UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 1 1992

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: Promulgation of Clarifying Amendments: National Emission Standards for Hazardous Air Pollutants for Benzene Waste Operations--ACTION MEMORANDUM

FROM: William G. Rosenberg, Assistant Administrator for Air and Radiation (ANR-443)

TO: The Administrator (A-100)

PURPOSE:

Attached for your consideration is a final rulemaking entitled "National Emission Standards for Hazardous Air Pollutants; Benzene Waste Operations," that would amend Subpart FF in 40 CFR Part 61. The authority for the proposed rulemaking is Section 112 of the Clean Air Act (CAA), prior to enactment of the Clean Air Act Amendments of 1990.

The attached rulemaking would remove a stay of the effectiveness of Subpart FF that has been in effect since March 5, 1992. It would also promulgate amendments to clarify Subpart FF, including several key applicability provisions that were poorly understood by the affected sources. Finally, it would add compliance options that would provide more flexibility to facilities affected by the control requirements of the rule. However, these options would still meet the risk protection goals in the policy for national emission standards for hazardous air pollutants (NESHAP) under Section 112 of the CAA prior to the 1990 Amendments. In particular, the Agency is including an alternative compliance approach under which owners and operators may selectively manage and treat benzene waste streams, as defined in the rule amendments, such that the total benzene in the waste managed in units without controls is less than 6 megagrams per year.

This rulemaking is associated with litigation on Subpart FF, as described in the next section of this memorandum. The Agency committed in a settlement agreement that the Administrator will sign a final action on amendments to Subpart FF by December 1, 1992.

Facilities affected by the rule will have 90 days from the date of promulgation of the clarifying amendments to comply with all provisions of the amended rule, unless a waiver of compliance is granted by the Agency. Facilities may individually apply for a waiver of compliance for up to 2 years, the maximum period available for a waiver from NESHAP requirements under the CAA prior to the 1990 Amendments. The Agency will seek an enforceable commitment from each waiver applicant to take mitigating actions to offset benzene emissions lost due to delayed compliance. A separate guidance document has been developed on how the policy for granting waivers for Subpart FF will be implemented.

BACKGROUND:

The NESHAP for benzene emissions from benzene waste operations was promulgated on March 7, 1990, (55 FR 8292). It was proposed and promulgated in about 1 year on a court-ordered schedule. The affected sources are chemical manufacturing plants, petroleum refineries, and coke by-product recovery plants. Facilities that treat, store, or dispose of waste generated by chemical plants, petroleum refineries, or coke by-product recovery plants are also affected.

As noted earlier, the NESHAP for benzene waste operations was promulgated under the authority of Section 112 of the CAA prior to its amendment in 1990. Accordingly, the rule was designed to meet the NESHAP risk protection goals for protection of public health. The rule requires plants to estimate the benzene content of waste streams at their point of generation and treat streams to remove or destroy benzene. Prior to treatment, affected waste streams may only be managed in units equipped with air emission controls. Facilities that demonstrate that they manage wastes containing a total of less than 10 megagrams of benzene per year, as defined in the rule, are only required to comply with the reporting and recordkeeping requirements of the rule. The original rule required that all controls be installed by March 7, 1992.

After promulgation of the rule, there were numerous telephone calls and letters to the Agency requesting explanation of the rule. Based on these and other evidence, it was apparent that key applicability provisions in the rule were not well understood by the affected industry.

Also following promulgation of the rule, the American Petroleum Institute (API) submitted a petition for reconsideration on May 7, 1990. In its petition, the API argued that many refineries could not meet the March 7, 1992 compliance date. On May 30, 1991, the API submitted a supplement to its petition for reconsideration that presented further information to support its argument that many refineries could not comply by March 1992.

On June 5, 1991, Conoco Inc. (Conoco) and Sun Refining and Marketing Company (Sun) filed a lawsuit. This lawsuit concerned a rule clarification made by the Agency, contained in a letter from Region VIII to Conoco. The industry claimed that the clarification was contrary to industry's previous interpretation of the rule. This clarification affected the applicability of the rule at five refineries (four Sun and one Conoco). On July 12, 1991, Exxon Chemical Company (Exxon) filed a lawsuit on a similar issue concerning the applicability of the rule to an Exxon facility.

Based on the results of surveys conducted by the API, it was estimated that only about one in five of refineries that must install controls would have been in compliance by March 1992. Approximately 50 percent of the Nation's refining capacity is represented by the plants that would have missed the compliance date.

An additional consideration is that some large facilities are undertaking comprehensive multimedia programs ("clustering") to control releases from process and waste management units to air, water, and land. These programs will achieve compliance with multiple regulations, including Subpart FF, in a more efficient manner than piecemeal compliance. However, they could not have been completed by March 1992.

A series of discussions among offices within the Agency with interests in the rule and with the API led to the formulation of a coordinated plan to clarify the rule and settle the litigation. Under this plan, the effectiveness of the rule would be stayed while the Agency issued clarifying amendments to the rule. This approach maintained the basic requirements of the rule, avoided unfairly penalizing sources due to lack of clarity in the rule, and encouraged facilities to undertake comprehensive control strategies that address releases to all media. In settlement agreements signed with the Agency, the industry litigants agreed to dismiss their lawsuits if the Agency followed this approach. The Deputy Administrator concurred with this approach in a memorandum dated August 9, 1991.

On March 5, 1992, a Federal Register notice (57 FR 8012) was published promulgating a stay of effectiveness for Subpart FF until final action is taken on the clarifying amendments. On the

same day, clarifying amendments to Subpart FF were proposed (57 FR 8017). They included clarifications on provisions affecting facility applicability that had been misunderstood by some facilities. Other proposed clarifications included an alternative exemption from controls for certain benzene wastes up to a total of 1.0 megagrams per year in the wastes, a requirement that facilities prepare and implement a maintenance turnaround plan, and other miscellaneous clarifications.

In the notice of proposed rulemaking, the EPA requested comments on potential alternative structures for the rule that would encourage reclamation and recycling without compromising the NESHAP risk protection goals. The Agency also specifically requested comments on the risk associated with the management of organic wastes containing benzene, and on the need for a maintenance turnaround plan.

Based on evaluation of the comments received, significant changes to several provisions in the proposed amendments have been made from proposal to promulgation. These changes include the following: (1) the exemption from controls was raised from 1.0 to 2.0 megagrams per year of benzene in the wastes, and the proposed restrictions on which wastes were eligible for the exemption have been removed; (2) the requirement for a maintenance turnaround plan has been deleted; (3) control requirements are lessened for organic wastes managed in tanks; and (4) as mentioned earlier, an alternative compliance approach based on meeting a benzene quantity of 6 megagrams per year has been adopted. The changes make the rule more cost effective and flexible for the affected industry, yet do not jeopardize attainment of the NESHAP risk protection goals.

The Natural Resources Defense Council (NRDC) has sought judicial review of the March stay of the effectiveness of Subpart FF. As the result of settlement discussions, the Agency agreed to change its policy for granting waivers of compliance for Subpart FF. The changes narrow the range of actions that the Agency will accept from facilities to mitigate lost benzene emission reductions due to delayed compliance. The NRDC agreed to drop their lawsuit, and will be sending a letter to the agency to that effect. Because this agreement with the NRDC involved changes from the settlement agreement between the Agency and the API, the API was involved in the settlement discussions and agreed to the changes in the waiver policy.

In a separate action, the Agency is considering an additional alternative compliance approach for Subpart FF that was suggested by commenters on the proposed rule amendments. This approach would allow sources to limit emissions to meet a target dose of benzene to the most exposed individual based on site-specific risk assessment. This alternative was not incorporated into the final rule amendments because it did not meet the criteria described for

alternative structures in the proposed rule amendments, including that it could not be fully evaluated in the time available for developing the final clarifying amendments. The Agency is publishing an advance notice of proposed rulemaking for this option soon after the publication of the final clarifying amendments. Facilities subject to Subpart FF that would like to use this alternative structure, and that will not be able to comply with the standard within 90 days after the effective date of these amendments, will have to apply for a waiver of compliance.

ISSUES:

There are no issues associated with the recommended action.

ENVIRONMENTAL, ECONOMIC, AND ENERGY IMPACTS:

The clarifying amendments to Subpart FF do not change the basic control requirements of the rule, and therefore, do not have economic nor energy impacts beyond those of the original rule. The recommended amendments would ensure that the rule is implemented as the Agency intended, and that the benzene emission reductions needed to meet NESHAP health risk protection goals are achieved.

The additional compliance options provided in the rule amendments provide increased flexibility to owners and operators in choosing which waste streams to control. This flexibility allows each owner or operator to select the compliance strategy that is most cost effective for his facility. Therefore, the rule amendments are expected to reduce compliance costs at some facilities.

Furthermore, the mitigating environmental benefits that would be required under the proposed policy for issuing waivers of compliance for the amended rule would offset benzene emissions lost due to delayed compliance.

REPORTING AND RECORDKEEPING REQUIREMENTS:

The majority of reporting and recordkeeping requirements required by these clarifying amendments are unchanged from the previously-approved information collection requests (ICR's) submitted for the promulgated standards and for the proposed amendments. The estimated reporting and recordkeeping burden for the recommended final amendments has decreased from that for the proposed amendments, because of the deletion of the proposed requirement for a maintenance turnaround plan. The Office of Management and Budget (OMB) did not approve this requirement in the proposed rule, and upon reevaluation, the Agency has concluded it is not necessary for effective implementation of the rule.

As required by the Paperwork Reduction Act (PRA), the OMB must clear any reporting and recordkeeping requirements that qualify as an ICR under the PRA. For the purpose of the OMB's review, the Agency uses 3-year periods in its impact analysis procedures for estimating the labor-hour burden of reporting and recordkeeping requirements. During the first 3 years of these amendments, the average annual burden of the reporting and recordkeeping requirements would be 0.18 person-years per year, based on an average of 25 respondents per year. The burden of the reporting and recordkeeping requirements associated with the recommended final clarifying amendments has been approved by the OMB.

AGENCY RESOURCE REQUIREMENT:

During the first 3 years of these amendments, the average annual Federal resources needed to implement the regulation would be 0.10 person-years per year, or $7,150 per year. To the extent that some of the responsibilities of implementing the regulation may be delegated to State or local agencies, the actual burden to the Federal Government would be less.

PUBLIC PARTICIPATION:

The comment period on the proposed clarifying amendments was from March 5, 1992, to May 4, 1992. The commenters included companies affected by the rule, trade associations, and the NRDC. Commenters generally supported the proposed amendments, although many offered specific criticisms and suggested changes.

As described earlier, in the March 1992 notice of proposed rulemaking, the Agency requested specific comments on potential alternative structures for the rule that would encourage reclamation and recycling without compromising the NESHAP risk protection goals. To inform the affected public of the suggested alternative rule structures and major rule clarifications being considered, the Agency held a series of meetings between proposal and promulgation of the rule amendments with trade associations, individual companies, and the NRDC. During and following these meetings, additional comments were submitted on the major rule clarifications and alternative rule structures. These comments were also considered by the Agency in developing the final rule amendments.

In June 1992, a draft waiver guidance document for Subpart FF was also circulated to the NRDC and trade associations representing companies affected by the rule for comments on the clarity of the document. The trade associations involved were the American Petroleum Institute, the National Petroleum Refiners Association, the Chemical Manufacturers Association, the American