compliance event that occurred more than a year ago and was resolved is probably not indicative of a continuing concern. The one-year demarcation is sufficient as a general “look back” rule, though the District maintains flexibility to consider prior instances of non-compliance where it is aware of recurring problems. The District is not aware of, and the comment does not suggest particular recurring problems at this facility, and so the discussion contained in the statement of basis is adequate.

- c) **Comment:** the compliance analysis should discuss i) how each violation was remedied; ii) whether the compliance history indicates recurrent or ongoing problems; iii) what additional conditions were added to the permit to assure future compliance.

Response: The results of the District’s review are *summarized* on page 16 in the Statement of Basis. Details of individual incidents are not required. The three Notices of Violations issued over a nine-year period is not indicative of a recurring compliance problem, and do not justify a more detailed discussion of compliance issues. The complaint history indicates that particulate matter is being emitted by the facility, but in this instance does not indicate violations of applicable requirements or a need for additional measures in the Title V permit.

2. **Comment:** The Pyroscrubbers are significant sources of NOx. The pyroscrubbers should be listed as combustion sources and “analyzed as such” in the permit evaluation.

Response: We agree that the pyroscrubbers and the calciners are significant sources of NOx as defined in BAAQMD Regulation 2-6-239. However, since there is no applicable NOx limit, there is no need for a discussion of NOx or NOx monitoring.

The pyroscrubbers are listed in Section II, Equipment, Part B, as abatement devices. The description contains the information that would also be provided for a combustion source in Table II-A, Permitted Sources, namely the make, the fuel and the heat input. All requirements that apply to the pyroscrubbers have been included in the permit under Sources S-1 and S-2, Coke Calcine Kiln/Cooler. The abatement device table clearly shows that the pyroscrubbers are abatement devices for S-1, S-2, S-16, S-17, S-26, and S-27. All material decisions concerning permit conditions or applicability determinations are discussed in the Permit Evaluation/Statement of Basis.

The District’s nomenclature for equipment calls control devices “abatement devices” and all other operations “sources.” “Sources” are typically equipment subject to a requirement; “abatement devices” are equipment used to comply with a requirement. If an abatement device has applicable requirements of its own (such as Regulation 2-2-112), the permit will list the requirements together with the source’s requirements. The only exceptions to this rule in the Title V permits are when the requirements for the abatement devices are lengthy and complex as are, for example, the requirements for landfill flares. This system for organizing the permit has not been discussed in the Permit Evaluation/Statement of Basis and we acknowledge that the District could have explained this more clearly. A discussion of this system will be added to future Permit Evaluations/Statement of

Basis. We agree that the pyroscrubbers have sufficient emissions to qualify them as “significant.” We have stated that significant sources will be listed in the permit in the equipment section and we have fulfilled that obligation. We have also included the applicable requirements in Tables IV-A and IV-B. The main applicable requirements for these abatement devices are the particulate standards and Regulation 9-1-301.

However, since the emissions from the pyroscrubbers are NO_x and CO, and since there are no NO_x or CO limits that apply to the facility, it is unclear what additional analysis the commenter believes should occur.

3. **Comment:** the pyroscrubbers should be monitored to ensure proper operation.
Response: The emissions from the coke calciners are abated first by the pyroscrubbers and then by the baghouses. Since the baghouses are the final abatement devices, all monitoring occurs at the baghouse and baghouse outlet. The following types of monitoring are required: an annual source test for particulate, annual baghouse inspection, quarterly visible emissions monitoring, and weekly pressure drop monitoring. There is no need to monitor the pyroscrubbers for particulate control. In regards to sulfur compounds: there is no requirement to completely oxidize the sulfur compounds. In regards to organic compounds: the coke is mostly carbon before it is received by the facility. Source tests show that CO levels are low, indicating that organic compounds are also low. There is no need to monitor the pyroscrubbers to ensure complete oxidation of organics or sulfur compounds.
4. **Comment:** Table IV should reflect the fact that Regulation 9-1-310 is a federally enforceable requirement.
Response: The District agrees that BAAQMD Regulation 9-1-310 is federally enforceable. However, 9-1-310 applies to fluid catalytic cracking units and fluid cokers as well as coke calcining kilns. All of 9-1-310 is not federally enforceable for *this* facility. Therefore, 9-1-310 is not shown as federally enforceable in this permit. We do note, upon examination of the issue, that 9-1-110.1, 9-1-110.2, and 9-1-310.3 have been inadvertently omitted. The District will correct this error in the final permit.
5. **Comment:** Regulation 6-311 applies to stockpiles.
Response: Regulation 6-311 limits particulate emissions from emission points at general sources. Because stockpiles do not have discrete emission points, regulation 6-311 does not apply.
6. **Comment:** Permit condition #136-6 is not practically enforceable.
Response: Conditions such as these have a long history of use in air pollution regulation. Such requirements are imposed where, for whatever reason, more specific prohibitions are not possible or practical. Lacking the information needed to impose a more specific directive, agencies sometimes impose qualitative requirements that are designed to be flexible. These more qualitative standards provide a regulatory tool that may be invoked for situations that cannot be predicted. The District acknowledges that such a qualitative standard is not practically enforceable in the sense that the operator may be readily cited for failure to comply. Its utility lies, not in its use as an enforceable limit, but in its value as a tool to encourage compliance. Because such conditions are too vague to meet EPA’s definition of “enforceable as a practical matter,” they are being designated as not federally enforceable. Because they are still of value in improving compliance, they will be retained as state-only requirements.
7. **Comment:** Permit conditions #10438-2 and 10439-2 describe circumstances during which S-26 and S-27 may be operated without regular controls. It is not clear whether operation without controls will comply with underlying regulations. The District should either discuss how the sources will comply, or delete the condition.
Response: We have reviewed the condition with the facility and have concluded that there is no need to allow the facility to operate without controls. The District will delete these provisions in the final permit.
8. Monitoring
Comment: The district should require a detailed Operating and Maintenance Plan for the baghouses in this permit.

Response: The inspection requirement is intentionally vague. Baghouses vary in their configuration of hardware, and the District lacks the engineering expertise and specific knowledge to prescribe a detailed method for inspection of a particular unit. Some aspects of baghouse inspection, such as checking the integrity of the fabric, are obvious and need not be prescribed. The pressure drop monitoring required in the Title V permit should be sufficient to provide a reasonable assurance of compliance. The annual inspection requirement is an additional measure of assurance, and is being retained in the same form as proposed. Given that other methods are in place to detect a malfunction of the baghouse, it is in the facility's interest to conduct the inspection in as thorough a manner as possible.

Comment: The frequency of monitoring for the baghouses should be increased.

Response: We disagree. The CAPCOA/EPA monitoring recommendations are based upon a balancing of the cost of monitoring with the likelihood and potential impact of an undetected failure. In the case of a baghouse, the probable failure mode is catastrophic, and increased monitoring will not improve detection of a failure, although quarterly inspections of bags for leaks and wear would possibly avoid some baghouse failures.

The calculated particulate emissions are more than 1300 tons before abatement. The CAPCOA guidance would recommend weekly pressure drop or visible emissions monitoring and an annual baghouse inspection. The District has imposed *weekly* pressure drop monitoring, *quarterly* visible emissions monitoring, an annual baghouse inspection *and* an annual source test. The District has imposed more monitoring than the CAPCOA guidance recommends.

- a) **Comment:** monthly visible emissions monitoring should be included for all other sources of particulate matter. Abatement devices A12, A13, Cyclones, and A1 and A2, Pyroscrubbers, also require monitoring to ensure that they are operating properly.

Response: We do not see any benefit to be gained from monthly (versus quarterly) monitoring. There is, however, some cost.

There is no need to monitor A-12 and A-13, because each is a cyclone whose exhaust vents to a pyroscrubber, followed by a baghouse. They have no moving parts. There is nothing to monitor. Monitoring of the pyroscrubbers is addressed in the response to comment 3, above.

Thank you again for your comments. We have amended the permit to correct deficiencies that you have identified. We will consider the improvements that you have suggested for future reports.

Sincerely,

Bill deBoisblanc
Director, Permit Services

WDB:sah