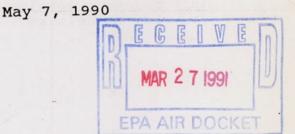
American Petroleum Institute 1220 L Street, Northwest Washington, D.C. 20005 202–682–8240 A-89-06 VI-A-1 515-90 5/8/90

G. William Frick Vice President and General Counsel

## VIA MESSENGER

Mr. William Reilly
Administrator
United States Environmental
Protection Agency
401 "M" Street, S. W.
Washington, D. C. 20460



Re: National Emission Standards for Hazardous Air Pollutants for Benzene Waste Operations (55 Fed. Reg. 8292, March 7, 1990)

Dear Mr. Reilly:

The American Petroleum Institute ("API") is a trade association with over 200 member companies engaged in all aspects of the petroleum industry: exploration, production, transportation, refining, and marketing.

On March 7, 1990, the Environmental Protection Agency ("EPA") promulgated National Emission Standards for Hazardous Air Pollutants restricting emissions from benzene waste operations from refineries and other facilities (55 Fed. Reg. 8292; the "Benzene Waste NESHAP"). These regulations will have a very significant impact on many of API's members. They will require these members to make substantial changes in their process wastewater gathering systems and in their end-of-pipe wastewater treatment systems. The regulation requires that installation of all such controls be completed by March 7, 1992.

API's members are willing to comply with the Benzene Waste NESHAP. However, compliance within the required two-year period is infeasible for most refineries. We are concerned that failure to meet this deadline may expose API members to the potential for significant civil and criminal penalties, even though they may make every effort to comply as quickly as possible.

During a meeting with the staff of EPA's Emission Standards and Engineering Divisionb on April 26, 1990, API expressed grave concerns over the compliance date. While your staff agreed that the compliance date probably would be extremely difficult for refineries to meet, they expressed their view that they lacked

Mr. William Reilly Environmental Protection Agency May 7, 1990 Page 2

the discretion to change it.

Enclosed is a Petition for Reconsideration of the Benzene Waste NESHAP that seeks further analysis of the two-year compliance date issue and suggests several approaches to alleviating the problems it creates. We urge you and your staff to give the Petition serious attention. If you have any questions concerning the Petition, please telephone me or Ellen Siegler of my staff. Ms. Siegler can be reached at (202)682-8271.

Very truly yours,

S. William Frich

G. William Frick

Enclosure

cc: Mr. William Rosenberg, EPA Assistant Administrator for Air E. Donald Elliott, Esq., EPA General Counsel

PETITION FOR RECONSIDERATION OF NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR BENZENE WASTE OPERATIONS, 55 FED. REG. 8292 (March 7, 1990)

## BACKGROUND

The American Petroleum Institute ("API") is a trade association with over 200 member companies engaged in all aspects of the petroleum industry: exploration, production, transportation, refining, and marketing.

On September 14, 1989, the Environmental Protection Agency
("EPA" or the "Agency") proposed, pursuant to Section 112 of the
Clean Air Act, National Emission Standards for Hazardous Air
Pollutants ("NESHAP") regulations restricting emissions from
benzene waste operations at refineries and other facilities. 54

Fed. Reg. 38083 (the "Benzene Waste NESHAP"). The proposed
Benzene Waste NESHAP was extremely broad and complex, and it
would have imposed substantial requirements on API's member
companies.

API participated actively in the rulemaking process. API and many of its member companies submitted comments on the proposed regulation. API's comments alone consisted of several submissions consuming approximately 1000 pages. They raised

numerous technical, legal and policy issues relating to the Benzene Waste NESHAP and to other benzene NESHAPs that were proposed simultaneously. API's comments on the Benzene Waste NESHAP focused on the technical infeasibility of many aspects of the proposed control requirements for refinery waste operations. API's comments also pointed out that it would be difficult for API's members to comply with the regulation within the proposed time periods because of the time necessary to obtain permits.

The comments of several API member companies also pointed out that it would be impossible to comply with the two-year compliance date for the installation of controls.<sup>2</sup>

On March 7, 1990 -- just six months after proposal -- EPA promulgated the Benzene Waste NESHAP. 55 Fed. Reg. 8292. The final regulation made significant changes in control options, scope of the regulation, and other matters. These changes improved the regulation in many respects. However, in promulgating these regulations the Agency failed to address fully, or to remedy, the fact that it will be infeasible for most

Also on September 14, 1989, EPA proposed NESHAPs restricting emissions of benzene from petroleum marketing operations and from benzene transfer operations. Both of these NESHAPs had potentially-significant impacts on the petroleum industry.

See, for example: comments of Conoco, Inc., dated November 13, 1989; comments of Texaco, Inc., dated November 13, 1989.

refineries subject to the control measures of new regulations to meet the two-year compliance date.

For the reasons presented below, API hereby petitions the Agency to reconsider the regulation's requirement that all substantive controls on refinery waste operations be implemented by March 7, 1992.

## THE STANDARDS FOR RECONSIDERATION OF THE REGULATION

Section 307(d)(7)(B) of the Clean Air Act provides that "the Administrator shall convene a proceeding for reconsideration of a rule" if

the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within [the public comment period] or if the grounds for such objection arose after the period for public comment...and if such objection is of central relevance to the outcome of the rule,....

In this case, all the requirements for reconsideration of the regulation have been satisfied.

First, it was impracticable to raise the matters presented in this petition, <u>i.e.</u>, the specific reasons why it will be infeasible for most refineries to achieve compliance with the final regulation by March 7, 1992, because the Agency made substantial changes in the regulation between proposal and

promulgation, <sup>3</sup> and API and its members did not have the opportunity to comment on the final regulatory scheme before promulgation of the rule. Refineries did not know which wastestreams would require controls and what types of controls would be acceptable. <sup>4</sup>

Another reason why detailed comment on potential compliance requirements was impracticable for the petroleum industry was that, during the same 60-day period, it was necessary for the petroleum industry to submit comments on proposed NESHAPs for petroleum marketing and benzene transfer operations. Moreover, the scope of the Benzene Waste NESHAP itself appeared extremely broad at proposal; it potentially covered exploration, production, and marketing operations as well as refineries. Analysis and comment on this issue required the expenditure of significant time and effort.

An event subsequent to promulgation of this NESHAP which profoundly complicates compliance planning and implementation in

For example, the proposal essentially limited process wastewater treatment options to stripping, thin-film evaporation, or incineration. The final rule allows for biological treatment. Further, in response to comments, the final rule added a different control option for individual drain systems.

In fact, because of the technical problems with the proposal, companies expected that the final rule, if not withdrawn altogether, as API suggested, might differ in many respects from the proposal. Accordingly, detailed compliance planning before promulgation would not have been prudent.

ways unforeseen during the comment period was EPA's promulgation of its final Toxicity Characteristic ("TC") rule under RCRA. 55

Fed. Reg. 11835 (March 29, 1990). This rule requires that any waste stream containing more than 0.5 ppm benzene be treated as a hazardous waste, subject to the Subtitle C requirements of RCRA. The refinery operations and compliance considerations described below for the Benzene Waste NESHAP are the same ones affected by the TC. 5

Second, reconsideration is appropriate because the compliance-date issue is a central features of the regulation. It is reasonable to expect that, had the Agency been aware, before promulgation, that the compliance date was infeasible, it would have explored other options concerning this issue.

API also submits this petition pursuant to Section 4(e) of the Administrative Procedures Act, 5 U.S.C. Sec. 553(e), which provides that "[e]ach agency shall give an interested person the right to petition for the issuance, amendment, or repeal of a rule."

API has alerted the Director of EPA's Office of Solid Waste to these overlaps and will meet to discuss timing and compliance issues with officials of EPA's Office of Solid Waste on May 14, 1990. (See letter to Sylvia Lowrance from Terry Yosie, dated May 4, 1990, Attachment 1 to this Petition.

# MAJOR COMPLIANCE REQUIREMENTS OF THE BENZENE WASTE NESHAP

The Benzene Waste NESHAP will require many refineries to make major retrofits and replacements of their process wastewater gathering systems. In addition, major retrofits and/or replacements of end-of-pipe wastewater treatment systems may be required to remove benzene from the wastewaters. Technological options include steam stripping or conventional wastewater treatment, such as oil/water separation units, dissolved air flotation ("DAF") units, and activated sludge units. For either option, the equipment must be enclosed and vented to control devices or meet alternative floating roof requirements.

Before beginning to design and construct appropriate equipment to comply with the regulation, refineries will have to develop detailed information with respect to the hundreds of wastestreams that might contain benzene. Such information will include point of generation, average flows, hourly flows, and benzene concentrations.

Designing a control system to comply with the regulation will be time-consuming because the system will involve controlling numerous wastestreams and because control equipment will be on a large scale. Designing such a system, in the necessary detail, will be time-consuming.

# API'S ACTIVITIES SINCE PROMULGATION

Since promulgation of the regulation, API and its members have been devoting considerable efforts to complying with the regulation. Companies with refining operations have been evaluating their wastes that contain benzene to comply with the requirement in Section 61.357 of the regulation to submit a report of all wastestreams in the facility and whether they would need to be controlled under the regulation. Companies also have begun planning for implementing controls. These are substantial undertakings because refineries have hundreds of wastestreams that contain or may contain some concentration of benzene and may need to be controlled.

As API and the companies have analyzed the final regulation and planned for compliance, most companies have become aware — with substantial certainty — that the two-year compliance date is the most significant deficiency in the final regulation. In short, for most refineries, this deadline cannot be met.

On April 26th, API representatives met with Agency representatives to discuss a number of technical problems with the regulation. One of the greatest concerns the API representatives expressed was that the two-year compliance date was infeasible. API explained why, even under the best of

circumstances, most refineries will be unable to meet the two-year deadline.

Among the difficulties API representatives brought to the Agency's attention during the meeting on April 26th were the following:

- Many refineries will have to perform extensive analyses to identify and to characterize their wastestreams and select control options.
- Designing control systems for projects of this magnitude and complexity requires adequate time.
- 3. Many refineries may have to rebuild major portions of their sewer systems to comply with the regulation.
- 4. Many refineries may have to revamp or replace major components of their end-of-pipe wastewater treatment systems or add large steam strippers to comply with the regulation.
- 5. Many refineries would need to obtain permits under the Clean Air Act's Prevention of Significant Deterioration ("PSD") program or other local state and federal programs before being able to begin construction of major components of the systems installed to comply with the regulation. The need to obtain a PSD permit can delay a project for over a year.

During the April 26th meeting, API explained that even

Another issue of great concern to API is strict compliance with Sec. 61.357 of the regulation within ninety days. During the April 26th meeting, EPA staff explained that they did not expect that initial reports submitted pursuant to Sec. 61.357 would include detailed information with respect to every wastestream that could contain benzene, and the Agency would expect many facilities to supplement their initial reports after ninety days had elapsed. Because EPA expressed the intention to clarify this issue in the near future, API is not now petitioning for a reconsideration of this portion of the regulation.

refineries that would be able to avoid some of these major hindrances to compliance will find it virtually impossible to achieve full compliance with the regulation within two years. In this connection, Mr. Ronald Truelove, Senior Environmental Engineer of Conoco, Inc., presented a detailed analysis of how long it would take an actual, relatively-modern facility that would not have to obtain a PSD permit and that would not need to repipe its sewers to comply with the regulation. Mr. Truelove's analysis showed that, without budget constraints and making best-case assumptions with respect to design and construction schedules, the Conoco refinery under discussion probably would not be able to achieve full compliance—with necessary certifications — before August, 1993.

The EPA representatives acknowledged, during the April 26th meeting, that the two-year deadline would present significant problems for refineries given the magnitude and complexity of the

For this refinery, it is expected that compliance with the regulation will require the following: modifications to the sewer system; new oil/water separators vented to new thermal combustors; covers and vents for existing DAF's; new, vented equalization tanks; new activated sludge units and clarifiers; new roofs and seals for sour water storage tanks; new seals for slop oil storage tanks; and a low termperature thermal treater for sludges. It is estimated that this project will cost Conoco \$20 million to \$30 million.

A copy of the schedule presented to EPA relating to Conoco's refinery is attached to this petition as Attachment 2. This document makes note of several of the key technological and timing advantages of this refinery in comparison to most others.

projects that would need to be undertaken to comply with the regulation. However, the EPA representatives stated their belief that they lacked statutory authority to extend the deadline.

API is in the process of compiling further information with respect to the difficulties other refineries will have in meeting the two-year compliance date. When more details are available, API will supplement this petition.

### LEGAL ISSUES

The Agency has never addressed fully the question of whether it believes that compliance with the regulation is feasible within two years. In response to comments on this issue, the Agency concluded that most facilities — including refineries — would not be able to comply within 90 days. 55 Fed. Reg. 8332. Accordingly, the Agency granted all facilities up to two years to comply. We commend the Agency for having taken this step. However, EPA did not address whether it was feasible to comply within two years. Rather, the Agency simply stated that the EPA had no authority under Section 112 of the Clean Air Act to extend the compliance date beyond that time. See 55 Fed. Reg. 8301.

API believes that, if the Agency is not authorized to extend the compliance date beyond two years, the Agency has an obligation under the statute to consider this constraint in fashioning its regulation. The Agency cannot promulgate a regulation that allows only two years for compliance if it has reason to believe that compliance will take significantly longer. Congress did not empower the Agency to take an action that will automatically place a majority of facilities in a source category out of compliance, possibly for as long as several years, subjecting them to the substantial possibility of civil and criminal penalties. Because paragraph 112(c)(1)(B) is a part of the authority EPA implements when it issues NESHAPs, the Agency must consider its constraints before promulgating regulations pursuant to Section 112.

API believes that EPA may not have known, before promulgating this regulation, that the two-year compliance date would be infeasible for most refineries, even though several commenters identified the issue. Indeed, API and its members did not appreciate the full extent of the problems created by the compliance date until recently. However, EPA now appears to have recognized this fact. Accordingly, the Agency should re-evaluate the regulation in this light.

#### RELIEF SOUGHT

API hereby requests that the Agency reconsider that part of

the benzene waste NESHAP that requires refineries to have achieved full compliance with all substantive requirements of the rule by March 7, 1992. Among other things, we request the Agency to evaluate the following regulatory options:

- Develop a realistic, phased compliance approach that would require refineries to meet those requirements that can reasonably be met within two years and to comply with other requirements as soon thereafter as the Agency determines is feasible;
- Reconsider the entire regulatory scheme and develop an alternative that can be achieved fully within two years; or
- 3. Amend the regulation to define "compliance" in such a way that facilities that are prevented from achieving full compliance by March 7, 1992 because of unavoidable obstacles, such as the inability to obtain the necessary permits in time to begin and complete construction by the compliance date, will not be deemed in violation of the regulation.
- 4. Stay the effectiveness of the Benzene Waste NESHAP during the period in which EPA reconsiders the regulation.

Any revised NESHAP for benzene waste operations should be consistent with related requirements imposed by the RCRA TC regulation.

API would welcome the opportunity to work closely with the Agency to revise the regulation in accordance with the suggestions presented above or any other options that the Agency believes are appropriate.

American Petroleum Institute 1220 L Street, Northwest Washington, D.C. 20005 202-682-8090

Dr. Terry F. Yosie Vice President

May 4, 1990

Ms. Sylvia K. Lowrance
Director
Office of Solid Waste
U.S. Environmental Protection Agency (OS-300)
401 M Street, S.W.
Washington, D.C. 20460

Dear Sylvia,

Thank you for the opportunity to meet on May 14 from 9:30 A.M. to 10:30 A.M. to discuss various issues concerning the implementation of the Toxicity Characteristic (TC) rule. Specifically, API would like to address three issues:

- 1) Opportunities for facilities to use pollution prevention concepts to comply with TC requirements and at the same time reap additional environmental benefits. API representatives will be prepared to discuss examples of where current operations might be modified to incorporate pollution prevention goals. In addition, we would like to explore what additional flexibility may exist with respect to the schedule for compliance with the TC rule and related land disposal requirements.
- 2) The apparent conflict between the timing of minimum technology requirements (MTR) for surface impoundments under RCRA interim status versus the timing of the same requirements under any future land disposal restrictions. API will discuss why the four year allowance for retrofitting surface impoundments should take precedence over the timing under the land disposal restriction.
- 3) The controls and compliance timing for TC wastes, Benzene NESHAPs under the Clean Air Act and the proposed primary treatment sludge hazardous waste listing have overlapping requirements. Such requirements should be complementary and apply simultaneously.

API representatives accompanying me to this meeting include Mr. Mark Hopkins of Chevron, Ms. Julie Murphy of Amoco, Mr. Arden Ahnell of BP America, Mr. John Wagner of API's Office of General Counsel and Ms. Sharon Kneiss, Manager of API Waste Programs.

Thank you again for the opportunity for these discussions.

Sincerely,

Terry F. Yosie

BENZENE NESHAP IMPLEMENTATION SCHEDULE CASE STUDY MODERN, INTEGRATED REFINERY (OPTIMUM EXISTING SEMER SYSTEM CONDITIONS - SEE NOTES BELOW)

7. Construct
 Equipment Procurement
 Field Erection
 Certification Report

REFINERY IS AN INTEGRATED 120,000 BBL SOUR CRUDE, 50,000 BBL SWEET CRUDE REFINERY.

REFINERY HAS A RELATIVELY MODERN WASTEWATER GATHERING SYSTEM:

- STORM SEWER SYSTEM IS SEGREGATED

- PROCESS WASTEWATERS ARE PUMPED FROM MOST PROCESS UNITS TO WHIS

- TANK DRAWS ARE TO SEWER PIPING

- MAJOR WASTEWATER STREAMS ARE HARD PIPED TO THE WHIS OR SOUR WATER STRIPPERS. NOTES:

ENZENE NESHAP IMPLEMENTATION SCHEDULE CASE STUDY ODERN, INTEGRATED REFINERI (OPTIMEM EXISTING SEMER SYSTEM CONDITIONS - SEE NOTES BELOW)

HAR. APR. HAY JUNE JULY AUG. SEP. OCT. NOV. DEC. JAN. FEB. HAR. APR. HAY JUNE JULY AUG.							
1992 JAN. FEB. HAR.							
CTIVITY	1. Develop Understanding of the Rule Benzene NESHAP Finalized API Meeting - Understanding Rule API/EPA Meeting - Clarification Notification of API Members	2. Develop 90-Day Report Sampling to Supplement "Knowledge" Analytical Preliminary Flow Determinations Report	3. Refine Data/Develop Design Data Intensive Source Survey Stream Identification Avg/Hax Flow Determinations Sampling Analytical Internal Report Update 90-Day Report	4. Complete Budget Quality Design Process Design Design Review/Finalization Estimate	5. Acquire Air and Mater Permits Permit Preparation Permit Approval	6. Complete Class "A" Quality Design Process Design Design Raview/Finalization Estimate Mechanical Design	7. Construct Equipment Procurement Field Erection Certification Report

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