Compliance Assurance Monitoring Rulemaking (40 CFR Parts 64, 70, and 71)
Responses to Public Comments (Part II)

(Comments Submitted for Reopened Comment Period
on Enhanced Monitoring Program)

October 2, 1997

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Enhanced Monitoring Program (Part II)

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INTRODUCTION

This Part II of the three part Compliance Assurance Monitoring Rulemaking Responses to Public Comment Document summarizes the written comments submitted during the reopened comment period on the original EM proposal (see 59 FR 66844, December 28, 1994).

The Compliance Assurance Monitoring Rule contained in part 64 and the conforming amendments to parts 70 and 71 are being promulgated in response to the direct mandate in section 114(a)(3), as well as the supporting authority in sections 504(b) and 113, of the Clean Air Act (the "Act"). Part 64 builds on existing regulatory monitoring approaches in order to provide a reasonable assurance that owners and operators are complying with emissions limitations or standards. The regulations require owners and operators to meet minimum monitoring requirements designed to ensure that control measures are operated and maintained in a manner consistent with good air pollution control practices. The amendments to parts 70 and 71 clarify the relationship between part 64 and the compliance certification process under the title V operating permits program.

The EPA proposed these regulations on October 22, 1993, at 58 FR 54648. The proposal announced the opportunity for written public comment until December 20, 1993, which date was subsequently extended until January 31, 1994. The proposal also provided notice of a public hearing, which was conducted in Washington, D.C. on November 19, 1993. The public comment period was reopened from December 28, 1994 until February 3, 1995 to take additional comment on a limited number of specific issues.

The Agency decided to redesign elements of the part 64 rulemaking in April 1995. On May 31, 1995, the EPA held a public hearing to discuss the potential redesign of part 64. Follow-up meetings were held in June 1995 in Washington, D.C., Cincinnati, Dallas, and Portland, Oregon. An initial draft of the compliance assurance monitoring rule and preamble were made available for public discussion and comment at another public meeting held in September 1995. Based on the public comment received on that interim draft, EPA released a second draft in August 1996 and once again took comment on the draft part 64 rule. In addition, a public meeting was held to obtain oral input as well.

A complete transcript of the initial public hearing, summaries of all subsequent public meetings, the full text of each comment letter, and the supporting information used in developing the regulations, are contained in Docket No. A-91-52. This docket is available for public inspection and copying between 8:00 a.m. and 5:30 p.m. Monday

through Friday, excluding government holidays, at Room M-1500, Waterside Mall, 401 M Street S.W., Washington, D.C. The public comments on the original enhanced monitoring proposal are found at Section IV-D of the docket and are numbered from IV-D-1 through IV-D-772. When the Agency determined to redesign the original proposal in April 1995 to reflect the CAM approach, new material relied on for the rulemaking was placed in Section VI of the docket. The public comments are included in section VI-D of the rulemaking docket.

In March 1996, EPA decided to proceed with the credible evidence provisions proposed with the original enhanced monitoring requirements. The Agency took additional public comment on those provisions and those comments are included in the docket as items IV-D-774 through IV-D-843. The Agency has responded to those comments as well as comments submitted in response to the original proposal that related to the credible evidence provisions in finalizing the credible evidence provisions on February 24, 1996 (62 FR 8314). See Docket A-91-52-V-C-2 for a copy of that response to comments document, which is referred to as the "CE Response Document" throughout the remainder of this document.

Because of the extended time period over which comments have been submitted on this rulemaking, this document is divided into three parts. First, Part I addresses the comments received during the initial public comment period (docket items IV-D-1 through IV-D-542). Part II then addresses the comments submitted during the December 1994-February 1995 reopened comment period (docket items IV-D-547 through IV-D-762). Finally, Part III addresses the comments submitted in response to the August 1996 Part 64 draft (docket items VI-D-114 through VI-D-243), as well as comments submitted during the reopened comment period in April-May 1997 (VI-D-244 through VI-D-274). Comments submitted early in the development of the CAM approach were considered by the Agency in formulating both the 1995 Part 64 Draft and the 1996 Part 64 Draft. The details of those comments related to preliminary staff-level ideas about possible rule structures. Comments on major structural issues have remained generally consistent over time (i.e., use of Part 64 data for enforcement, implementation through Part 70 permits, scope of applicability, and the level of justification and testing needed to support proposed monitoring). Thus, the Agency believes that the release of follow-up drafts of the rule and accompanying discussion materials, and the responses to comments included in Parts I-III of this document adequately address these additional comments.

The reader should note that many of the most significant comments from these comment periods are also responded to in the preamble to the final rule, and the responses in this document cross-reference the appropriate discussion in the preamble where appropriate.

This document also includes appendices. Appendices I-A, II-A and III-A are lists of all comment letters received in the rulemaking docket during the initial comment period, the 1994-1995 reopened comment period, the comment period following release of the 1996 part 64 Draft, and the 1997 reopened comment period, as well as all oral testimony provided at the public hearing. (Comments submitted to the docket use a "IV-D-" or a "VI-D" prefix, while comments from the public hearing use a "IV-F" prefix.)

This document includes many citations to other authorities outside of part 64 or the conforming amendments. These citations are generally not followed by their origin, such as "of the Clean Air Act." Rather, the reader can recognize the origins of the sections by their nature: sections of existing EPA regulations are preceded by 40 CFR, except in the case of 40 CFR part 70, which is frequently cited only as "part 70," and sections therein cited as, e.g., "§ 70.2." Sections of the Act are referenced by a three digit number, such as "114" or "504." This document also often refers to "State" or "permitting authority." The reader should assume that where the document refers to a "State," the reference also includes local air pollution agencies, Indian tribes, and territories of the United States to the extent they are or will be the permitting authority for their area, or have been or will be delegated permitting responsibilities under the Act. In addition, the term "permitting authority" would also include EPA to the extent EPA is the permitting authority of record.

Section 1: Development of Guidance on Presumptively Acceptable Protocols

Section 1.1: Guidance Versus Regulation

Comment a: Many industry, environmental and permitting authority commenters expressly supported the guidance approach for developing and implementing presumptively acceptable enhanced monitoring protocols (EMPs). Several commenters said that the guidance approach will reduce the burdens to permitting authorities and industry. The commenters said that the approach will improve the protocol selection process, reduce the need for case-by-case review, promote timely review of protocols, and promote monitoring consistency. An environmental group said that separate rulemakings were not necessary because the presumptively acceptable EMPs are non-binding guidance. An association of permitting authorities and industry commenters supported EPA's development of guidance on presumptively acceptable EMPs because they provide flexibility in the protocol selection process. One of these commenters said that the approach recognizes that standardized approaches may not be applicable for every source.

An industry commenter supported the use of guidance because it will result in a far less cumbersome approval process for an enhanced monitoring protocol and will offer sources greater assurance that their proposed protocols will be approved by the permitting authority. Another industry commenter said that presumptively acceptable EMPs are not only necessary, but also are the most cost-effective way to develop enhanced monitoring protocols, particularly for small sources. The commenter added that presumptively acceptable EMPs developed by EPA are necessary in order provide consistency and uniformity nationwide. Some of the commenters that supported the use of presumptively acceptable EMPs expressed their concern that the existence of these EMPs not preclude the use of a different monitoring approach that can satisfy the part 64 criteria. One commenter also stated that presumptively acceptable EMPs must be developed with public participation, in some logical sequence, with room for sources to interpret requirements in selecting appropriate EMPs and with protections for confidential information. Another commenter said that this approach must involve continuously updating the guidance materials and must include adequate support for example EMPs.

Many commenters, however, opposed the proposed guidance approach. Certain commenters argued that the proposed approach would inhibit the flexibility that EPA had provided in the rule. Many others argued that the proposed approach failed to satisfy their objections with the proposed case-by-case implementation approach for several reasons. First, the commenters argued that the presumptively acceptable EMPs that will be developed by EPA will not reflect the most cost-effective option available for most sources and thus sources will still need to develop alternative protocols or modify the presumptively acceptable EMPs significantly. The result will be that the burdens of the rule will not be reduced significantly because detailed case-by-case protocol development and review will be necessary in most circumstances. Some commenters were also concerned that when sources propose protocols different from the presumptively acceptable EMPs, permitting authorities and EPA will, at best, raise questions as to why the presumptively acceptable EMPs are not being proposed and, at worst, require that a presumptively acceptable EMP be used in order to reduce permitting burdens.

Many commenters noted that the draft presumptively acceptable EMPs that had been developed to date are clear examples that the guidance approach will result in presumptively acceptable EMPs that are too conservative and detailed, and that are not cost-effective. Another commenter said that proposing an alternative protocol will require the source to generate a large amount of data to show that an alternate protocol meets all requirements.

Commenters argued that the presumptively acceptable EMPs will not be able to address the key areas where permitting authorities, sources, and others are likely to disagree on the appropriate requirements for a particular application. Commenters also noted that significant case-by-case implementation will be required because EPA will not be able to address a sufficient number of types of process/pollutant combinations and will likely develop an insufficient number of options for a particular type of emissions unit before implementation is required. Other commenters expressed concern that any deviation from a presumptively acceptable EMP will trigger case-by-case implementation of the rule, ensuring that similarly situated sources will not be treated the same, and ensuring that permitting authorities will be overwhelmed. Finally, commenters noted that the 90 day time line fails to provide sufficient opportunity to evaluate either the applicability of the presumptively acceptable EMP, its cost-effectiveness for the source, or alternatives.

Another commenter said that the guidance approach will violate Executive Order 12866 because the presumptively acceptable EMPs will be based on a process/pollutant basis and, therefore, it is likely that different protocols for the same source could be issued at different times, requiring protocols to be developed for each individual pollutant. (See section 1.2, below, for additional comments raising concerns about the coordination of guidance for a particular source category in order to avoid piecemeal implementation.) Certain commenters also noted that MACT monitoring developments may duplicate, overlap or render unnecessary part 64 requirements, and the guidance approach may complicate this concern.

In addition to the burden issues raised by commenters, many commenters opposed the proposed guidance approach because they consider a rulemaking approach necessary to implement enhanced monitoring. Some commenters said that a rulemaking approach was necessary to satisfy the requirement that enhanced monitoring be implemented by rule and that any changes to the monitoring requirements in underlying rules be made in the context of revisions to those rules. Other commenters said that the guidance approach would not employ the legally mandated standard-setting procedures of legislative rulemaking, and would not ensure that the stringency and initial cost considerations of underlying rules are not affected adversely.

Some commenters also argued that a rulemaking approach was necessary to provide consistency for similar sources. Still other commenters said that since the presumptively acceptable EMPs will have the force and effect of a rule, they should be established by rulemakings that can take into account all appropriate issues, including cost considerations. Other reasons given by commenters for supporting a rulemaking approach are that the use of guidance documents in place of rules will not meet either the spirit or the letter of the law, and that the rulemaking approach will better protect the interests of affected parties and provide judicial review. Some commenters said that, in light of the new proposed five-year implementation schedule, a rulemaking approach was feasible.

Many commenters that were opposed to the proposed guidance approach provided suggestions on how to implement enhanced monitoring through a rulemaking process that would revise underlying standards where necessary. One commenter suggested that EPA begin with NSPS. Another commenter suggested that the revision process should continue

until all necessary enhancements have been achieved. The commenter suggested that this process be coordinated with the development of MACT rules. A permitting authority that liked the flexibility and balance between recommended monitoring methods available in an approach that used the Enhanced Monitoring Reference Document for example protocols, nevertheless said that a separate rulemaking for each underlying requirement would be advantageous for sources to have a more complete compendium of applicable requirements for a given process in one document. A commenter said that the monitoring requirements of parts 60 and 61 be adopted by reference into the enhanced monitoring rule and applied on a source category basis. Lastly, a commenter said that only those underlying requirements that need to be enhanced should be enhanced.

Response: The final rule does not include the same concept of staging implementation of enhanced monitoring based on the timing of the issuance of source category based guidance on presumptively acceptable monitoring. Thus, many of the above comments are no longer relevant. After considering the comments concerning the nature of EPA's guidance, the Agency has released a guidance document that contains example CAM monitoring approaches for various types of situations. In addition, § 64.4(b) of the final rule lists certain types of monitoring as presumptively acceptable. Detailed justifications should generally not be necessary for monitoring approaches that rely on presumptively acceptable monitoring. If the presumption of acceptability is rebutted, then the owner or operator would have to submit the necessary justification to show the monitoring satisfied the substantive criteria in part 64. The Agency has included this list of presumptively acceptable monitoring in an attempt to help streamline the CAM approval process. The types of monitoring listed are not intended to be binding on source owners or operators or to create minimum standards for monitoring. Since these presumptions are rebuttable they are not binding on the permitting authority either.

As discussed in Section II.D. of the preamble to the final rule, EPA has established through guidance that the monitoring requirements for flares in 40 CFR 60.18 are a presumptively acceptable approach under § 64.4(b)(5). The Administrator will provide notice in the Federal Register of other such approaches, initially in draft form for public comment and review, followed by a final notice. This approach should assist agencies and sources alike in streamlining the monitoring selection and approval process. However, the Agency emphasizes that these approaches are

guidance as to monitoring that should be considered acceptable. As guidance, the presumptively acceptable monitoring approaches are not binding on either source owners or operators or permitting authorities. Contrary to the comment regarding the need for rulemaking to create rebuttable presumptions, the law is clear that such presumptions may be created through guidance documents. See Panhandle Producers & Royalty Owners Ass'n v. ERA, 822 F.2d 1105 (D.C. Cir. 1987).

Letter(s): Aluminum Association, The (IV-D-713); American Automobile Manufacturers Association (IV-D-732); American Petroleum Institute (IV-D-703); Amoco Corporation (IV-D-760); Arizona Department of Environmental Quality (IV-D-595); Arkansas Environmental Federation (IV-D-547); ASARCO (IV-D-654); Association of Texas Intrastate Natural Gas Pipelines (IV-D-610); AT&T (IV-D-631); Baltimore Gas and Electric Company (IV-D-573); Bay Area Air Quality Management District (IV-D-593); BP Oil Company (IV-D-756); Chemical Manufacturers Association (IV-D-648); Chevron (IV-D-585); City of Los Angeles (IV-D-714); Class of '85 Regulatory Response Group (IV-D-664); Clean Air Implementation Project (IV-D-639); Coalition for Clean Air Implementation (IV-D-724); Colorado Association of Commerce and Industry (IV-D-590); Commonwealth Aluminum Corp. (IV-D-578); Delhi Gas Pipeline Corporation (IV-D-557); Dow Chemical Company, The (IV-D-582); DuPont Engineering (IV-D-758); DuPont SHE Excellence Center (IV-D-755); Eastman Chemical Company (IV-D-589); Eastman Kodak Company (IV-D-597); Edison Electric Institute (IV-D-748); Electronic Industries Clean Air Task Force (IV-D-738); Eli Lilly and Company (IV-D-696); Engelhard Corporation (IV-D-694); Engine Manufacturers Association (IV-D-581); Environmental Forensic Services (IV-D-716); Exxon Chemical Americas (IV-D-600); Fort Howard Corporation (IV-D-570); Gas Processors Association (IV-D-670); General Electric Company (IV-D-580); Goodyear Tire & Rubber Company, The (IV-D-598); Houston Lighting & Power Company (IV-D-579); Illinois Power Company (IV-D-625); Independent Liquid Terminals Association (IV-D-747); Intel Corporation (IV-D-739); J.M. Huber Corporation (IV-D-563); Kaiser Aluminum & Chemical Corporation (IV-D-734); Kennecott Corporation (IV-D-663); Marathon Oil Company (IV-D-743); Minnesota Pollution Control Agency (IV-D-707); Mobil Oil Corporation (IV-D-619); Monsanto Company (IV-D-592); National Council of the Paper Industry for Air and Stream Improvement, Inc. (IV-D-698); Natural Resources Defense Council (IV-D-750); NEDA/CARP (IV-D-689); NESCAUM (IV-D-697); Northwest Pipeline Corporation (IV-D-690); Occidental Chemical Corporation

(IV-D-566); Oregon Department of Environmental Quality (IV-D-717); Pennzoil Company (IV-D-588); Peoples Natural Gas Company, The (IV-D-645); Pharmaceutical Research and Manufacturers of America (IV-D-606); Phillips Petroleum Company (IV-D-718); Procter & Gamble Company, The (IV-D-665); Regional Air Pollution Control Agency (IV-D-752); South Carolina Electric & Gas Company (IV-D-637); Specialty Steel Industry of North America (IV-D-653); STAPPA/ALAPCO (IV-D-741); Steel Manufacturers Association (IV-D-652); Sugar Cane Growers Cooperative of Florida, et al. (IV-D-584); Synthetic Organic Chemical Manufacturers Association, Inc. (IV-D-603); Tenneco Gas (IV-D-746); Tennessee Valley Authority (IV-D-609); Texaco Inc. (IV-D-608); Texas Chemical Council (IV-D-587); Texas Mid-Continent Oil & Gas Association (IV-D-719); Texas Natural Resource Conservation Commission (IV-D-596); Texas Utilities Services, Inc. (IV-D-668); United States Sugar Corporation (IV-D-666); Total Petroleum, Inc. (IV-D-667); Utah Department of Environmental Quality (IV-D-749); Utility Air Regulatory Group (IV-D-740); Valero Energy Corporation (IV-D-669); Williston Basin Interstate Pipeline Company (IV-D-553)

Comment b: One commenter said that it appeared that presumptively acceptable EMPs would be addressing emission limit type requirements, but not other requirements which would be subject to enhanced monitoring such as production and throughput limits, firing limits, vapor pressure limits, TRE limits, flow and temperature limits, composition limits and others. Thus, the commenter said, there will be many federal and State requirements for which a presumptively acceptable EMP is not developed which will require case-by-case protocol development and review.

Response: The final rule is focused on assuring that control devices are operated and maintained so as to remain in compliance with applicable requirements. Thus, the nature of the control equipment and not the nature of the emission limit is most important to the selection of appropriate monitoring. To the extent the types of requirements identified in the comments are generally not complied with by means of control devices, the units subject to such requirements will not be subject to part 64, but instead the general requirements of part 70.

Letter(s): Exxon Chemical Americas (IV-D-600)

Comment c: A commenter said that sources must have the ability to appeal permits that deny the use of a protocol that meets the requirements of part 64, whether the protocol is a presumptively acceptable EMP or an alternative that meets the requirements of part 64.

Response: Any disapproval of a proposed monitoring approach is subject to a source's right to appeal the decision as final agency action, in the same manner as any other element of the final permit action.

Letter(s): General Electric Company (IV-D-580)

Comment d: Certain commenters suggested that a safe harbor concept should be applied if the source elects to use an established technique such as one under NSPS, in which case no further review would be required. These commenters also suggested the following approach to resolve some of their concerns: (1) a source would include periodic monitoring in its first permit application; (2) presumptively acceptable EMPs would be issued for all monitoring requirements in a part 60 or part 61 standard at the same time, and EPA would identify those requirements that do not need enhancement; (3) a source would have 12 months from the issuance of the applicable presumptively acceptable EMPs to propose its protocols, and the proposed protocols could be supported by engineering judgment, instead of actual field test data; (4) the proposed protocols would be reviewed (with public notice) outside of the permit review process; (5) approved presumptively acceptable EMPs would be installed pursuant to a schedule and tested to establish compliance limits and to demonstrate that all specified criteria are met; (6) the source would then make any needed modifications to the presumptively acceptable EMP and then conduct performance tests; these changes would not require permit modifications and would not constitute a violation; and (7) at the first permit renewal after the protocol is verified to meet enhanced monitoring requirements, incorporate the final enhanced monitoring protocol into the permit.

Response: The concept of a safe harbor is included in the final rule for certain monitoring systems which the Agency has listed as presumptively acceptable: CEMS, COMS, and PEMS; excepted or alternative monitoring methods approved under 40 CFR part 75; other monitoring designated by the Administrator as presumptively acceptable; monitoring designated by the permitting authority in a SIP rule as required or

presumptively acceptable for purposes of satisfying part 64; post-1990 NSPS and NESHAP monitoring requirements that apply to a control device which is used to control both the pollutant subject to the NSPS/NESHAP standard and another pollutant subject to standards which are not exempt from part 64; and continuous compliance determination methods that apply to standards exempt under § 64.2(b)(1)(vi) that are applicable to assessing the performance of the control device to assure compliance with any non-exempt emission limits. The presumption pertaining to these types of monitoring is rebuttable, and source owners or operators would have to justify compliance with part 64 if information was brought forward to rebut the presumption. For other types of established monitoring in applicable requirements, the owner or operator may rely in part on the fact that the monitoring has already been established for its circumstances, but the owner or operator still bears the burden to justify that the monitoring achieves compliance with part 64. See the applicable provisions of § 64.4(b).

Letter(s): Chemical Manufacturers Association (IV-D-648); Amoco Corporation (IV-D-760); DuPont Engineering (IV-D-758); Eastman Kodak Company (IV-D-597); Occidental Chemical Corporation (IV-D-566); Phillips Petroleum Company (IV-D-718); Texaco Inc. (IV-D-608)

Section 1.2: Guidance on Presumptively Acceptable Monitoring Protocols

1.2.1: Scope Issues

Comment a: A commenter said that protocols should be sufficiently broad in order to address emerging technologies. Another commenter suggested that EPA give high priority to the development of a single presumptively acceptable EMP for categories of process/pollutant combinations that would have wide applicability in the regulated industry. Some commenters cautioned that if presumptively acceptable EMPs are not acceptable to industry for widespread use, permitting authorities will be burdened with case-by-case review. A city urged EPA to investigate all viable means of monitoring emissions for each process/pollutant category, and not to rely solely on CEMS.

Response: The final guidance document issued with the final rule reflects these comments, and the Agency is committed to expanding the document to identify other, emerging methods of satisfying part 64.

Letter(s): Bush Boake Allen Inc. (IV-D-646); City of Los Angeles (IV-D-714); Gas Processors Association (IV-D-670); Northwest Pipeline Corporation (IV-D-690); Valero Energy Corporation (IV-D-669)

Comment b: Several commenters supported a process/pollutant approach for presumptively acceptable EMPs. A permitting authority said that this approach will make it easier to judge if a particular protocol is cost-effective for a particular process. Another permitting authority suggested that the process/pollutant protocols should correspond as closely as possible to processes in existing standards and applicable requirements such as NSPS and NESHAP. Finally, a commenter requested that EPA adequately evaluate the many variations of process/pollutant combinations affected by the rule to ensure that protocols applied to one process are not applied to other similar processes where the application and cost-effectiveness may make it infeasible.

However, many commenters suggested that presumptively acceptable EMPs be developed on a source category basis so that all applicable requirements may be addressed at the same time. Several commenters were concerned that if all protocols for a particular source are not issued at the same time, the result will be a piecemeal, rather than a source-wide, approach that may lead to a series of potentially overlapping or contradictory monitoring requirements. Particular general concerns expressed by the commenters were that sources may possibly be forced to mix technologies inefficiently simply because the presumptively acceptable EMPs use different technologies and the hurdles to proposing alternates are so high; a source may likely follow the presumptively acceptable EMP for the first pollutant or requirement addressed, only to find that it was the wrong choice in light of synergisms with technologies used in later presumptively acceptable EMPs; the process/pollutant approach will preclude characteristics unique to each source category from being factored into the presumptively acceptable EMP as it is developed, and sources will be prevented from designing all the facilities and protocols at once.

Some procedural concerns expressed by the commenters were that the process/pollutant approach will require many permits to be amended numerous times because emissions units are often subject to multiple applicable requirements. One consequence of this approach is that it will

require redundant review by permitting authorities of protocols that are identical for different pollutants, but are submitted at different times as a result of the sequential release of presumptively acceptable EMPs for the pollutants. Another commenter said that a source will be forced to wait until the guidance is final to develop a protocol.

Response: The initial guidance issued with the final rule attempts to focus on the most common situations to assure as broad coverage as possible initially. Subsequent updates to the guidance will reflect this same approach.

Letter(s): Alabama Department of Environmental Management (IV-D-695); Amoco Corporation (IV-D-760); Association of Texas Intrastate Natural Gas Pipelines (IV-D-610); Bay Area Air Quality Management District (IV-D-593); Chemical Manufacturers Association (IV-D-648); Clean Air Implementation Project (IV-D-639); County Sanitation Districts of Orange County, California (IV-D-594); Dow Chemical Company, The (IV-D-582); DuPont Engineering (IV-D-758); Eastman Chemical Company (IV-D-589); Eastman Kodak Company (IV-D-597); Electronic Industries Clean Air Task Force (IV-D-738); Houston Lighting & Power Company (IV-D-579); Intel Corporation (IV-D-739); Kaiser Aluminum & Chemical Corporation (IV-D-734); Louisiana Mid-Continent Oil and Gas Association (IV-D-554); Monsanto Company (IV-D-592); National Council of the Paper Industry for Air and Stream Improvement, Inc. (IV-D-698); Occidental Chemical Corporation (IV-D-566); Phillips Petroleum Company (IV-D-718); Synthetic Organic Chemical Manufacturers Association, Inc. (IV-D-603); Texaco Inc. (IV-D-608); Texas Natural Resource Conservation Commission (IV-D-596); Utah Department of Environmental Quality (IV-D-749)

Comment c: Numerous industry commenters and one permitting authority stated that presumptively acceptable EMPs will not be useful as written because of site- or equipment-specific factors that will require that either the presumptively acceptable EMP be modified or that an alternative protocol be proposed. Thus, the guidance approach will not significantly reduce the need for case-by-case development and review of protocols. A commenter noted that, for engines, turbines and other sources in the gas industry, the development of presumptively acceptable EMPs will be very difficult because of the numerous different models in the industry.

Other commenters said that presumptively acceptable EMPs may need to be modified because they contain unnecessary requirements. One

commenter noted that a presumptively acceptable EMP may be too elaborate and costly for a particular application. Another commenter was concerned that a presumptively acceptable EMP will contain wasteful requirements.

Response: The initial guidance attempts to provide reasonable, cost-effective monitoring approaches that can be used without significant revision. However, source-specific issues will likely require some fine tuning of the examples to reflect those types of site-specific issues. Because the final rule focuses solely on control devices, concerns about monitoring inherent controls that may vary by model type, as in the engine example, are no longer applicable.

Letter(s): American Gas Association (IV-D-735); Amoco Corporation (IV-D-760); Baltimore Gas and Electric Company (IV-D-573); Chemical Manufacturers Association (IV-D-648); DuPont Engineering (IV-D-758); Eastman Kodak Company (IV-D-597); Edison Electric Institute (IV-D-748); Exxon Chemical Americas (IV-D-600); Illinois Power Company (IV-D-625); Marathon Oil Company (IV-D-743); Ohio EPA (IV-D-730); Occidental Chemical Corporation (IV-D-566); Phillips Petroleum Company (IV-D-718); Texaco Inc. (IV-D-608); Texas Utilities Services, Inc. (IV-D-668); Utility Air Regulatory Group (IV-D-740)

Comment d: An industry commenter suggested that EPA take the lead in developing cost-effective alternative monitoring protocols to assure that States do not mandate only CEMS. A city said that EPA should delegate the review of alternative monitoring protocols to local permitting authorities, which would be developed through cooperation between the source and the permitting authority. Another commenter said that EPA should make use of its Method 301 for evaluating alternative protocols.

Response: The Agency has attempted to take the lead in developing the initial part 64 guidance document. However, the Agency does not believe that the States would develop significantly different guidance in the absence of EPA's guidance.

Letter(s): Baker Refractories (IV-D-613); City of Los Angeles (IV-D-714); Southern California Gas Company (IV-D-564)

Comment e: Some commenters suggested that EPA develop guidance for the process of developing protocols. The commenters suggested that EPA develop general criteria with a technical database, such as in a reference document, of available monitoring methods currently in use.

Other commenters suggested that EPA merely develop accuracy specifications and allow industry to develop protocols. One commenter based this suggestion on its concern that EPA does not yet have sufficient experience and resources to develop meaningful protocols. An industry commenter suggested that EPA should also develop guidance that describes the performance limitations of certain monitoring approaches in order to minimize site-by-site debates over monitoring performance requirements or limitations.

Finally, one commenter said that the use of optical remote monitoring devices would allow protocols to apply to criteria and hazardous air pollutants together, which would be a cost-effective approach.

Response: Because the final rule focuses on monitoring of control devices, the Agency believes that established monitoring techniques for various control devices provides a solid basis from which to develop part 64 monitoring approaches. Thus a separate guideline on the process for developing example monitoring approaches is considered unnecessary.

Letter(s): Aluminum Association, The (IV-D-713); American Gas Association (IV-D-735); Coastal Corporation, The (IV-D-583); Environmental Forensic Services (IV-D-716); Ravenswood Aluminum Corporation (IV-D-704); Tenneco Gas (IV-D-746); WMX Technologies, Inc. (IV-D-731)

1.2.2: <u>The Meaning of "Presumptively Acceptable"</u>

Comment a: Some commenters suggested that "presumptively acceptable" be clarified to mean that a presumptively acceptable EMP is conclusively presumed to satisfy the requirements of part 64. A commenter suggested that the term indicates EPA's willingness to approve, as complying with part 64, any part 64 source following the development of a presumptively acceptable EMP for a particular process/pollutant. Another commenter said that an owner or operator should be allowed to use a presumptively acceptable EMP and established monitoring (such as those in the NSPS, HON and MACT rules) without further review by the permitting authority. Lastly, another commenter was concerned that if presumptively

acceptable EMPs do not create irrebuttable presumptions, then EPA has not changed the original proposed rule as far as case-by-case implementation is concerned and has not alleviated the burden on sources and permitting authorities.

Other commenters wanted assurance that even though a protocol is presumptively acceptable, its usage is not mandatory, and that sources may propose alternative protocols to assure flexibility. Some of the commenters said that if the use of a presumptively acceptable EMP is mandatory, cost-effective innovation will be stifled and sources will not be able to develop innovative programs that best meet their individual needs and processes and operations. Another commenter argued that a source should not be required to use a presumptively acceptable EMP if an alternative protocol satisfies part 64 criteria, and such alternative protocols should be presumed to satisfy part 64 criteria if the source demonstrates that the protocol is at least as effective as the presumptively acceptable EMP. A permitting authority said that a source should have the option of using an alternate protocol on a very limited basis as long as a guidance protocol exists.

Numerous commenters were concerned with how permitting authorities will perceive presumptively acceptable protocols. Some commenters were concerned that a presumptively acceptable EMP will be considered inappropriately to establish minimum requirements, and that attempts by sources to deviate and use alternative protocols will be extremely difficult and costly to justify. A commenter said that presumptively acceptable EMPs may result in more delay and controversy if permitting authorities view them as the only acceptable protocols and, at best, sources will be forced to defend any deviations from them and, at worst, the permitting authority may simply demand strict conformance with them. Another commenter suggested that permitting authorities be given the discretion to modify presumptively acceptable EMPs, while at the same time retaining their major elements, without sacrificing the presumption that the resulting permit satisfies enhanced monitoring requirements.

An environmental group said that its understanding of EPA's proposal was that sources would retain the option to submit something different and permitting authorities would retain the discretion to accept an alternative to a presumptively acceptable EMP.

Other commenters were concerned whether permitting authorities would

apply a presumptively acceptable EMP. One commenter noted that the proposal described in the Federal Register notice would not require that permitting authorities allow a source to use a presumptively acceptable EMP, and the commenter argued that permitting authorities potentially could require that sources upgrade protocols or adopt wholly different approaches and undertake evaluations required to demonstrate compliance with part 64. One industry commenter suggested that permitting authorities be required to demonstrate that a presumptively acceptable EMP is not sufficient to determine compliance before it imposes any requirements that are different or more stringent that those in a presumptively acceptable EMP. The commenter added that if a permitting authority imposes more stringent requirements than are contained in the Enhanced Monitoring Reference Document, the enhanced monitoring requirements would not be federally enforceable to the extent that they are more stringent than the presumptively acceptable EMP. Another industry commenter suggested that although a presumptively acceptable EMP is guidance, it should be a legal safe harbor which the permitting authority must approve, or at least approve on an expedited basis. This commenter added that a challenger must prove that such a protocol is not appropriate within the same time frame as the duration of the review without allowance for extra time for challenge.

Some commenters questioned whether presumptively acceptable EMPs would be applied in light of public opposition. A permitting authority questioned whether a presumptively acceptable EMP will prevail if the public comment during the permit process disagrees that a presumptively acceptable EMP is presumptively acceptable.

Response: The presumptions created in § 64.4(b) are rebuttable presumptions. Although these presumptions may guide the permitting authority, ultimately, the decision on acceptability rests with the informed discretion of the permitting authority. Further, presumptively acceptable monitoring is not binding on source owners or operators. Implementing presumptively acceptable monitoring in this manner insures that CAM can be implemented on a case-by-case basis while at the same time providing a framework for consistent and timely implementation. Presumptively acceptable monitoring approaches are not minimum requirements for other proposed approaches, but rather a recognition that certain types of monitoring ought to be presumptively appropriate without the need for further justification.

Letter(s): American Automobile Manufacturers Association (IV-D-732); American Petroleum Institute (IV-D-703); Amoco Corporation (IV-D-760); AT&T (IV-D-631); BP Oil Company (IV-D-756); Chemical Manufacturers Association (IV-D-648); Chevron (IV-D-585); City of Los Angeles (IV-D-714); Clean Air Implementation Project (IV-D-639); County Sanitation Districts of Los Angeles County (IV-D-632); County Sanitation Districts of Orange County, California (IV-D-594); Dow Chemical Company, The (IV-D-582); DuPont Engineering (IV-D-758); Eastman Chemical Company (IV-D-589); Eastman Kodak Company (IV-D-597); Engine Manufacturers Association (IV-D-581); General Electric Company (IV-D-580); Kaiser Aluminum & Chemical Corporation (IV-D-734); Marathon Oil Company (IV-D-743); Minnesota Pollution Control Agency (IV-D-707); Monsanto Company (IV-D-592); Natural Resources Defense Council (IV-D-750); Occidental Chemical Corporation (IV-D-566); Pennzoil Company (IV-D-588); Phillips Petroleum Company (IV-D-718); Specialty Steel Industry of North America (IV-D-653); Steel Manufacturers Association (IV-D-652); Synthetic Organic Chemical Manufacturers Association, Inc. (IV-D-603); Tennessee Valley Authority (IV-D-609); Texaco Inc. (IV-D-608); Texas Natural Resource Conservation Commission (IV-D-596); Texas Utilities Services, Inc. (IV-D-668); WMX Technologies, Inc. (IV-D-731)

1.2.3 Development of Presumptively Acceptable EMPs

Comment a: A commenter said that the development of presumptively acceptable EMPs is premature because their adoption make the use of other less expensive protocols very difficult. Another commenter suggested that EPA stop developing presumptively acceptable EMPs until questions concerning costs, continuous versus intermittent compliance, and reliance on intermittent monitoring are resolved. Finally, another commenter noted the difficulties that the Texas Natural Resource Conservation Commission (TNRCC) has had in developing model protocols based on the proposed rule, and noted that TNRCC has detailed the technical problems in the proposed rule that render it unworkable.

A commenter said that it was critical that EPA provide simple and practical procedures for approval of monitoring protocols. Another commenter suggested that EPA should allow industry to select the most suitable type of enhanced monitoring, and should delete the "best" requirement and direct the permitting authority to determine if it meets the appendix A

criteria.

Some industry commenters suggested that the accuracy requirements of performance specifications be staged to satisfy the data needs over a five year period, beginning with a simple initial protocol based on fuel usage and periodic monitoring and imposing more a sophisticated protocol when the permit is revised or renewed after the quantity of emissions is understood and experience is obtained.

An industry commenter said that EPA should not develop presumptively acceptable EMPs for all the types of emissions units in the gas industry because industry will be best at accomplishing this if enough time is allowed for research and development. Another commenter was concerned about EPA's ability to evaluate the range and variability of protocols for a specific source. The commenter added that the protocols which are ultimately provided for the natural gas fired engines used in pipelines must be able to adequately address different operating variables between the various types of pipeline compression engines.

A commenter said that the Enhanced Monitoring Reference Document must be continuously updated in a timely manner, and new proposed protocols must be adequately supported.

Response: The process for establishing further presumptively acceptable monitoring approaches whether by EPA or by a State agency will allow for sufficient input from all interested parties. In addition, at the federal level, any further establishment of presumptively acceptable approaches will generally occur only as a result of an appropriate request from an affected industry group or in response to a perceived implementation problem for a particular type of source.

Letter(s): American Gas Association (IV-D-735)]; AT&T (IV-D-631); Coastal Corporation, The (IV-D-583); ENRON Operations Corp. (IV-D-683); Interstate Natural Gas Association of America (IV-D-757); Mobil Oil Corporation (IV-D-619); Monsanto Company (IV-D-592); Natural Gas Pipeline Company of America (IV-D-715); Northwest Pipeline Corporation (IV-D-690); Southern California Gas Company (IV-D-564); Tenneco Gas (IV-D-746)

Comment b: Several commenters urged that presumptively acceptable EMPs be

developed in conjunction with new standards and be based upon existing monitoring systems. One industry commenter said that, in developing presumptively acceptable EMPs, EPA should examine the history of monitoring methods development in connection with NSPS to understand the effort involved in reaching a consensus concerning feasible, technically reliable and cost-effective monitoring requirements for demonstrating compliance. Another suggested that presumptively acceptable EMPs be developed in conjunction with MACT standards for that particular source category, and only after significant source category data gathering, extensive study by EPA experts, and open debate with the regulated community. Another commenter proposed that presumptively acceptable EMPs incorporate emerging technology and lessons learned from existing installations. Finally, a city said that EPA should first consider detection sensitivity and data variance required to ensure successful implementation of an effective emission control strategy; the most sensitive method, typically with a higher cost, should not be automatically adopted as the better method, if such sensitivity is not required to effectively control the emissions concerned.

An industry commenter expressed concern that the draft protocols were developed by EPA without field data or any guarantee that they will be reliable. Another commenter was concerned that the draft presumptively acceptable EMPs developed to date do not demonstrate that EPA understands parametric monitoring of gas engines well enough to produce workable protocols for such engines.

Response: Presumptively acceptable approaches will be developed based on input from all parties and will not be issued without sufficient data or experience to document that the monitoring approaches should be considered presumptively acceptable.

Letter(s): American Gas Association (IV-D-735); Baker Refractories (IV-D-613); City of Los Angeles (IV-D-714); Fort Howard Corporation (IV-D-570); National Council of the Paper Industry for Air and Stream Improvement, Inc. (IV-D-698); Tenneco Gas (IV-D-746)

Comment c: A commenter was concerned that the process for developing presumptively acceptable EMPs described in the December 28, 1994 notice will not result in usable protocols because industry will not be involved in the development process, the process will not provide

adequate time to review and comment on draft protocols, and EPA will have little incentive to be responsive to changes without the protections afforded through a formal rulemaking approach.

Several commenters supported developing protocols in a public process in which industry and other stakeholders are allowed to participate. One of the commenters suggested that affected industries should be consulted from the beginning so that later controversies are minimized. Another commenter suggested that protocols be developed by a work group that consists of staff from various organizations.

Response: The Agency intends to develop any presumptively acceptable monitoring procedures using a process similar to that suggested in these comments, except that other interested parties, including public interest groups and state agency representatives, will also be involved.

Letter(s): Baltimore Gas and Electric Company (IV-D-573); Eli Lilly and Company (IV-D-696); Goodyear Tire & Rubber Company, The (IV-D-598); Interstate Natural Gas Association of America (IV-D-757); Minnesota Pollution Control Agency (IV-D-707); Monsanto Company (IV-D-592); National Council of the Paper Industry for Air and Stream Improvement, Inc. (IV-D-698); Northwest Pipeline Corporation (IV-D-690); Specialty Steel Industry of North America (IV-D-653); Steel Manufacturers Association (IV-D-652); Tenneco Gas (IV-D-746); United States Sugar Corporation (IV-D-666)

Comment d: Certain commenters urged that EPA specify certain criteria in the rule itself, including accuracy specifications, the criteria for validating parametric monitoring, averaging times, and data availability. Another commenter suggested that EPA correct and revise the criteria in Appendix A to the proposed rule. Some commenters said that adding the criteria would allow industry to develop the most appropriate protocol for the emissions unit. Another commenter was concerned that if permitting authorities are allowed to impose whatever enhanced monitoring protocol requirements they see fit as a matter of federal law, then the approach establishes a standardless system and allows permitting authorities to create federal requirements. An association of permitting authorities said that, without such criteria in the rule, it will be difficult for permitting authorities to require them in a protocol; moreover, permitting authorities will be left in a position to defend what industry may perceive to be as unnecessary and not have an established level of acceptability already

defined in the enhanced monitoring rule to fall back on. Finally, a commenter said that the requested criteria would reduce the burden on permitting authorities to review alternative and multiple enhanced monitoring protocols for a single applicable requirement, and would reduce inconsistent application among the States.

Response: The Agency believes that, for the type of monitoring required by the final rule, the general criteria and performance criteria included in § 64.3 of the final rule are adequate.

Letter(s): AT&T (IV-D-631); General Electric Company (IV-D-580); Natural Gas Pipeline Company of America (IV-D-715); NESCAUM (IV-D-697); Texas Natural Resource Conservation Commission (IV-D-596)

Comment e: Several commenters expressed concern whether EPA could issue the presumptively acceptable EMPs by January 1, 2000. One commenter thought that EPA has underestimated the effort required. Other commenters questioned whether EPA has adequate staff and resources to complete the task. Other commenters noted the effort required to develop presumptively acceptable EMPs for the chemical manufacturing and natural gas industries. For example, one of the commenters noted a single chemical manufacturing process unit that may need five to ten different protocols, and that process unit was only one of 60 to 80 process units at a single site.

Some commenters asked that EPA commit to the number of protocols that it plans to develop. Two associations of permitting authorities suggested that EPA commit to developing at least 300 example EMPs over the next 4 years. Some permitting authorities were concerned that if EPA fails to fulfill this commitment, permitting authorities will not be able to implement the enhanced monitoring requirements effectively. Other commenters said that EPA should issue a mandatory schedule for completion of protocols, with deadlines based on percentages of air pollutant emissions affected by enhanced monitoring.

Response: The timeframe discussed in the notice of the reopened comment period, and the associated "hammer" provision, are not included in the final rule, and thus these comments are no longer applicable.

Letter(s): Aluminum Association, The (IV-D-713); American Automobile Manufacturers Association (IV-D-732); Arizona Department of

Environmental Quality (IV-D-595); Dow Chemical Company, The (IV-D-582); Enviroplan (IV-D-723); Marathon Oil Company (IV-D-743); Natural Resources Defense Council (IV-D-750); National Council of the Paper Industry for Air and Stream Improvement, Inc. (IV-D-698); Oregon Department of Environmental Quality (IV-D-717); Regional Air Pollution Control Agency (IV-D-752); STAPPA/ALAPCO (IV-D-741); Tenneco Gas (IV-D-746); Texas Natural Resource Conservation Commission (IV-D-596); Utah Department of Environmental Quality (IV-D-749)

Section 1.3: Publication Process

Comment a: Many commenters supported public comment during development of presumptively acceptable EMPs. Some commenters suggested that the comment period be at least 90 days. Other commenters were concerned that providing public notice through the Federal Register and TTN was not sufficiently broad, and that EPA would not be accountable for its decisions. A permitting authority commenter said that an opportunity for hearing should be provided and a public docket should be maintained.

Response: The Agency intends that presumptively acceptable monitoring approaches will include a notice and comment process that assures full and fair public review and comment.

Letter(s): Chevron (IV-D-585); Class of '85 Regulatory Response Group (IV-D-664); Coastal Corporation, The (IV-D-583); Exxon Chemical Americas (IV-D-600); Houston Lighting & Power Company (IV-D-579); Mississippi Chemical Corporation (IV-D-745); Phillips Petroleum Company (IV-D-718); South Carolina Electric & Gas Company (IV-D-637); Tennessee Valley Authority (IV-D-609); Texas Chemical Council (IV-D-587); Texas Natural Resource Conservation Commission (IV-D-596)

Comment b: Many commenters supported publishing draft and final presumptively acceptable EMPs, not merely a notice of availability, in the Federal Register. A permitting authority suggested that EPA also publish a preamble to draft example protocols, and respond to comments in a preamble for final examples. Another commenter suggested that the example protocols currently contained in the draft Enhanced Monitoring Reference Document also be published in the Federal Register before being approved. Finally, another commenter suggested that example

protocols be combined into large groups of protocols for notice at one time.

Response: To reduce publication costs, EPA reserves the right to publish simple notices of availability of monitoring approaches, but for shorter documents, EPA will consider publishing the proposed monitoring approach in full text in the Federal Register.

Letter(s): American Gas Association (IV-D-735); County Sanitation Districts of Orange County, California (IV-D-594); Enviroplan (IV-D-723); Monsanto Company (IV-D-592); Natural Gas Pipeline Company of America (IV-D-715); Questar Corporation (IV-D-686); Synthetic Organic Chemical Manufacturers Association, Inc. (IV-D-603); Texas Natural Resource Conservation Commission (IV-D-596); Utah Department of Environmental Quality (IV-D-749)

Comment c: Several commenters supported distributing presumptively acceptable EMPs on the TTN. However, some of the commenters said that the TTN has major drawbacks when it is used to handle non-textual information of the type that is required to be in an enhanced monitoring protocol, such as equations of more than a few characters that do not download. Some commenters suggested that hard copies of the examples be available to those who need them.

Response: The Agency will take all necessary steps to assure full public access to example monitoring approaches, including providing hard copies of information upon request of any materials made available generally through electronic media.

Letter(s): Chemical Manufacturers Association (IV-D-640); DuPont Engineering (IV-D-758); Eastman Kodak Company (IV-D-597); Exxon Chemical Americas (IV-D-600); Monsanto Company (IV-D-592); Occidental Chemical Corporation (IV-D-566); Phillips Petroleum Company (IV-D-718); Texaco Inc. (IV-D-608); Utah Department of Environmental Quality (IV-D-749)

Section 1.4: Prioritizing Protocol Development

Comment a: An association of permitting authorities suggested that EPA convene a

workgroup of EPA staff and State and local agency representatives to determine the factors to include in developing a protocol prioritization mechanism, followed by the workgroup's development of the actual source priorities. A permitting authority said that prioritization should be a combination of an EPA assessment of available national data and State and local recommendations. The permitting authority added that a number of high priority example protocols should be reserved for process/pollutant combinations whose impact is more local or regional as identified by State and local permitting authorities. An industry commenter recommended that EPA poll the States to ascertain which sources the States have determined to be of higher priority in developing their schedules for the submittal of title V permit applications.

A few commenters were concerned about a national prioritization approach. A permitting authority was concerned that a national approach to prioritizing environmentally significant protocols will not allow the States enough flexibility to address specific environmental concerns. Some industry commenters said that prioritization could create questions of fairness where, for example, a source that had already received a permit would not have to include protocols until permit renewal, while a similar source with an application being processed would have to resubmit amended applications as example protocols are made available. Some commenters suggested that the development and issuance of presumptively acceptable EMPs by source category was more important than prioritization.

Numerous commenters suggested how certain process/pollutant or source categories should be prioritized. Several commenters suggested that priority be given to those process/pollutant combinations that pose the greatest health and environmental risk. A commenter suggested that EPA take the lead in determining risk and then schedule the development of protocols in light of that risk. Another commenter suggested that EPA begin with hazardous air pollutants, followed by respiratory irritants. One of these commenters said that other factors could change this priority, including the comprehensiveness of the source category's current monitoring requirements or practices and how recently those requirements or practices were established. For example, the commenter said, title IV monitoring requirements should quickly be affirmed as the enhanced monitoring protocol for affected units, even though such units would be a low priority under a risk-based priority scheme given the comprehensive title IV monitoring that is already in place. In this example, the regulatory

certainty benefits make this a high priority.

Several commenters suggested that priority be given to those process/pollutant combinations for which enhanced monitoring will have the greatest effect on reducing air pollution or are the greatest polluters or have a potential to emit above the major source threshold. One of the commenters suggested that EPA consider all data which describes the number and potential to emit of emissions units across the nation, and consider other factors such as the simplicity of applicable requirements, the number of sources affected by those applicable requirements, toxicity of emissions, and nonattainment area status. Another commenter said that prioritization should not be driven by the number of emissions units covered or by trying to be representative in covering emissions units in many different industries. Another commenter said that a disadvantage of prioritizing protocols based on quantitative significance is that examples may not be timely developed for unique sources for which development may be most resource demanding. One of the commenters suggested that, based on table 4-3 of the draft RIA, pollutants from NO_x sources should be addressed first, followed in descending order by SO_2, particulate matter, VOC and CO, respectively. The commenter added that, from a source category perspective, the following five should be given the highest priority: (1) NO_x from gas-fired industrial, commercial and institutional boilers; (2) SO_2 from oil-fired boilers; (3) NO_x from simple cycle industrial gas turbines using water injection for NO_x control; (4) NO_x and SO_2 from industrial, commercial and institutional coal-fired boilers with NO_x and SO_2 controls; and (5) NO_x and SO_2 from sources subject to NSPS that require CEMS. Another commenter suggested that combustion processes that emit VOC or NO_x in ozone nonattainment areas be given the highest priority. Finally, another commenter suggested that once presumptively acceptable EMPs for the major emissions units are developed, example protocols be developed: (1) in order of a decreasing number of sources or permits affected; (2) in order of tons of emissions affected; or (3) according to some ranking of health and welfare effects due to source category emissions.

Some commenters stated that NSPS source categories be given the highest priority. One of the commenters said that by doing so, EPA will be able to quickly develop presumptively acceptable EMPs for a large number of environmentally significant units. The commenter added that EPA could then target less commonplace sources where enhanced monitoring may not already exist, where industry and public participation in

the process would be particularly important. Another commenter suggested that after example protocols are developed for NSPS sources, they be developed for part 63 emissions units, followed by any remaining source types. Some commenters suggested that the prioritization, grouping and timing of MACT standards could be used as a guideline for prioritizing example protocol development. Some of these commenters urged that such example protocols not be issued prior to the issuance of a final MACT standard. Other commenters suggested that priority be given to those process/pollutant combinations in nonattainment areas.

A permitting authority suggested the following prioritization: (1) particulate emissions (grain loading and opacity limits) from wood-fired boilers (dutch oven, spreader/stoker, and fuel cell) with either multiclone, venturi scrubber, or wet or dry ESP controls; (2) particulate emissions (lb/air dried ton of pulp produced) from kraft pulp mill recovery furnaces with ESP controls; and (3) visible emissions from fugitive emissions units such as unpaved roads, material handling systems (front end loaders, conveyors, separators, etc.), and crushing/screening operations. The commenter said that presumptively acceptable EMPs for particulate emissions will pose the greatest challenge, time and resources and requested that EPA spend a fair amount of time on these types of protocols.

Lastly, an industry commenter said that EPA should give high priority to the development of internal combustion engine protocols before the end of the phase-in period because internal combustion engines are used extensively throughout the country and because engine manufacturers must know the potential requirements and controls to be placed on the engines prior to production.

Response: The initial guidance includes example monitoring approaches for several types of process units and control devices that the Agency believes will be common types of sources affected by part 64. No formal prioritization approach has been developed and the Agency does not necessarily intend to develop such an approach.

Letter(s): American Automobile Manufacturers Association (IV-D-732); Amoco Corporation (IV-D-760); American Gas Association (IV-D-735); Bush Boake Allen Inc. (IV-D-646); Class of '85 Regulatory Response Group (IV-D-664); Coastal Corporation, The (IV-D-583); Colorado Association of Commerce and Industry (IV-D-590); County Sanitation Districts of Los Angeles County (IV-D-632); County Sanitation Districts of Orange County,

California (IV-D-594); Engine Manufacturers Association (IV-D-581); Enviroplan (IV-D-723); Exxon Chemical Americas (IV-D-600); Houston Lighting & Power Company (IV-D-579); Minnesota Pollution Control Agency (IV-D-707); National Automobile Dealers Association (IV-D-687); Natural Gas Pipeline Company of America (IV-D-715); Northwest Pipeline Corporation (IV-D-690); Ohio EPA (IV-D-730); Oregon Department of Environmental Quality (IV-D-717); Phillips Petroleum Company (IV-D-718); Questar Corporation (IV-D-686); Rubber Manufacturers Association (IV-D-601); Southern California Gas Company (IV-D-564); STAPPA/ALAPCO (IV-D-741); Tennessee Valley Authority (IV-D-609); Texas Chemical Council (IV-D-587); Texas Mid-Continent Oil & Gas Association (IV-D-719); Texas Natural Resource Conservation Commission (IV-D-596); Utah Department of Environmental Quality (IV-D-749); Williston Basin Interstate Pipeline Company (IV-D-553)

Section 1.5: Data Quality Objectives (DQO) Process

Note: The DQO process was raised as one possible tool to assist in part 64 implementation during the reopened comment period. Based on the comments received and the nature of the monitoring required by the final rule, the Agency determined not to pursue this approach for part 64 implementation. The comments on this issue are summarized below, but no further response is necessary.

Comment a: Many industry and State agency commenters stated general opposition to the DQO process as outlined in the December 28th notice. These commenters argued that the DQO process would be complex, especially for small sources, and would not simplify implementation. They also stated that the process would be unworkable in the context of permit decisions and would be too costly and require too much data collection.

Other commenters, however, stated general support for the DQO process, at least in principle. Many of these commenters stated that EPA must provide more information on the process and how it would be used for enhanced monitoring in order for them to provide meaningful comment on its potential. Many of these commenters also stated that EPA must develop the DQO process for enhanced monitoring through notice and comment rulemaking.

Some commenters that were generally supportive of the DQO process

also included limitations on its potential usefulness. Some commenters argued that it should be used only as an optional tool or goal and not be a prescribed requirement. Others stated that the DQO process should not be required where sources rely on presumptively acceptable EMPs developed by EPA. One commenter stated that the presumption of noncompliance that is included in the guidance document must be changed to a presumption of compliance before using the guidance on the DQO process in the context of enhanced monitoring.

Many commenters were either noncommittal on the use of the DQO process or expressed significant reservations about its use. Most of these commenters stated that the December 28th notice did not provide sufficient information on how the process would be used. Many suggested that the process as proposed would be difficult to implement from a practical perspective. These commenters argued that EPA must develop a more detailed DQO process specifically tailored for enhanced monitoring implementation before attempting to use the process. Some also noted that any final DQO process must allow for increased reliance on existing data and information sources so that the burdens of the DQO process are reasonable. Certain commenters also noted that, in Chapter 4 of the DQO document, the specification of the baseline condition to correspond to the true state of nature for the more severe decision error will be appropriate only if the risk of false negatives is allowed to float upward in order to achieve a smaller sample size. Again, many of these commenters suggested a separate rulemaking to implement the DQO process. Several commenters noted the need to structure the DQO process differently for presumptively acceptable EMPs and alternatives developed on a case by case basis. Finally, certain commenters suggested that the DQO process may be workable if it replaced the protocol criteria and performance requirements that were included in the proposed rule.

Response: See the note at the beginning of this section.

Letter(s): Alabama Department of Environmental Management (IV-D-695); Aluminum Association, The (IV-D-713); Alyeska Pipeline Service Company (IV-D-742); American Gas Association (IV-D-735); American Automobile Manufacturers Association (IV-D-732); American Petroleum Institute (IV-D-703); Amoco Corporation (IV-D-760); Arizona Department of Environmental Quality (IV-D-595); ASARCO (IV-D-654); Association of Texas Intrastate Natural Gas Pipelines (IV-D-610); AT&T (IV-D-631);

Baker Refractories (IV-D-613); Baltimore Gas and Electric Company (IV-D-573); BP Oil Company (IV-D-756); Chemical Manufacturers Association (IV-D-640); Chevron (IV-D-585); Class of '85 Regulatory Response Group (IV-D-664); Clean Air Implementation Project (IV-D-639); Coalition for Clean Air Implementation (IV-D-724); Coastal Corporation, The (IV-D-583); Colorado Association of Commerce and Industry (IV-D-590); Cooper Energy Services (IV-D-555); Dow Chemical Company, The (IV-D-582); DuPont Engineering (IV-D-758); Eastman Kodak Company (IV-D-597); Eastman Chemical Company (IV-D-589); Edison Electric Institute (IV-D-748); Eli Lilly and Company (IV-D-696); Environmental Forensic Services (IV-D-716); Enviroplan (IV-D-723); Exxon Chemical Americas (IV-D-600); Gas Processors Association (IV-D-670); General Electric Company (IV-D-580); Hawaiian Electric Company, Inc. (IV-D-571); Houston Lighting & Power Company (IV-D-579); Illinois Power Company (IV-D-625); Independent Liquid Terminals Association (IV-D-747); Interstate Natural Gas Association of America (IV-D-757); Kaiser Aluminum & Chemical Corporation (IV-D-734); Minnesota Pollution Control Agency (IV-D-707); Mississippi Chemical Corporation (IV-D-745); Mobil Oil Corporation (IV-D-619); Monitor Labs, Inc. (IV-D-591); Monsanto Company (IV-D-592); Natural Gas Pipeline Company of America (IV-D-715); NEDA/CARP (IV-D-689); NESCAUM (IV-D-697); Northwest Pipeline Corporation (IV-D-690); Oregon Department of Environmental Quality (IV-D-717); Occidental Chemical Corporation (IV-D-566); Pennzoil Company (IV-D-588); Pharmaceutical Research and Manufacturers of America (IV-D-606); Phillips Petroleum Company (IV-D-718); Procter & Gamble Company, The (IV-D-665) ; Questar Corporation (IV-D-686); Regional Air Pollution Control Agency (IV-D-752); Rubber Manufacturers Association (IV-D-601); South Carolina Electric & Gas Company (IV-D-637); Specialty Steel Industry of North America (IV-D-653); STAPPA/ALAPCO (IV-D-741); Steel Manufacturers Association (IV-D-652); Sugar Cane Growers Cooperative of Florida, et al. (IV-D-584); Tenneco Gas (IV-D-746); Texaco Inc. (IV-D-608); Texas Chemical Council (IV-D-587); Texas Mid-Continent Oil & Gas Association (IV-D-719); Texas Natural Resource Conservation Commission (IV-D-596); Texas Utilities Services, Inc. (IV-D-668); Total Petroleum, Inc. (IV-D-667); Union Camp (IV-D-586); Utah Department of Environmental Quality (IV-D-749); Utility Air Regulatory Group (IV-D-740); Valero Energy Corporation (IV-D-669)

Comment b: Chemical industry commenters stated that all relevant and appropriate data sources should be used to understand the behavior of a process over its full range of operation and to weigh the consequences of an incorrect decision. Thus, acceptable probability levels and their development should be viewed as highly situational and industry should be allowed great flexibility in setting these limits. EPA should not directly specify the acceptable probability levels, and the probability of decision error and the acceptable level of such error should never be calculated solely from data, since they also need to take into account all the sources of error and imprecision, including measurement error and process variability.

These commenters noted that the DQO process is very useful in identifying the most effective data collection and analysis design for protocols as it provides a systematic approach to developing this aspect of a protocol. They expressed support for the approach in the DQO document for acceptable decision errors, and support for the concept that the acceptable probability of decisional errors are directly related to the consequences of the decision errors. A chemical industry association argued that a decision error limit of 1% (as suggested in Chapter 6 of the DQO document) is unreasonable and not practically achievable, and proposed a probability level of 10% as an acceptable starting point for decision making. The commenter suggested that EPA not list pollutants in some sort of risk ranking; instead, sources and permitting authorities should be allowed to use the best available data to make DQO decisions on a case-by-case basis.

Other industry commenters argued that it would be inappropriate for EPA to arbitrarily set the probability of error level at any set level, such as the 5 or 10 percent level suggested by the proposal. Instead, if the DQO process is to be used, EPA should calculate the probability of error in existing requirements to probability levels to be established for monitoring methods that will not result in an increase in stringency of the underlying standard. These commenters argued that the level of probability of error should not be linked to the hazard because it would add another complication and because stringency should be the controlling factor in establishing the probability level.

Certain utility industry commenters argued that this issue is premature. They argued that before acceptable probability levels are established, EPA should first formulate a definitive proposal and issue it for public comment. Preliminary decisions must be made on policy issues such as

the appropriate null and alternative hypotheses, and the appropriate probability levels.

Other industry commenters noted that, although a specific discussion regarding an acceptable probability level is premature at this point, generally an unduly low probability of decision error will require source to conduct more reference tests than required under the proposed enhanced monitoring criteria.

Another commenter stated that DQOs for enhanced monitoring can not be set in the absence of inputs about the costs involved. Although the DQO document appears to recognize this, the commenter stated, it does so by suggesting that the only costs involved are minor ones for sampling and testing, and this is clearly not true since neither the costs of enhanced monitoring nor the potential fines are minor.

Response: See the note at the beginning of this section.

Letter(s): American Petroleum Institute (IV-D-703); Amoco Corporation (IV-D-760); AT&T (IV-D-631); Baltimore Gas and Electric Company (IV-D-573); BP Oil Company (IV-D-756); Chemical Manufacturers Association (IV-D-640); Clean Air Implementation Project (IV-D-639); DuPont Engineering (IV-D-758); Eastman Chemical Company (IV-D-589); Eastman Kodak Company (IV-D-597); Edison Electric Institute (IV-D-748); Exxon Chemical Americas (IV-D-600); Illinois Power Company (IV-D-625); Kaiser Aluminum & Chemical Corporation (IV-D-734); NEDA/CARP (IV-D-689); Occidental Chemical Corporation (IV-D-566); Pennzoil Company (IV-D-588); Phillips Petroleum Company (IV-D-718); Procter & Gamble Company, The (IV-D-665); Questar Corporation (IV-D-686); Texaco Inc. (IV-D-608); Texaco Inc. (IV-D-608); Texas Utilities Services, Inc. (IV-D-668); Utility Air Regulatory Group (IV-D-740)

Comment c: Certain commenters objected to the indication in the December 28th notice that a single decision error probability level could be adopted for all types of protocols and emissions units. Some commenters stated generally that acceptable levels should vary depending on the circumstances and should be left to State agencies' discretion. A State agency stated that it would be impractical to assign a specific probability level for all protocols, because the level depends on numerous factors. Thus, levels should be established for each type of combination of

emissions unit, process, and monitoring methodology. Another commenter argued that setting the probability of error level at 5 to 10 percent is inappropriate because, depending on specific monitoring conditions, to establish a monitoring protocol requiring this degree of accuracy will be extremely burdensome and costly with little benefit to the environmental protection. Other commenters were concerned that a single level for all situations would prevent EPA from focusing on those areas of compliance which have potentially significant environmental impact. They argued that a single level will cause severe inefficiencies in designing protocols for both large and small sources, which is the result the DQO process was designed to avoid. Another commenter stated that it is difficult to specify a confidence level without reviewing the testing and analytical method required for each specific emission matrix; there should be reasonable guidelines but it is unreasonable to consider all situations to be the same and apply the same degree of confidence.

Response: See the note at the beginning of this section.

Letter(s): Aluminum Association, The (IV-D-713); Alyeska Pipeline Service Company (IV-D-742); Goodyear Tire & Rubber Company, The (IV-D-598); Houston Lighting & Power Company (IV-D-579); Northwest Pipeline Corporation (IV-D-690); Phillips Petroleum Company (IV-D-718); Specialty Steel Industry of North America (IV-D-653); Steel Manufacturers Association (IV-D-652); Texas Chemical Council (IV-D-587); Texas Natural Resource Conservation Commission (IV-D-596)

Comment d: Some commenters provided suggestions on the appropriate factors or methods to be used in establishing appropriate probability levels. Commenters suggested that probability levels should vary based on the size and/or age of emissions units, the cost of the available EMPs, the risk presented by the emissions to be monitored, the margin of compliance and potential variability of emissions, the attainment status of the area in which an emissions unit is located, or the impacts on attainment status presented by the emissions unit. One commenter argued that an appropriate level for probability limits can not be determined without field testing.

One commenter presented a detailed approach, including a mathematical formula. The commenter's approach can be summarized as follows. Probability should be measured in terms of the acceptable probability of having an undetected violation occur using enhanced monitoring. It is

reasonable for the lower bound of the acceptable probability of an undetected violation occurring to be the acceptable frequency with which short term concentrations may exceed the NAAQS. The low bound on the acceptable probability of an undetected violation occurring may be set as 1/365 for all air pollutants with NAAQS; this is only a lower bound because most emission standards have been set to actually attain the NAAQS with a reasonable margin of safety since air quality modeling is always conducted using potential emissions instead of actual emissions.

Certain State agency commenters stated that it may be possible to develop an algorithm that could be used for establishing the probability levels for different situations. One approach would be to develop criteria for assigning a score to each necessary element of a protocol (e.g., performance specification), summing the individual scores, and then comparing the total score to a range of values acceptable for different applications. Another State agency stated that the criteria should be those in the rule -- sufficiently representative, accurate, precise, reliable, frequent and timely, and the existing performance specifications in 40 CFR 75 and the performance stack test methods should be used for determining the appropriate probability levels for certifying enhanced monitoring protocols.

Response: See the note at the beginning of this section.

Letter(s): Aluminum Association, The (IV-D-713); Class of '85 Regulatory Response Group (IV-D-664); Enviroplan (IV-D-723); Goodyear Tire & Rubber Company, The (IV-D-598); Minnesota Pollution Control Agency (IV-D-707); Northwest Pipeline Corporation (IV-D-690); Oregon Department of Environmental Quality (IV-D-717); STAPPA/ALAPCO (IV-D-741); Sugar Cane Growers Cooperative of Florida, et al. (IV-D-584); Tenneco Gas (IV-D-746); Utah Department of Environmental Quality (IV-D-749); Williston Basin Interstate Pipeline Company (IV-D-553)

Comment e: One commenter noted that the South Coast Air Quality Management District is currently developing protocols, but they have been subject to a Method 301 analysis, not a DQO analysis. Another commenter argued that one such example is the use of NO_x emissions factors based upon the results of emissions testing coupled with fuel consumption for standard burn turbines.

Response: See the note at the beginning of this section.

Letter(s): Northwest Pipeline Corporation (IV-D-690); Southern California Gas Company (IV-D-564)

Section 1.6: Independent Third Party Review

1.6.1: Appropriateness of Third Party Review

Comment a: Many commenters supported the use of third party review. Most of the commenters' support was conditional upon factors such as assuring that third party review replaces review by the permitting authority, the reviewer being truly independent, third party review not being required in all cases, third party review being used only for proposed alternative protocols, the permitting authority having discretion to whether to use third party review, and third party review being used to augment permitting authority review. A permitting authority supported third party review so long as permitting authorities do not have to spend excessive resources reviewing the work of the reviewer.

An industry commenter said that it would support further exploration of the use of third party review. The commenter added that in its experience, third party review has been used effectively to alleviate burdens and reduce costs by allowing regulators to rely on independent technical expertise and to facilitate a timely review process.

A substantial number of commenters, however, opposed third party review. Many commenters stated that any third party review process would be unworkable, burdensome, costly, and merely create another layer of bureaucracy. These commenters generally believed that third party review would result in no benefits for program implementation and would just add costs. Some commenters noted that the subjective nature of protocol approval makes this approach unworkable. Commenters also argued that third party review could hinder approval of innovative or alternative protocols. Some commenters noted that third party review usually involves following some form of standardized review process that would not allow the reviewers to make the independent judgments necessary to implement enhanced monitoring effectively. Commenters also pointed to the limited pool of reviewers available. They noted that the most qualified reviewers likely will have a vested interest in certain

types of protocols or will have other forms of conflicts making them unsuitable for independent reviews. Commenters also argued that third party review under other EPA programs such as Superfund and drinking water demonstrate the problems with this approach.

Certain commenters noted that the proposed third party review process would not be necessary if EPA fulfilled its obligations to develop a clear enhanced monitoring program. Certain commenters noted that a perceived need for third party review serves to highlight the problems which EPA has built into the proposed program. The commenters added that if EPA established standards for protocols that were sufficiently clear and objective, permitting authorities would have little difficulty reviewing proposals and making sound decisions. Others noted that third party review is a less than satisfactory replacement for EPA guidance through rulemaking, as required by section 114, and that a rulemaking approach would reduce the number of alternative protocols and, thus, the need for third party review. An association of permitting authorities said that EPA should strive to develop reasonable and clear protocols and thereby eliminate the need for independent third parties to be involved in the process. Finally, a commenter stated that third party review will likely not be in place early enough to be helpful to either permittees or permitting authorities.

Some commenters said that sources could not be required to incorporate suggested revisions into a protocol from a third party lacking in responsibility or liability. Others also noted that final review of protocols must be the duty of the permitting authority. Thus, commenters noted that permitting authorities would be faced with certifying the adequacy of third party's recommendations. Commenters added that, because a permitting authority will have to understand both the source's and the reviewer's positions, permitting authorities will have to expand their review of proposed protocols and this could create more work for permitting authorities, not less. Commenters also noted that disputes will have to be settled by the permitting authority.

Finally, although generally opposed to third party review, a few commenters noted that if third party review is implemented, it could alleviate some of the problems associated with the case-by-case approach when alternative protocols are proposed. These commenters suggested that EPA analyze other situations where it has used third party review and publish a proposed rule that sets forth proposed approaches in

sufficient detail to allow public comment.

Response: Based on the comments received and the nature of the monitoring required by the final rule, the Agency has determined not to pursue the concept of third party review which was raised as one possible implementation assistance tool in the December 1994 notice.

Letter(s): Alabama Department of Environmental Management (IV-D-695); Aluminum Association, The (IV-D-713); Alyeska Pipeline Service Company (IV-D-742); American Automobile Manufacturers Association (IV-D-732); American Petroleum Institute (IV-D-703); Amoco Corporation (IV-D-760); ASARCO (IV-D-654); AT&T (IV-D-631); Baltimore Gas and Electric Company (IV-D-573); BP Oil Company (IV-D-756); Chemical Manufacturers Association (IV-D-640); Clean Air Implementation Project (IV-D-639); County Sanitation Districts of Los Angeles County (IV-D-632); County Sanitation Districts of Orange County, California (IV-D-594); DuPont Engineering (IV-D-758); Eastman Chemical Company (IV-D-589); Eastman Kodak Company (IV-D-597); Edison Electric Institute (IV-D-748); Eli Lilly and Company (IV-D-696); Exxon Chemical Americas (IV-D-600); Gas Processors Association (IV-D-670); General Electric Company (IV-D-580); Hawaiian Electric Company, Inc. (IV-D-571); Houston Lighting & Power Company (IV-D-579); Illinois Power Company (IV-D-625); Independent Liquid Terminals Association (IV-D-747); Intel Corporation (IV-D-739); Kaiser Aluminum & Chemical Corporation (IV-D-734); Kennecott Corporation (IV-D-663); Minnesota Pollution Control Agency (IV-D-707); Mississippi Chemical Corporation (IV-D-745); Mobil Oil Corporation (IV-D-619); NEDA/CARP (IV-D-689); NESCAUM (IV-D-697); Northwest Pipeline Corporation (IV-D-690); Ohio EPA (IV-D-730); Oregon Department of Environmental Quality (IV-D-717); Occidental Chemical Corporation (IV-D-566); Pennzoil Company (IV-D-588); Pharmaceutical Research and Manufacturers of America (IV-D-606); Phillips Petroleum Company (IV-D-718); Procter & Gamble Company, The (IV-D-665); Ravenswood Aluminum Corporation (IV-D-704); Regional Air Pollution Control Agency (IV-D-752); Southern California Gas Company (IV-D-564); Specialty Steel Industry of North America (IV-D-653); Steel Manufacturers Association (IV-D-652); Synthetic Organic Chemical Manufacturers Association (IV-D-603); Tenneco Gas (IV-D-746); Texaco Inc. (IV-D-608); Texas Chemical Council (IV-D-587); Texas Mid-Continent Oil & Gas Association (IV-D-719); Texas Natural Resource Conservation Commission (IV-D-596); Texas Utilities Services, Inc. (IV-D-668); Total Petroleum, Inc. (IV-D-667); Utah Department of Environmental Quality (IV-D-749); Utility Air Regulatory Group (IV-D-740); Valero Energy Corporation (IV-D-669); Wellman Inc. (IV-D-574); Williston Basin Interstate Pipeline Company (IV-D-553); WMX Technologies, Inc. (IV-D-731)

1.6.2: Selection of Third Party Reviewer

Comment a: Some commenters suggested that the third party reviewer be selected either by the owner or operator, or by an independent entity. One of the commenters said that it would not support a system if the third party reviewer was selected by the permitting authority or EPA. A permitting authority asked whether there will be nationally approved third party reviewers, or whether permitting authorities and sources will be able to select reviewers on a local level.

Several commenters also were concerned that it would be impossible to find independent third parties. Some of the commenters said that the only two potential pools -- consultants and academics -- would be viewed as either lacking in technical expertise or having technical expertise but not being impartial, since in the latter case the party likely would be involved in protocol development. These commenters suggested that EPA should review its other regulations to develop criteria for assessing independence. Another commenter said that EPA should create the needed organization and develop a means to certify that third party reviewers are qualified to perform evaluations.

Response: Based on the comments received and the nature of the monitoring required by the final rule, the Agency has determined not to pursue the concept of third party review which was raised as one possible implementation assistance tool in the December 1994 notice.

Letter(s): American Petroleum Institute (IV-D-703); AT&T (IV-D-631); BP Oil Company (IV-D-756); Chemical Manufacturers Association (IV-D-640); DuPont Engineering (IV-D-758); Eastman Chemical Company (IV-D-589); Eastman Kodak Company (IV-D-597); Gas Processors Association (IV-D-670); Mobil Oil Corporation (IV-D-619); NEDA/CARP (IV-D-689); Occidental Chemical Corporation (IV-D-566); Pennzoil Company (IV-D-588); Phillips Petroleum Company (IV-D-718); Texaco Inc. (IV-D-608); Procter & Gamble Company, The (IV-D-665); Texas Natural Resource Conservation Commission (IV-D-596); Texas Utilities Services, Inc. (IV-D-668); Valero Energy Corporation (IV-D-669)

1.6.3: Function of Third Party Review

Comment a: An industry commenter said that third party review should be limited to voluntary actions by an individual applicant or group of applicants seeking to minimize their investment in the protocol by having a trade association or similar entity support the participants. Another industry commenter said that if the promulgated rule provides for case-by-case implementation using presumptively acceptable EMPs, sources should have the option of retaining a third party to review alternative protocols; the use of third party review should not be mandatory. Another industry commenter said that third party reviewers should provide assistance to EPA as its agent and avoid the need for individual contracts and nondisclosure agreements between sources and a third party.

Some industry commenters suggested that an independent third party protocol "roadmap" used to develop and prove a protocol be utilized rather than having third parties review individual protocols. These commenters said that this approach would clarify the steps needed to approve a protocol for the benefit of all parties developing and approving a protocol and the process would not be subject to the bias of the varied consultants that would be used to review a protocol.

An industry commenter said that the decision of the third party review must be binding, yet subject to adequate review and recourse. Another industry commenter said that a reviewer should have the authority to review and recommend approval of the proposed protocol, and the permitting authority would be required to accept the reviewer's recommendations unless the permitting authority could provide a reasonable, technically defensible reasons why it should not be approved.

Response: Based on the comments received and the nature of the monitoring required by the final rule, the Agency has determined not to pursue the concept of third party review which was raised as one possible implementation assistance tool in the December 1994 notice.

Letter(s): American Automobile Manufacturers Association (IV-D-732); County Sanitation Districts of Orange County, California (IV-D-594); DuPont Engineering (IV-D-758); Eastman Chemical Company (IV-D-589); ENRON Operations Corp. (IV-D-683); Interstate Natural Gas Association of America (IV-D-757); Natural Gas Pipeline Company of America (IV-D-715); WMX Technologies, Inc. (IV-D-731)

1.6.4: Paying for Third Party Review

Comment a: Many commenters, including those from both industry and permitting authorities, supported requiring sources to pay for third party review. Some of the industry commenters did not oppose paying for third party review provided that the review was assured to be timely. A commenter said that it was reasonable to ask industry to pay for third party review if it replaces permitting authority review, and added that payment could be made either through increased permit fees if the review is conducted by enlarged permitting authority staffs, or directly if the reviewer is completely independent.

Several commenters opposed requiring a source to pay for third party review. Some commenters said that the cost should be borne by the permitting authority by incorporating the cost into permit fees. Some commenters particularly objected to paying for third party review if the permitting authority or EPA selects the reviewer. Another commenter said that if EPA needs additional technical help, EPA should pay for it. Another commenter said that EPA has no authority to create a fee program for enhanced monitoring, and title V fees may not be used for such a purpose.

A permitting authority asked whether it was appropriate to require sources to pay additional fees for this extra review. An industry commenter did not believe that third party review was equitable in terms of cost to an applicant. To assure that all sources are treated equitably, a payment for the review of a protocol would require that all subsequent applicants using the same protocol also make payment. The commenter also questioned who would track applicants and the protocols they use.

Response: Based on the comments received and the nature of the monitoring required by the final rule, the Agency has determined not to pursue the concept of third party review which was raised as one possible implementation assistance tool in the December 1994 notice.

Letter(s): American Gas Association (IV-D-670); AT&T (IV-D-631); Baltimore Gas and Electric Company (IV-D-573); Clean Air Implementation Project (IV-D-639); DuPont Engineering (IV-D-758); Eastman Chemical Company (IV-D-589); Edison Electric Institute (IV-D-748); General Electric Company

(IV-D-580); Illinois Power Company (IV-D-625); Kaiser Aluminum & Chemical Corporation (IV-D-734); Mississippi Chemical Corporation (IV-D-745); Mobil Oil Corporation (IV-D-619); Natural Gas Pipeline Company of America (IV-D-715); NEDA/CARP (IV-D-689); Oregon Department of Environmental Quality (IV-D-717); Phillips Petroleum Company (IV-D-718); Procter & Gamble Company, The (IV-D-665); Synthetic Organic Chemical Manufacturers Association (IV-D-603); Texas Natural Resource Conservation Commission (IV-D-596); Texas Utilities Services, Inc. (IV-D-668); Total Petroleum, Inc. (IV-D-667); Utility Air Regulatory Group (IV-D-740); Wellman Inc. (IV-D-574)

1.6.5: Procedures to Guide Third Party Review

Comment a: Many commenters suggested that EPA had to establish specific procedures to guide third party review. A number of the commenters were concerned that, without such procedures, review would not be independent and objective, and could result in claims of conflict of interest or impartiality. Some permitting authorities said that EPA must administer the third party review program to ensure national consistency.

Some commenters said that the procedures must be published. An industry commenter suggested that the procedures be published as a proposed rulemaking to allow for adequate comment on the particulars. A permitting authority suggested that the procedures be contained in part 64.

Several commenters were concerned that third party review would infringe on confidential business information and trade secrets. One of the commenters said that EPA must establish procedures to protect industry confidentiality, which the commenter said may be impossible with third party involvement.

A permitting authority asked: (1) whether a recommendation by a third party reviewer will be binding; (2) how disputes will be resolved; (3) whether EPA will veto a proposed permit if a permitting authority or the source disagrees with the recommendation of the third party reviewer; (4) whether the public will have an opportunity to comment on the review and, if so, how will discrepancies between the comments and the review be resolved; (5) when third party review will occur; and (6) whether third party reviewers can be used on an as-needed basis instead of for every

protocol.

Response: Based on the comments received and the nature of the monitoring required by the final rule, the Agency has determined not to pursue the concept of third party review which was raised as one possible implementation assistance tool in the December 1994 notice.

Letter(s): American Automobile Manufacturers Association (IV-D-732); AT&T (IV-D-631); Baltimore Gas and Electric Company (IV-D-573); Chemical Manufacturers Association (IV-D-640); DuPont Engineering (IV-D-758); Eastman Chemical Company (IV-D-589); Eastman Kodak Company (IV-D-597); Edison Electric Institute (IV-D-748); Exxon Chemical Americas (IV-D-600); Illinois Power Company (IV-D-625); Mobil Oil Corporation (IV-D-619); Monsanto Company (IV-D-592); NEDA/CARP (IV-D-689); Oregon Department of Environmental Quality (IV-D-717); Occidental Chemical Corporation (IV-D-566); Phillips Petroleum Company (IV-D-718); Procter & Gamble Company, The (IV-D-665); Regional Air Pollution Control Agency (IV-D-752); Texaco Inc. (IV-D-608); Texas Natural Resource Conservation Commission (IV-D-596); Texas Utilities Services, Inc. (IV-D-668); Utility Air Regulatory Group (IV-D-740)

Section 2: Phase-in and Timing of Implementation

Section 2.1: After Issuance of Guidance

Comment a: Many commenters expressed general support for the phased-in approach triggered by guidance development. Some commenters supported the phased-in approach because it would allow States and local authorities to implement the Enhanced Monitoring Program gradually and cost-effectively and would significantly reduce the administrative burdens of the title V permitting process, while one commenter also noted that it would eliminate the requirement that owners or operators include protocols for particulate matter in their initial title V permit applications.

A number of commenters supported the general idea of a phased approach which would include a public process for developing protocols, but opposed or suggested changes to the specific approach proposed by EPA due to the burdens on industry and/or permitting authorities. Some State and local agencies argued that sources who use example protocols should not be required to reopen their permit under the significant permit revision track for an additional public participation period, but rather be allowed to use the administrative amendment track. An association of State and local permitting authorities, one local agency and one State agency supported the phased-in approach but recommended that EPA formally commit, possibly through the ongoing consent decree, to the total number of guidance protocols that the Agency plans to develop and the time frame in which it intends to do so.

Many commenters, however, opposed the phased-in approach requiring development of protocols after the issuance of guidance. Reasons for opposition included: (1) the burdens and delays in the title V program resulting from the numerous permit application revisions which will be required due to the piecemeal fashion in which example protocols will become available; (2) the interference with the modification of issued permits for non-monitoring reasons; and (3) forcing inefficiencies on large sources by imposing uncertain and changing monitoring requirements and preventing sources from addressing source-wide monitoring all at one time. One environmental organization opposed the phased-in implementation approach as unnecessary and inappropriate given that the enhanced monitoring rule is already two years overdue. According to the group, to allow sources to avoid enhanced monitoring until the issuance of guidance would contravene the Act. The group also argued that, if EPA

does make implementation dependent upon the issuance of example protocols, then the dates for issuing such protocols must be fixed and enforceable.

Numerous commenters objected to the requirement that sources for which draft permits have not been noticed develop enhanced monitoring protocols within 90 days of the publication of presumptively acceptable protocols. They maintained that this was an insufficient amount of time to evaluate the appropriateness of the protocol and, where necessary, develop an alternative. Some of these commenters suggested an implementation period of one year following the publication of example protocols.

Some commenters proposed that a source be required to incorporate enhanced monitoring into its permit only after installation of necessary equipment, subsequent testing and revision of the proposed protocol. Others argued that sources should not have to incorporate protocols into permits until the time of the next renewal.

One State agency objected to the 90 day period for application revision for permit applications filed but not noticed for public comment prior to the publication of an example protocol. It was suggested that the permitting authorities retain the authority to allow application revisions any time prior to public notice. An association of State and local permitting authorities, along with one State agency, argued that a permittee should only be required to incorporate a protocol into a permit if a reopening occurs that involves public notice and comment for the specific emissions unit/pollutant combination to which the protocol is applicable.

Response: Based on the comments received, EPA believes that a phased-in approach to implementation is appropriate, but that the concept of tying the implementation schedule to the issuance of guidance is not appropriate. As noted by some of the commenters, this approach would result in piecemeal implementation that could result in unwarranted burdens to the permit process. Therefore, in the final rule, the Agency has adopted an implementation schedule that requires implementation during the initial round of title V permitting only for the largest pollutant-specific emissions units that use control devices to comply. The Agency believes that for many of these units, waiting to implement part 64 until guidance is available is unnecessary because these units tend to already have some form of monitoring in place. For smaller units, part 64

will not be effective until the permit renewal process. This delayed implementation will allow sources and permitting authorities alike to gain experience with part 64 during the initial round of permitting and will allow EPA to develop additional part 64 guidance. This experience and additional guidance will assist in developing appropriate monitoring for smaller units that are less likely to have existing monitoring in place that can be used as the primary basis for satisfying part 64.

Letter(s): Alabama Department of Environmental Management (IV-D-695); Aluminum Association, The (IV-D-713); Alyeska Pipeline Service Company (IV-D-742); American Automobile Manufacturers Association (IV-D-732); American Gas Association (IV-D-735); American Petroleum Institute (IV-D-703); Amoco Corporation (IV-D-760); Arkansas Environmental Federation (IV-D-547); ASARCO (IV-D-654); Association of Texas Intrastate Natural Gas Pipelines (IV-D-619); AT&T (IV-D-631); Baker Refractories (IV-D-613); Baltimore Gas and Electric Company (IV-D-573); Bay Area Air Quality Management District (IV-D-593); BP Oil Company (IV-D-756); Bush Boake Allen, Inc. (IV-D-646); Commonwealth Aluminum Corp. (IV-D-578); Chemical Manufacturers Association (IV-D-640); Chevron (IV-D-585); City of Los Angeles (IV-D-714); Class of '85 Regulatory Response Group (IV-D-664); Clean Air Implementation Project (IV-D-639); Greater Cleveland Growth Association (IV-D-638); CNG Transmission Corporation (IV-D-721); Coalition for Clean Air Implementation (IV-D-274); Coastal Corporation, The (IV-D-583); Colorado Association of Commerce and Industry (IV-D-590); Corn Refiners Association, Inc. (IV-D-605); County Sanitation Districts of Los Angeles (IV-D-632); Delhi Gas Pipeline Corporation (IV-D-557); Dow Chemical Company, The (IV-D-582); E.I. DuPont de Nemours and Company (IV-D-758); Eastman Chemical Company (IV-D-589); Edison Electric Institute (IV-D-748); Electronics Industries Clean Air Task Force (IV-D-738); Engelhard Corporation (IV-D-694); Engine Manufacturers Association (IV-D-581); ENRON Operations Corporation (IV-D-683); Exxon Chemical Americas (IV-D-600); Fort Howard Corporation (IV-D-570); Gas Processors Association (IV-D-670); General Electric Company (IV-D-580); Goodyear Tire and Rubber Company (IV-D-598); Hawaiian Electric Company, Inc. (IV-D-571); Illinois Power (IV-D-625); Intel Corporation (IV-D-739); Interstate Natural Gas Association of America (IV-D-757); J.M. Huber Corporation (IV-D-563); Kaiser Aluminum & Chemical Corporation (IV-D-734); Kennecott Corporation (IV-D-663); Kodak (IV-D-597); Mississippi Chemical Corporation (IV-D-745); Monitor Labs, Inc. (IV-D-591); Monsanto Company (IV-D-592); National

Resources Defense Council (IV-D-750); Natural Gas Pipeline Company of America (IV-D-715); NEDA/CARP (IV-D-689); NESCAUM (IV-D-697); Northwest Pipeline Corporation (IV-D-690); Oregon Department of Environmental Quality (IV-D-717); Occidental Chemical Corporation (IV-D-566); Pennzoil Company (IV-D-588); Peoples Natural Gas (IV-D-645); Pharmaceutical Research and Manufacturers of America (IV-D-606); Phillips Petroleum Company (IV-D-718); Procter & Gamble Company, The (IV-D-665752); Ravenswood Aluminum Corporation (IV-D-704); Regional Air Pollution Control Agency (IV-D-752); Rubber Manufacturers Association (IV-D-601); South Carolina Electric & Gas Company (IV-D-637); Southern California Gas Company (IV-D-564); Specialty Steel Industry of North America (IV-D-653); STAPPA/ALAPCO (IV-D-741); Steel Manufacturers Association (IV-D-652); Sugar Cane Growers Cooperative of Florida, et al (IV-D-584); Synthetic Organic Chemical Manufacturers Association, Inc. (IV-D-603); Tenneco Gas (IV-D-746); Tennessee Valley Authority (IV-D-609); Texaco Inc. (IV-D-608); Texas Chemical Council (IV-D-587); Texas Mid-Continent Oil and Gas Association (IV-D-719); Texas Natural Resource Conservation Commission (IV-D-596); Texas Utilities Services, Inc. (IV-D-668); Total Petroleum, Inc. (IV-D-667); Union Camp Corporation (IV-D-586); United States Sugar Corporation (IV-D-666); Utah Department of Environmental Quality (IV-D-749); Utility Air Regulatory Group (IV-D-740); Valero Energy Corporation (IV-D-669); Wellman, Inc. (IV-D-574); Williston Basin Interstate Pipeline Company (IV-D-553); WMX Technologies, Inc., et al (IV-D-731)

Section 2.2: Hammer Provision

2.2.1 Generally

Comment a: Many commenters opposed inclusion of a "hammer" provision for a number reasons, including the fact that it was unjustified and unreasonable given industry's willingness to assist EPA in the development of protocols and the fact that a hammer might act as an impediment, rather than incentive, to the development of appropriate protocols. Other reasons for opposition included: (1) the Act does not require that enhanced monitoring be implemented by all affected sources by January 1, 2000; (2) requiring sources to submit protocols without guidance unfairly disadvantages those sources which will have to commit a much higher level of resources to develop protocols versus those who

had the benefit of example protocols; and (3) there is no reason to hurry the process in a way that will lead to uncertainty and time-consuming revision, given the fact that underlying requirements are not being revised and periodic monitoring is available as an interim option. Numerous other commenters questioned the logic of requiring sources to develop and submit protocols that EPA itself could not successfully develop by the hammer deadline. The example of particulate matter protocols was cited. Some thought that the hammer would allow EPA to escape its responsibility to develop protocols. A utility group suggested that EPA postpone adoption of a hammer provision until it clear whether the Agency is able to produce the several hundred necessary protocols in the next few years. It was said that if EPA accomplishes this task, then adopting a hammer will be uncontroversial. If the Agency does not, then there will a better understanding of the technical issues which should be considered in structuring of a hammer provision. Two State agencies also opposed a hammer provision absent the adoption of an enforceable schedule and a demonstration by EPA that all necessary protocols can be promulgated in a timely fashion.

Some commenters advocated an extension of the hammer deadline. They argued that no permit renewals would occur before the hammer date and, therefore, under the phase-in approach permitting agencies would see a flood of protocol applications soon after the deadline. An extension would alleviate some of this logjam by allowing for some renewals to occur before the hammer. One association of State and local permitting authorities, along with two State agencies, recommended that EPA redefine the hammer provision to be five years from the promulgation of the enhanced monitoring program. The association further suggested, along with some State and local agencies, that the hammer only be implemented if EPA fulfills its example protocol development obligations. Some State agencies recommended that the hammer provision not take effect until one year after the scheduled completion by EPA of a monitoring protocol for a particular pollutant/process combination, thereby minimizing the number of protocols received by the agency near a single hammer date.

One environmental group supported the hammer provision, but argued that the Agency must clarify that all permits must contain enhanced monitoring requirements for the covered units by January 1, 2000. The rule should require any source with units subject to part 64, but without enhanced monitoring requirements in its operating permit, to submit an

application to revise its permit by April 1, 1999. This would give the permitting authority nine months to review the application and modify the permit. It was argued that a requirement merely to reopen a permit expeditiously after January 1, 2000, is unenforceable.

Response: As discussed above in section 2.1 (Part II), this implementation approach is not adopted in the final rule.

Letter(s): Aluminum Association, The (IV-D-713); American Automobile Manufacturers Association (IV-D-732); Amoco Corporation (IV-D-760); Arizona Department of Environmental Quality (IV-D-595); Arkansas Environmental Federation (IV-D-547) ; ASARCO (IV-D-654); Association of Texas Intrastate Natural Gas Pipelines (IV-D-610); Association of Texas Intrastate Natural Gas Pipelines (IV-D-619); AT&T (IV-D-631); Baltimore Gas and Electric Company (IV-D-573); Bay Area Air Quality Management District (IV-D-593); BP Oil Company (IV-D-756); Chemical Manufacturers Association (IV-D-640); Class of '85 Regulatory Response Group (IV-D-664); Clean Air Implementation Project (IV-D-639); CNG Transmission Corporation (IV-D-721); Coalition for Clean Air Implementation (IV-D-274); Colorado Association of Commerce and Industry (IV-D-590); Corn Refiners Association, Inc. (IV-D-605); County Sanitation Districts of Orange County (IV-D-594); Delhi Gas Pipeline Corporation (IV-D-557); E.I. DuPont de Nemours and Company (IV-D-758); Eastman Chemical Company (IV-D-589); Eastman Kodak Company (IV-D-597); Edison Electric Institute (IV-D-748); Electronics Industries Clean Air Task Force (IV-D-738); Eli Lilly and Company (IV-D-696); Engine Manufacturers Association (IV-D-581); Exxon Chemical Americas (IV-D-600); General Electric Company (IV-D-580); Illinois Power Company (IV-D-625); Intel Corporation (IV-D-739); Kaiser Aluminum & Chemical Corporation (IV-D-734); Kennecott Corporation (IV-D-663); Marathon Oil Company (IV-D-743); Minnesota Pollution Control Agency (IV-D-707); Mobil Oil Corporation (IV-D-619); Monsanto Company (IV-D-592); National Resources Defense Council (IV-D-750); NEDA/CARP (IV-D-689); Northwest Pipeline Corporation (IV-D-690); Ohio EPA (IV-D-730); Oregon Department of Environmental Quality (IV-D-717); Occidental Chemical Corporation (IV-D-566); Pennsylvania Department of Environmental Resources (IV-D-744); Peoples Natural Gas (IV-D-645); Pharmaceutical Research and Manufacturers of America (IV-D-606); Phillips Petroleum Company (IV-D-718); Procter & Gamble Company, The (IV-D-665752); Rubber Manufacturers Association (IV-D-601); South Carolina Electric & Gas Company (IV-D-637); STAPPA/ALAPCO

(IV-D-741); Tenneco Gas (IV-D-746); Tennessee Department of Environment and Conservation (IV-D-634); Tennessee Valley Authority (IV-D-609); Texaco Inc. (IV-D-608); Texas Chemical Council (IV-D-587); Texas Mid-Continent Oil and Gas Association (IV-D-719); Texas Utilities Services, Inc. (IV-D-668); Total Petroleum, Inc. (IV-D-667); Union Camp Corporation (IV-D-586); Utility Air Regulatory Group (IV-D-740); Wellman, Inc. (IV-D-574); Williston Basin Interstate Pipeline Company (IV-D-553); WMX Technologies, Inc. (IV-D-731)

2.2.2: Timeframes for Processing Permits after Reopening

Comment a: Several commenters proposed deleting the reopening provision in order to allow for better planning by industry and State regulators. In the alternative, commenters suggested that EPA eliminate or extend the hammer and, after initial permitting, require submission of protocols only at the permit renewal stage. One State agency recommended clarifying the hammer provision by deleting the term "expeditiously" as used for reopenings of existing permits. Instead, it was suggested that the owner or operator be required to submit an application for permit modification to incorporate enhanced monitoring by January 1, 2000, unless there is two years or less left in the permit term. Because the permit modification process could take up to 18 months, it would not make sense to modify the permit six months before the permit is renewed. Another State agency said that EPA must define a specific date when protocols must be incorporated into permits.

Response: As discussed above in section 2.1 (Part II), this implementation approach is not adopted in the final rule.

Letter(s): Baltimore Gas and Electric Company (IV-D-573); Bay Area Air Quality Management District (IV-D-593); Edison Electric Institute (IV-D-748); Illinois Power Company (IV-D-625); Minnesota Pollution Control Agency (IV-D-707); Oregon Department of Environmental Quality (IV-D-717); Texas Utilities Services, Inc. (IV-D-668); Utility Air Regulatory Group (IV-D-740)

Section 2.3: States' Authority to Require Enhanced Monitoring

Comment a: One commenter argued that to allow States to adopt enhanced monitoring

programs that may be inconsistent with future EPA guidance is counter-productive. The commenter encouraged EPA to request States to not adopt enhanced monitoring programs until guidance is available. A State agency suggested that the final rule contain language allowing permitting authorities the option to establish an enhanced monitoring protocol through State rulemaking twelve months after an example protocol is published by EPA.

Response: Part 64 establishes minimum requirements that an owner or operator must achieve to satisfy the Act. Nothing in part 64 restricts the State from requiring more stringent monitoring than the requirements imposed by part 64. This includes implementation schedule requirements as well as monitoring elements.

Letter(s): Coastal Corporation, The (IV-D-583); Texas Natural Resource Conservation Commission (IV-D-596)

Section 3: Consideration of Cost in Selecting and Approving Protocols

Section 3.1: Selection of Monitoring Using the Least-cost Option

Comment a: Numerous commenters supported the general notion of considering cost in the enhanced monitoring protocol selection process, but did not specifically comment on the option of choosing the least-cost option among different protocols that meet the requirements of the rule.

Many other commenters from industry, local and State permitting authorities and environmental organizations were specifically in favor allowing owners and operators to select the least-cost enhanced monitoring protocol that can achieve the requirements in the rule.

A number of commenters argued that owners or operators are already free to select the least cost protocol that meets the minimum requirements of the rule, because nothing in the Act authorizes EPA or the permitting authority to require the use of a more expensive protocol. Thus, a rule allowing for such considerations would be superfluous because it would merely clarify what is already permitted. Other industry commenters stated that the least-cost approach must be included in the rule, not just the preamble.

One utility group added that considering cost only when selecting a protocol from among those that meet the currently proposed enhanced monitoring criteria would not be consistent with the reasonableness concept in § 114 of the Act, because all of the possible protocols that satisfy the enhanced monitoring criteria might be unreasonable from a cost standpoint.

Two commenters specifically opposed allowing owners or operators to choose the least-cost monitoring option on the grounds that cost should only be considered in the guidance development process. One association of State and local permitting authorities suggested that more than one acceptable protocol be developed for each emissions unit/pollutant combination, which would likely result in differing cost considerations. Another State agency said that the ability to choose between one of several protocols based on cost considerations should be left to the discretion of permitting authorities.

Response: Part 64 establishes minimum requirements that an owner or operator must

achieve to satisfy the Act. Provided the owner or operator satisfies part 64, the owner or operator is free to select whatever monitoring option the owner chooses for whatever reason, including cost. As noted by some commenters, this concept is inherent to the structure of the part 64 process and there is no reason to include specific language to this effect in the rule.

Letter(s): Alabama Department of Environmental Management (IV-D-695); Aluminum Association, The (IV-D-713); Alyeska Pipeline Service Company (IV-D-742); American Automobile Manufacturers Association (IV-D-732); American Gas Association (IV-D-735); American Petroleum Institute (IV-D-703); Amoco Corporation (IV-D-760); Arkansas Environmental Federation (547); ASARCO (IV-D-654); Association of Texas Intrastate Natural Gas Pipelines (IV-D-610); AT&T (IV-D-631); Baker Refractories (IV-D-613); Baltimore Gas and Electric Company (IV-D-573); Bay Area Air Quality Management District (IV-D-593); BP Oil Company (IV-D-756); Bush Boake Allen, Inc. (IV-D-646); Chemical Manufacturers Association (IV-D-640); Chevron (IV-D-585); City of Los Angeles (IV-D-714); Class of '85 Regulatory Response Group (IV-D-664); Clean Air Implementation Project (IV-D-639); CNG Transmission Corporation (IV-D-721); Coalition for Clean Air Implementation (IV-D-274); Coastal Corporation, The (IV-D-583); Colorado Association of Commerce and Industry (IV-D-590); Corn Refiners Association, Inc. (IV-D-605); General Electric (IV-D-580); County Sanitation Districts of Los Angeles County (IV-D-632); County Sanitation Districts of Orange County, California (IV-D-594); Delhi Gas Pipeline Corporation (IV-D-557); Dow Chemical Company, The (IV-D-582); DuPont Engineering (IV-D-758); Eastman Chemical Corporation (IV-D-589); Eastman Kodak Company (IV-D-597); Edison Electric Institute (748); Electronics Industries Clean Air Task Force (IV-D-738); Eli Lilly and Company (IV-D-696); Engelhard Corporation (694); Engine Manufacturers Association (IV-D-581); Environmental Forensic Services (IV-D-716); Exxon Chemical Americas (IV-D-600); Fort Howard Corporation (IV-D-570); Gas Processors Association (IV-D-670); Greater Cleveland Growth Association (IV-D-638); Hawaiian Electric Company, Inc. (IV-D-571); Houston Lighting & Power Company (IV-D-579); Illinois Power (IV-D-625); Independent Liquid Terminals Association (IV-D-747); Interstate Natural Gas Association of America (IV-D-757); J.M. Huber Corporation (IV-D-563); Kaiser Aluminum & Chemical Corporation (IV-D-734); Kennecott Corporation (IV-D-663); Louisiana Mid-Continent Oil and Gas Association (IV-D-554); Marathon Oil Company (IV-D-743); Minnesota Pollution Control Agency (IV-D-707);

Mississippi Chemical Corporation (IV-D-745); Mobil Oil Corporation (IV-D-619); Monitor Labs, Inc. (IV-D-591); Monsanto Company (IV-D-592); National Resources Defense Council (IV-D-750); Natural Gas Pipeline Company of America (IV-D-715); NEDA/CARP (IV-D-689); NESCAUM (IV-D-697); Northwest Pipeline Corporation (IV-D-690); Occidental Chemical Corporation (IV-D-566); Ohio EPA (IV-D-730); Oregon Department of Environmental Quality (IV-D-717); Pennzoil Company (IV-D-588); Peoples Natural Gas Company (IV-D-645); Pharmaceutical Research and Manufacturers of America (IV-D-606); Phillips Petroleum Company (IV-D-718); Procter & Gamble Company, The (IV-D-665); Questar Corporation (IV-D-686); Ravenswood Aluminum Corporation (IV-D-704); Rubber Manufacturers Association (IV-D-601); South Carolina Electric & Gas Company (IV-D-637); Southern California Gas Company (IV-D-564); Specialty Steel Industry of North America (IV-D-653); STAPPA/ALAPCO (IV-D-741); Steel Manufacturers Association (IV-D-652); Sugar Cane Growers Cooperative of Florida, et al (IV-D-584); Synthetic Organic Chemical Manufacturing Association, Inc. (IV-D-603); Tenneco Gas (IV-D-746); Tennessee Valley Authority (IV-D-609); Texas Chemical Council (IV-D-587); Texaco Inc. (IV-D-608); Texas Natural Resource Conservation Commission (IV-D-596); Texas Mid-Continent Oil and Gas Association (IV-D-719); Texas Utilities Services, Inc. (IV-D-668); Total Petroleum, Inc. (IV-D-667); Union Camp Corporation (IV-D-586); United States Sugar Corporation (IV-D-666); Utah Department of Environmental Quality (IV-D-749); Utility Air Regulatory Group (IV-D-740); Valero Energy Corporation (IV-D-669); Williston Basin Interstate Pipeline Company (IV-D-553); WMX Technologies, Inc., et al (IV-D-731).

Section 3.2: Cost Considerations in Developing EPA Guidance

Comment a: Many commenters expressed their general support for the consideration of cost and effectiveness in the development of monitoring protocol guidance, but did not offer specific comments on how the final rule should allow the Agency to consider such factors.

A number of commenters who supported the consideration of cost in the guidance development process advocated an approach similar to the one used in the development of "reasonably available control technology" (RACT) requirements for nonattainment areas under section 172(c)(1) of the Act. The commenters suggested that the guidance development process mirror the first stage of implementation of RACT requirements in

which EPA issues Control Technique Guidelines (CTGs) for certain categories of stationary sources. Each CTG reviews current technology and cost information for the relevant source category and then sets out a "presumptive norm" for RACT for that source category. The commenters recommended that EPA follow a similar procedure by arraying and evaluating available monitoring methods and associated costs for each source category and then promulgating a "presumptively acceptable" enhanced monitoring protocol for each. These same commenters argued, however, that presumptively acceptable protocols would have to be developed through rulemaking, not guidance. Supporters of the RACT approach noted that it would be impossible to develop a reasonable methodology for the evaluation of protocol cost-effectiveness by permitting authorities on a case-by-case basis.

One industry commenter argued that EPA must consider cost in the development of any example protocols and that this could be achieved by allowing for least-cost monitoring that achieves the requirements of the rule, by retaining existing monitoring where no demonstrated alternative to it exist, and by rejecting any least-cost monitoring which is unreasonably costly.

Other commenters suggested that the best way to consider cost in the guidance development process is to develop several alternative protocols for each process/pollutant combination, or to discuss in a preamble to the presumptively acceptable protocols less expensive versions of the protocol.

Some industry commenters provided specific guidance criteria that would reduce the cost of monitoring protocols. One commenter said that cost should be compared to value in meeting scientific objectives versus practical objectives considering the level of DQO, risk of each pollutant, and the location of the source. Other commenters felt that the guidance development process should be refocused as a more general set of principles coupled with a reference document "data base" approach to provide information on available monitoring methods. These guidelines would include cost criteria for monitor selection that compares the cost of potential monitoring protocols with the cost of current practices. Thus, EPA would provide general guidelines, but permitting authorities would retain the discretion to define their own incremental cost criteria. The following factors were suggested for inclusion in the general criteria: (1) allowing a reduction in monitoring frequency where a source maintains

exemplary compliance for extended periods; (2) allowing the States flexibility to monitor fewer emission points within a facility when the pollutants being monitored are of relatively low concern; (3) according States the power to specify implementation delays for monitoring protocols or phase-in schedules for emission points applicable to monitoring requirements; and (4) eliminating archaic and expensive monitoring requirements when more effective monitoring is developed. One commenter advocated generically enhancing monitoring associated with underlying substantive requirements, consistent with the title V standard of "sufficient to determine compliance".

A few commenters expressed opposition to the guidance development process altogether, maintaining that the Agency can only properly consider costs through a rulemaking approach which considers not only the direct cost of enhanced monitoring, but also the indirect costs imposed by the potential increased stringency of the underlying standard. One commenter supported consideration of cost in the guidance process only if EPA chooses not to pursue a rulemaking approach. Other commenters said that the issue of considering cost in the guidance process is difficult to address since the Agency has not sufficiently documented any emission reduction benefit derived from the proposed program, and a revised RIA has not been made available to the regulated community.

Response: The Agency has considered cost and other appropriate factors in developing the degree to which monitoring under part 64 should provide a reasonable assurance of compliance. Based on those considerations, the Agency has promulgated the minimum requirements for monitoring under part 64 that must be achieved. The Agency will develop guidance to indicate which monitoring approaches for a particular process/pollutant/control device the Agency believes can satisfy the part 64 requirements.

Letter(s): Aluminum Association, The (IV-D-713); Amoco Corporation (IV-D-760); Arkansas Environmental Federation (IV-D-547); AT&T (IV-D-631); Baker Refractories (IV-D-613); Bay Area Air Quality Management District (IV-D-593); Chemical Manufacturers Association (IV-D-640); City of Los Angeles (IV-D-714); Clean Air Implementation Project (IV-D-639); Corn Refiners Association, Inc. (IV-D-605); DuPont Engineering (IV-D-758); Eastman Chemical (IV-D-589); Edison Electric Institute (IV-D-748); Enviroplan (IV-D-723); Exxon Chemical Americas (IV-D-600); Fort Howard Corporation (IV-D-570); Gas Processors Association (IV-D-670); General

Electric Company (IV-D-580); Illinois Power Company (IV-D-625); Kaiser Aluminum & Chemical Corporation (IV-D-734); Kennecott Corporation (IV-D-663); Louisiana Mid-Continent Oil and Gas Association (IV-D-554); Mobil Oil Corporation IV-D-619); Natural Gas Pipeline Company of America (IV-D-715); NEDA/CARP (IV-D-689); NESCAUM (IV-D-697); Northwest Pipeline Corporation (IV-D-690); Occidental Chemical Corporation (IV-D-566); Ohio EPA (IV-D-730); Oregon Department of Environmental Quality (IV-D-717); Peoples Natural Gas Company (IV-D-645); Pharmaceutical Research and Manufacturers of America (IV-D-606); Ravenswood Aluminum Corporation (IV-D-704); Regional Air Pollution Control Agency (IV-D-752); Rubber Manufacturers Association (IV-D-601); STAPPA/ALAPCO (IV-D-741); Sugar Cane Growers Cooperative of Florida, et al (IV-D-584); Texaco Inc. (IV-D-608); Texas Mid-Continent Oil and Gas Association (IV-D-719); Texas Natural Resource Conservation Commission (IV-D-596); Texas Utilities Services, Inc. (668); United States Sugar Corporation (IV-D-666); Utility Air Regulatory Group (IV-D-740); Valero Energy Corporation (IV-D-669); WMX Technologies, Inc., et al (IV-D-731).

Section 3.3: Variance Based on Cost-effectiveness

Comment a: Many commenters generally supported the concept of allowing, on a case-by-case basis and upon a demonstration by the owner or operator that no monitoring approach that satisfies the requirements of the rule is cost-effective, the owner or operator to propose a cost-effective monitoring approach that comes as close as possible to achieving all the other enhanced monitoring criteria.

A number of commenters suggested a case-by-case approach similar to the second stage in the development of RACT requirements for nonattainment areas. These commenters argued that, after the development of a CTG which sets out a presumptive norm for a source category, the second stage of the RACT process involves the establishment of RACT requirements by State agencies that fit the economic and technical circumstances of an individual source. The commenters therefore suggested that, after the development of presumptively acceptable enhanced monitoring protocols, a second opportunity to consider cost be provided at the time the protocol is established for the specific source. The latter evaluation would include consideration of site-specific factors like the size of the unit and the margin

of compliance.

Several commenters advocated a top-down analysis of monitoring options similar to that employed in best available control technology (BACT) determinations. One such approach would rely on the guidance process to develop multiple protocols for process/pollutant combinations, and then owners and operators would have to justify the use of more cost-effective protocols based on the criteria provided in the rule.

Utility commenters argued that the reasonableness requirements in section 114 of the Act required EPA to allow the owner or operator to propose a protocol that does not satisfy all regulatory criteria in circumstances where no monitoring can satisfy the requirements in a cost-effective manner. Utility industry commenters also supported a general cost-effectiveness criteria based on the cost per ton of actual emissions monitored. If the cost exceeds a few hundred dollars per ton of monitored emissions, imposition of that monitoring technique would be seen as unreasonable.

A number of commenters also proposed specific cost caps or ceilings above which protocols would not be considered cost-effective. Some of these commenters provided specific cost per ton values or formulas, while others generally supported cost evaluations based on a percentage of control costs, title V emissions fees, or capital costs.

At least two commenters suggested that the rule provide for an appeals process through which sources could contest permitting authority monitoring decisions which provide for monitoring that is not cost-effective. Some provided general criteria to be included in the rule which would assist in choosing alternative monitoring or determining the specific nature of monitoring which would come "as close as possible" to meeting the rule requirements. One industry commenter proposed a general cost/benefit analysis coupled with a risk analysis to determine the acceptability of monitoring.

Some commenters specifically opposed a provision in the rule which would allow sources to implement enhanced monitoring which comes as close as possible to satisfying rule requirements when no monitoring method which satisfies the rule is found to be cost-effective. One State agency maintained that allowing for such a variance from rule requirements suggests that the enhanced monitoring rule is unnecessary

and that an amendment of the part 70 monitoring requirements would be sufficient. Another State agency argued that the case-by-case evaluation of cost-effectiveness would be an unmanageable burden on permitting authorities. An association of local and State agencies said that cost should only be considered in the guidance development process. One State agency argued that EPA should redefine "cost effectiveness".

Several industry commenters concerned with the burdens that such a case-by-case analyses would present argued that cost could only be properly considered in separate rulemakings for each source category.

An association of manufacturers and suppliers of air pollution monitoring and control technologies disagreed with EPA's assertion that enhanced monitoring would not be cost-effective for some major sources. The association stated that the Agency has built sufficient flexibility in to the proposed rule to allow all major sources to adopt some form of cost-effective enhanced monitoring.

One environmental organization opposed allowing sources to implement monitoring that only came as close as possible to achieving rule requirements, arguing that no basis exists under the Act for waiving a source's obligation to determine and certify whether compliance is continuous. The group added that cost had already been considered by raising the applicability threshold and by tying the frequency, specificity and type of monitoring required to the variability of a unit's emissions.

Response: The Agency has considered cost and other appropriate factors in developing the degree to which monitoring under part 64 should provide a reasonable assurance of compliance. Based on those considerations, the Agency has promulgated the minimum requirements for monitoring under part 64 that must be achieved. The Agency notes that the criteria for monitoring under the final rule are more flexible than the criteria included in the 1993 EM proposed rule, in part because of the significant cost and technical issues raised by many commenters during the public comment process. The Agency believes that the criteria in the final rule will allow owners or operators to develop cost-effective monitoring approaches that provide a reasonable assurance of compliance with applicable requirements. In addition, the final rule (like the proposed rule) allows for site-specific factors, such as control device reliability and margin of compliance, to be considered in evaluating whether the monitoring proposed satisfies part 64. The Agency disagrees that any variance from

these requirements based solely on cost considerations is necessary or appropriate. Such an approach would only be appropriate if the Agency developed a hierarchical, top-down approach, that required a balancing of cost, technical and similar issues for each application of part 64. The Agency believes that such an approach is overly burdensome, not necessary to achieve the goals of the Act, and not desired by most of the commenters that expressed support for case-by-case cost consideration. Thus, the final rule does not include the variance requested.

Letter(s): Alabama Department of Environmental Quality (IV-D-695); Aluminum Association, The (IV-D-713); American Automobile Manufacturers Association (IV-D-732); American Gas Association (IV-D-735); American Petroleum Institute (IV-D-703); Amoco Corporation (IV-D-760); ASARCO (IV-D-654); Association of Intrastate Natural Gas Pipelines (IV-D-610); Baltimore Gas and Electric Company (IV-D-573); Bay Area Air Quality Management District (IV-D-593); BP Oil Company (IV-D-756); Chemical Manufacturers Association (IV-D-640); Chevron (IV-D-585); City of Los Angeles (IV-D-714); Class of '85 Regulatory Response Group (IV-D-664); Clean Air Implementation Project (IV-D-639); Coalition for Clean Air Implementation (IV-D-724); Coastal Corporation, The (IV-D-583); Engelhard Corporation (IV-D-694); Colorado Association of Commerce and Industry (IV-D-590); Corn Refiners Association, Inc. (IV-D-605); County Sanitation Districts of Los Angeles (IV-D-632); County Sanitation Districts of Orange County (IV-D-594); Delhi Gas Pipeline Corporation (IV-D-557); Dow Chemical Company, The (IV-D-582); DuPont Engineering (IV-D-758); Eastman Chemical Company (IV-D-589); Edison Electric Institute (IV-D-748); Eli Lilly and Company (IV-D-696); Engine Manufacturers Association (IV-D-581); Environmental Forensic Services (IV-D-716); Exxon Chemical Americas (IV-D-600); Gas Processors Association (IV-D-670); General Electric Company (IV-D-580); Hawaiian Electric Inc. (IV-D-571); Illinois Power Company (IV-D-625); Independent Liquid Terminals Association (IV-D-747); Institute of Clean Air Companies (IV-D-726); J.M. Huber Corporation (IV-D-563); Kaiser Aluminum & Chemical Corporation (IV-D-734); Kennecott Corporation (IV-D-663); Minnesota Pollution Control Agency (IV-D-707); Mississippi Chemical Corporation (IV-D-745); Mobil Oil Corporation (IV-D-619); National Resources Defense Council (IV-D-750); Natural Gas Pipeline Company of America (IV-D-715); NEDA/CARP (IV-D-689); NESCAUM (IV-D-697); Northwest Pipeline Corporation (IV-D-690); Occidental Chemical Corporation (IV-D-566); Ohio EPA (IV-D-730); Oregon Department of Environmental Quality (IV-D-717); Pennzoil Company (IV-D-588); Peoples

Natural Gas Company (IV-D-645); Pharmaceutical Research and Manufacturers of America (IV-D-606); Phillips Petroleum Company (IV-D-718); Procter & Gamble Company, The (IV-D-665); Ravenswood Aluminum Corporation (IV-D-704); Regional Air Pollution Control Agency (IV-D-752); Rubber Manufacturers Association (IV-D-601); South Carolina Electric & Gas Company (IV-D-637); Southern California Gas Company (IV-D-564); Specialty Steel Industry of North America (IV-D-653); STAPPA/ALAPCO (IV-D-741); Steel Manufacturers Association (IV-D-652); Synthetic Organic Chemical Manufacturers Association, Inc. (IV-D-603); Tennessee Valley Authority (IV-D-609); Texas Chemical Council (IV-D-587); Texas Mid-Continent Oil & Gas Association (IV-D-719); Texas Natural Resources Conservation Commission (IV-D-596); Texas Utilities Services, Inc. (IV-D-668); Utah Department of Environmental Quality (IV-D-749); Utility Air Regulatory Group (IV-D-740); Valero Energy Corporation (IV-D-669); Williston Basin Interstate Pipeline Company (IV-D-553)

Section 3.4: Reconsidering "Enhanced Monitoring" Definition and Criteria

3.4.1: Meaning of Section 114(a)(3), Generally

Comment a: Numerous commenters explicitly supported the proposal to redefine enhanced monitoring as representing the monitoring for determining compliance, taking cost and effectiveness into account. Some of these commenters proposed specific definitions. Some utility industry commenters argued that the reasonableness concept in section 114 of the Act compels EPA to accept protocols that do not fully meet enhanced monitoring criteria, if the only protocols that do meet the criteria are not cost-effective.

Response: The final rule requires that the monitoring under part 64 provide a reasonable assurance that sources remain in compliance with applicable requirements. See the detailed discussion of these issues in Section I.C. of the preamble to the final rule.

Letter(s): American Automobile Manufacturers Association (IV-D-732); ASARCO (IV-D-654); Baltimore Gas and Electric Company (IV-D-573); BP Oil Company (IV-D-750); Chemical Manufacturers Association (IV-D-640); Clean Air Implementation Project (IV-D-639); Coalition of Clean Air Implementation (IV-D-274); Colorado Association of Commerce and Industry (IV-D-590); Corn Refiners Association, Inc. (IV-D-605); DuPont

Engineering (IV-D-758); Eastman Chemical Company (IV-D-589); Eastman Kodak Company (IV-D-597); Edison Electric Institute (IV-D-748); Electronic Industries Clean Air Task Force (IV-D-738); Engine Manufacturers Association (IV-D-581); Illinois Power Company (IV-D-625); Kaiser Aluminum & Chemical Corporation (IV-D-734); Monsanto Company (IV-D-592); Occidental Chemical Corporation (IV-D-566); Phillips Petroleum Company (IV-D-718); Rubber Manufacturers Association (IV-D-601); Texaco Inc. (IV-D-608); Texas Utilities Services, Inc. (IV-D-668); Utility Air Regulatory Group (IV-D-740)

Comment b: One commenter criticized the definition of enhanced monitoring in the proposed rule, because it is contrary to the intent of the Act. The commenter maintained that the intent of the statute was to have representative data regarding the compliance status of sources and, if Congress had intended to require continuous compliance, they would have specifically requested it for the Enhanced Monitoring Program as it did for the Acid Rain Program.

Response: The Agency believes that the criteria established in the final rule properly address this concern.

Letter(s): Occidental Chemical Corporation (IV-D-566)

Comment c: An industry commenter questioned why EPA would implement a rule that presumes the preferred approach is to be able to certify compliance with continuous data, given that the Agency does not believe section 114 requires data to account for all operating periods and given the significance of costs as demonstrated by a study conducted by an EPA contractor. The commenter suggested that EPA simply state that sources can either certify continuous or intermittent compliance using continuous or intermittent data respectively, and that the least-cost method that provides a reasonable assurance that the source is achieving compliance is sufficient. The commenter further argued that nothing in section 114 indicates a preference for either certification and, if the Agency were implementing the statute in the least-cost manner, it would create a preference for intermittent certifications. Continuous certifications would only be required where there is extreme variability of emissions or no other technology that can provide reasonably representative information regarding the functioning of control equipment

or compliance with the standard.

Response: Because the CAM approach should be significantly less costly than EPA's proposed enhanced monitoring approach, EPA believes it is no longer appropriate to allow sources covered by part 64 to adopt monitoring that, at best, can document intermittent compliance.

Letter(s): General Electric Company (IV-D-580)

3.4.2: Meaning of Intermittent Compliance

Comment a: Many commenters supported the Agency's position that nothing in section 114 of the Act dictates that all sources must certify to being in either continuous compliance or else be considered in noncompliance, but rather that sources may also certify to being in compliance as demonstrated on an intermittent basis. A number of industry commenters, while supporting EPA's position that section 114 does not require a source to be considered in noncompliance if it does not certify to continuous compliance, noted that an intermittent compliance certification should not be viewed as an accommodation to the practical unavailability of continuous data. Rather, intermittent reference tests should be seen as part of the basic design of many standards, and any shift to a continuous monitoring approach in such cases would have to be undertaken through a rulemaking.

Some commenters agreed with the Agency's position that section 114 allows for a certification of intermittent compliance that does not indicate noncompliance, but disagreed with the notion that sources must have continuous monitoring data available to certify continuous compliance. These commenters were concerned that the average layman would not appreciate the fine legal distinction between continuous compliance and compliance as demonstrated on an intermittent basis. It was argued that EPA should take an approach that would not confuse the public. This could be accomplished by allowing sources to certify to continuous compliance if the source meets the monitoring and compliance determinations of the applicable standards, regardless of whether the underlying standard contains a compliance method that measures emissions at all times or just periodically. At the very least, the Agency should clarify the difference between this type of intermittent compliance

and the type that indicates noncompliance. This step would at least avoid confusion by State inspectors and plant personnel assisting in the preparation of certifications.

One commenter interpreted EPA's position to mean that it is possible to compile monitoring data on an intermittent basis to demonstrate continuous compliance. The commenter supported this viewpoint, saying that it is possible to monitor some pollution control devices intermittently and ensure that the device is operating within an acceptable range. It was suggested that EPA clarify this point with explicit language in the rule. Other commenters, however, did not believe that the Agency was willing to allow a certification of continuous compliance based on intermittent or periodic monitoring data, but argued that sources should be able to do so.

An industry association suggested that the compliance certification requirements should simply provide that a source review the results of the monitoring required by the underlying applicable requirement or imposed through title V permits and then submit a certification as to whether the relevant monitoring results indicate that the source was in compliance with the applicable requirement at the time the monitoring was performed.

One State agency expressed opposition to EPA's interpretation of section 114 of the Act, saying that a source which has failed to obtain sufficient monitoring data to certify compliance with the underlying standard is de facto in violation of the applicable requirement. The agency argued that rather than allowing sources to certify intermittent compliance, the rule should allow for a reduction in the acceptable monitoring frequency in a particular protocol. Another State agency said that the December 28 notice was unclear regarding the definitions of intermittent and continuous compliance. The agency recommended that EPA clarify the meaning of these terms in the final rule, thereby aiding sources in understanding how data collected under an approved EMP will affect the source's compliance status and assisting permitting authorities in making enforcement determinations.

One commenter supported the Agency's interpretation of intermittent and continuous compliance and recommended that it be extended to periodic monitoring. According to the commenter, periodic monitoring and intermittent monitoring imply the same frequency of monitoring and, therefore, should be afforded the same level of reliability. The commenter added, that if this is not the case, EPA should more clearly

differentiate between periodic and intermittent monitoring.

In support of the Agency's clarification of intermittent and continuous compliance, one commenter stated that if an intermittent compliance certification was viewed as tantamount to a confession of violation, only monitoring protocols that were continuous in nature would be adequate to avoid a source being deemed in violation. The commenter went on to cite the legislative history of section 114 as evidence that Congress clearly considered and rejected requiring all sources to use continuous monitoring methods.

Response: See Sections I.C.5. and II.K. of the preamble to the final rule for a detailed discussion of this issue.

Letter(s): American Automobile Manufacturers Association (IV-D-732); American Petroleum Institute (IV-D-703); Amoco Corporation (IV-D-760); ASARCO (IV-D-654); AT&T (IV-D-631); Baltimore Gas and Electric Company (IV-D-573); BP Oil Company (IV-D-756); Chemical Manufacturers Association (IV-D-640); Class of '85 Regulatory Response Group (IV-D-664); Clean Air Implementation Project (IV-D-639); Coalition for Clean Air Implementation (IV-D-724); Colorado Association of Commerce and Industry (IV-D-590); Corn Refiners Association, Inc. (IV-D-605); County Sanitation Districts of Los Angeles County (IV-D-632); DuPont Engineering (IV-D-758); DuPont SHE Excellence Center (755); Eastman Chemical Company (IV-D-589); Eastman Kodak Company (IV-D-597); Edison Electric Institute (IV-D-748); Eli Lilly and Company (IV-D-696); Engelhard Corporation (IV-D-694); Engine Manufacturers Association (IV-D-581); Gas Processors Association (IV-D-670); General Electric Company (IV-D-580); Houston Lighting & Power Company (IV-D-579); Illinois Power Company (IV-D-625); Kaiser Aluminum & Chemical Corporation (IV-D-734); Independent Liquid Terminals Association (IV-D-747); Kennecott Corporation (IV-D-663); Minnesota Pollution Control Agency (IV-D-707); Mobil Oil Corporation (IV-D-619); Monsanto Company (IV-D-592); NEDA/CARP (IV-D-689); Northwest Pipeline Corporation (IV-D-690); Pennzoil Company (IV-D-588); Peoples Natural Gas Company (IV-D-645); Phillips Petroleum Company (IV-D-718); Procter & Gamble Company, The (IV-D-665); Questar Corporation (IV-D-686); Specialty Steel Industry of North America (IV-D-653); Steel Manufacturers Association (IV-D-652); Tenneco Gas (IV-D-746); Tennessee Valley Authority (IV-D-609); Texaco Inc. (IV-D-608); Texas Chemical Council (IV-D-587); Texas Natural Resource Conservation Commission

(IV-D-596); Texas Utilities Services, Inc. (IV-D-668); Total Petroleum, Inc. (IV-D-667); United States Sugar Corporation (IV-D-666); Utility Air Regulatory Group (IV-D-740); Valero Energy Corporation (IV-D-669)

Section 4: Second Phase of Applicability for Nonattainment Areas

Comment a: A few commenters supported a second phase of applicability for nonattainment areas as proposed in the December 28, 1994 notice. Certain other commenters said that they could support a second phase of applicability if changes were made to its implementation. Several commenters supported a second phase of applicability for nonattainment areas, but suggested that it apply only to nonattainment areas designated "serious" or worse. Other commenters said that the second phase should apply to "no more than," instead of "at least" 25% of the emissions units at the major source. Some commenters suggested that the implementation of the second phase be further delayed. One commenter asked EPA to clarify that the second phase would apply only to sources that are major sources for the nonattainment pollutant.

However, numerous commenters opposed a second phase of applicability for nonattainment areas as proposed in the December 28, 1994 notice. The two primary reasons for the opposition were that such a second phase was unnecessary and unjustified. Some commenters also argued that any second phase should be delayed until EPA can determine the effectiveness of enhanced monitoring. Other commenters argued that any additional phase should be based on emissions covered, not emissions units covered. Finally, some commenters argued that efforts to upgrade SIPs in nonattainment areas has already enhanced monitoring for the types of emissions units that would be covered by a second phase.

Response: The Agency believes that the applicability approach adopted in the final rule make this approach unnecessary and therefore no second phase of applicability in nonattainment areas is included in the final rule.

Letter(s): Alabama Department of Environmental Management (IV-D-695); Aluminum Association, The (IV-D-713); Alyeska Pipeline Service Company (IV-D-742); American Automobile Manufacturers Association (IV-D-732); American Gas Association (IV-D-735); Amoco Corporation (IV-D-760); American Petroleum Institute (IV-D-703); Arkansas Environmental Federation (IV-D-547); AT&T (IV-D-631); ASARCO (IV-D-654); Baker Refractories (IV-D-613); Bay Area Air Quality Management District (IV-D-593); BP Oil Company (IV-D-756); Chemical Manufacturers Association (IV-D-640); Chevron (IV-D-585); Class of '85

Regulatory Response Group (IV-D-664); Clean Air Implementation Project (IV-D-639); CNG Transportation Corporation (IV-D-721); Coalition for Clean Air Implementation (IV-D-724); Coastal Corporation, The (IV-D-583); Colorado Association of Commerce and Industry (IV-D-590); Colorado Association of Commerce and Industry (IV-D-590); County Sanitation Districts of Los Angeles County (IV-D-632); County Sanitation Districts of Orange County, California (IV-D-594); Dow Chemical Company, The (IV-D-582); DuPont Engineering (IV-D-758); Eastman Kodak Company (IV-D-597); Engine Manufacturers Association (IV-D-581); Exxon Chemical Americas (IV-D-600); General Electric Company (IV-D-580); Goodyear Tire & Rubber Company, The (IV-D-598); Greater Cleveland Growth Association (IV-D-638); Hawaiian Electric Company, Inc. (IV-D-571); Houston Lighting & Power Company (IV-D-579); Independent Liquid Terminals Association (IV-D-747); Interstate Natural Gas Association of America (IV-D-757); Kaiser Aluminum & Chemical Corporation (IV-D-734); Kaiser Aluminum & Chemical Corporation (IV-D-734); Kennecott Corporation (IV-D-663); Louisiana Mid-Continent Oil & Gas Association (IV-D-554); Marathon Oil Company (IV-D-743); Minnesota Pollution Control Agency (IV-D-707); Mobil Oil Corporation (IV-D-619); Mobil Oil Corporation (IV-D-619); Monsanto Company (IV-D-592); Natural Gas Pipeline Company of America (IV-D-715)Natural Gas Pipeline Company of America (IV-D-715); NEDA/CARP (IV-D-689); NESCAUM (IV-D-697); Northwest Pipeline Corporation (IV-D-690); Occidental Chemical Corporation (IV-D-566); Ohio EPA (IV-D-730); Oregon Department of Environmental Quality (IV-D-717); Pennsylvania Department of Environmental Resources (IV-D-744); Pennzoil Company (IV-D-588); Pennzoil Company (IV-D-588); Peoples Natural Gas Company (IV-D-645); Pharmaceutical Research and Manufacturers of America (IV-D-606); Phillips Petroleum Company (IV-D-718); Phillips Petroleum Company (IV-D-718); Phillips Petroleum Company (IV-D-718); Procter & Gamble Company, The (IV-D-665); Questar Corporation (IV-D-686); Ravenswood Aluminum Corporation (IV-D-704); Rubber Manufacturers Association (IV-D-601); South Carolina Electric & Gas Company (IV-D-637); Southern California Gas Company (IV-D-564); Specialty Steel Industry of North America (IV-D-653); Steel Manufacturers Association (IV-D-652); Synthetic Organic Chemical Manufacturers Association, Inc. (IV-D-603); Tenneco Gas (IV-D-746); Tennessee Department of Environment and Conservation (IV-D-634); Tennessee Valley Authority (IV-D-609); City of Los Angeles (IV-D-714); Texaco Inc. (IV-D-608); Texas Chemical Council (IV-D-587); Texas Mid-Continent Oil & Gas Association (IV-D-719); Texas Natural Resource

Conservation Commission (IV-D-596); Texas Utilities Services, Inc. (IV-D-668); Texas Utilities Services, Inc. (IV-D-668); Total Petroleum, Inc. (IV-D-667); Union Camp Corporation (IV-D-586); Utah Department of Environmental Quality (IV-D-749); WMX Technologies, Inc. (IV-D-731)

Section 5: Relationship of Part 64 to Part 70 Periodic Monitoring

Comment a: Many industry and permitting authority commenters supported relying on part 70 periodic monitoring as sufficient enhanced monitoring for emissions units that are below the major source threshold. However, several commenters suggested that part 70 periodic monitoring be used to satisfy enhanced monitoring requirements for all emissions units at major sources. An industry commenter said that there should be no distinction between periodic and other forms of monitoring.

Several commenters supported the use of periodic monitoring as enhanced monitoring in particular circumstances. A permitting authority suggested that part 70 periodic monitoring was appropriate to satisfy enhanced monitoring in rare cases in which a major source has no individual units that would be subject to enhanced monitoring. Another permitting authority said that periodic monitoring should be used if Phase 2 is implemented and the threshold level is 100 tons. Some commenters said that periodic monitoring was appropriate for emissions units which have a large margin of compliance and a low variability in emissions. Another commenter said that periodic monitoring was particularly appropriate for sources with unmanned emissions units.

Several commenters expressed concern about relying on periodic monitoring until the meaning of "periodic monitoring" is determined. An association of permitting authorities said that the lack of guidance on periodic monitoring and testing requirements remained a major gap in determining the scope and nature of what constitutes enhanced monitoring under the title V program.

Several commenters were concerned about the use of periodic monitoring in the rule. Some of the commenters said that the proposal to use periodic monitoring for certain emissions units was an overly complicated solution to a problem that EPA created. Other commenters said that it would be disastrous for EPA to equate periodic monitoring with the same criteria for enhanced monitoring in proposed part 64.

Some commenters said that if an emissions unit has monitoring that is already adequate to determine compliance, EPA should state that such monitoring is enhanced. Another commenter supported a de minimis exemption to prevent unnecessary burden for small or backup units with

insignificant emissions. Another commenter said that part 70 periodic monitoring should use the same standards of measurement accuracy as required under part 64, even where the frequency of periodic monitoring might be less. This commenter added that if different measurement accuracy standards were adopted for part 70 monitoring than for part 64 enhanced monitoring, the process of determining acceptable frequencies of periodic monitoring to provide representative information on the compliance status of the part 70 source would be considerably complicated.

Response: See Section I.C.4. of the preamble to the final rule and EPA's response in 2.1.7 above for a detailed discussion of this issue.

Letter(s): Alabama Department of Environmental Management (IV-D-695); American Automobile Manufacturers Association (IV-D-732); American Petroleum Institute (IV-D-703); Amoco Corporation (IV-D-760); Arkansas Environmental Federation (IV-D-547); AT&T (IV-D-631); Baltimore Gas and Electric Company (IV-D-573); BP Oil Company (IV-D-756); Chevron (IV-D-585); Class of '85 Regulatory Response Group (IV-D-664); Clean Air Implementation Project (IV-D-639); Colorado Association of Commerce and Industry (IV-D-590); County Sanitation Districts of Orange County, California (IV-D-594); DuPont Engineering (IV-D-758); Eastman Chemical Company (IV-D-589)Edison Electric Institute (IV-D-748); Electronic Industries Clean Air Task Force (IV-D-738); Engelhard Corporation (IV-D-694); Enviroplan (IV-D-723); Gas Processors Association (IV-D-670); Hawaiian Electric Company, Inc. (IV-D-571); Houston Lighting & Power Company (IV-D-579); Illinois Power Company (IV-D-625); Independent Liquid Terminals Association (IV-D-747); J.M. Huber Corporation (IV-D-563); Kaiser Aluminum & Chemical Corporation (IV-D-734); Mobil Oil Corporation (IV-D-619); Monsanto Company (IV-D-592); NEDA/CARP (IV-D-689); NESCAUM (IV-D-697); Northwest Pipeline Corporation (IV-D-690); Ohio EPA (IV-D-730); Oregon Department of Environmental Quality (IV-D-717); Peoples Natural Gas Company, The (IV-D-645); Pennzoil Company (IV-D-588); Phillips Petroleum Company (IV-D-718); Procter & Gamble Company, The (IV-D-665); Rubber Manufacturers Association (IV-D-601); Southern California Gas Company (IV-D-564); Specialty Steel Industry of North America (IV-D-653); Steel Manufacturers Association (IV-D-652); STAPPA/ALAPCO (IV-D-741); Texaco Inc. (IV-D-608); Texas Chemical Council (IV-D-587); Texas Mid-Continent Oil & Gas Association (IV-D-719); Texas Natural Resource Conservation Commission (IV-D-596); Texas Utilities Services, Inc. (IV-D-668); Total Petroleum, Inc. (IV-D-667); Union Camp (IV-D-586); Utah Department of Environmental Quality (IV-D-749); Utility Air Regulatory Group (IV-D-740); Valero Energy Corporation (IV-D-669)

Comment b: Many commenters supported including periodic monitoring language in part 64. Some commenters said that, primarily to avoid confusion, it would be sufficient to cross-reference 40 CFR 70.6(a)(3)(i) in part 64. A commenter said that by merely cross-referencing 40 CFR 70.6(a)(3)(i) in part 64, EPA will avoid any confusion or discrepancies that may arise from having two federal rules with different language for periodic monitoring. Some commenters said that the preamble to part 64 should have some

explanation of this link. Another commenter suggested that the language should clarify that the codification would not be intended to alter, or add to, the existing part 70 requirements into any such codification.

Many commenters, however, opposed including periodic monitoring language in part 64. Most of the commenters said that linkage was either inappropriate, unnecessary or would be confusing. Another commenter opposed linkage because this would create confusion and subject sources with low actual emissions, which should be exempt from section 114(a)(3) (such as electronics manufacturing operations) to monitoring requirements more stringent than necessary. Some commenters were concerned that future amendments part 64 or part 70 would be needlessly complicated. A commenter said that a small unit may not be subject to periodic monitoring if it is subject, for example, to SOCMI HON or another MACT standard.

Some commenters who opposed linkage wanted it to be clear that part 64 enhanced monitoring requirements were not the equivalent of part 70 periodic monitoring requirements, and that the two would be kept separate. The commenters said EPA should make it absolutely clear that periodic monitoring is not required to meet all of the part 64 enhanced monitoring criteria. Conversely, a commenter said that EPA should be careful not to imply that periodic monitoring is acceptable for all sources that are subject to enhanced monitoring.

Response: Although the Agency considered linking the two monitoring provisions, and drafted an approach to make this explicit link in the 1996 part 64 Draft, the final rule opts not to make any explicit cross-reference to part 70 (or any incorporation of part 70 requirements into part 64) on this issue. See Section I.C.4. of the preamble to the final rule for further discussion.

Letter(s): Alabama Department of Environmental Management (IV-D-695); American Petroleum Institute (IV-D-703); Amoco Corporation (IV-D-760); AT&T (IV-D-631); BP Oil Company (IV-D-756); Clean Air Implementation Project (IV-D-639); Colorado Association of Commerce and Industry (IV-D-590); County Sanitation Districts of Los Angeles County (IV-D-632); DuPont Engineering (IV-D-758); Electronic Industries Clean Air Task Force (IV-D-738); General Electric Company (IV-D-580); Houston Lighting & Power Company (IV-D-579); Independent Liquid Terminals Association (IV-D-747); Kaiser Aluminum & Chemical Corporation (IV-D-734); Minnesota Pollution Control Agency (IV-D-707); Mobil Oil Corporation

(IV-D-619); Monsanto Company (IV-D-592); NEDA/CARP (IV-D-689); Ohio EPA (IV-D-730); Oregon Department of Environmental Quality (IV-D-717); Pennzoil Company (IV-D-588); Phillips Petroleum Company (IV-D-718); Procter & Gamble Company, The (IV-D-665); Rubber Manufacturers Association (IV-D-601); STAPPA/ALAPCO (IV-D-741); Tennessee Department of Environment and Conservation (IV-D-634); Texaco Inc. (IV-D-608); Texas Chemical Council (IV-D-587); Texas Mid-Continent Oil & Gas Association (IV-D-719); Texas Natural Resource Conservation Commission (IV-D-596); Total Petroleum, Inc. (IV-D-667); Union Camp (IV-D-586); Utah Department of Environmental Quality (IV-D-749); WMX Technologies, Inc. (IV-D-731)

Section 6: Other Comments

Comment a: Many commenters objected to the potential changes to the proposal announced in the December 28th notice on the basis that they were insufficient to address the commenters' concerns about the proposal. Commenters pointed to their earlier comments to support these arguments. Some commenters also stated that EPA's potential changes to the proposal serve to highlight their objections to the proposal, including that the rule (even with such changes) would be overly burdensome, would increase the stringency of underlying rules, and would have to be implemented on a rule by rule basis -- not through permits.

Response: The Agency believes that these concerns have been addressed because of the additional changes to the original proposal that have been included in the final rule after over two years of further dialogue with interested parties.

Letter(s): Aluminum Association, The (IV-D-713); American Automobile Manufacturers Association (IV-D-732); American Gas Association (IV-D-735); American Petroleum Institute (IV-D-703 and IV-D-729); Amoco Corporation (IV-D-760); ASARCO (IV-D-654); AT&T (IV-D-631); Baltimore Gas and Electric Company (IV-D-573); BP Oil Company (IV-D-756); Chemical Manufacturers Association (IV-D-640); Chevron (IV-D-585); Clean Air Implementation Project (IV-D-639); Coalition for Clean Air Implementation (IV-D-724); Coastal Corporation, The (IV-D-583); Colorado Association of Commerce and Industry (IV-D-590); DuPont Engineering (IV-D-758); Eastman Chemical Company (IV-D-589); Eastman Kodak Company (IV-D-597); Edison Electric Institute (IV-D-748); Electronic Industries Clean Air Task Force (IV-D-738); Exxon Chemical Americas (IV-D-600); Gas Processors Association (IV-D-670); General Electric Company (IV-D-580); Houston Lighting & Power Company (IV-D-579); Illinois Power Company (IV-D-625); Independent Liquid Terminals Association (IV-D-747); Intel Corporation (IV-D-739); Interstate Natural Gas Association of America (IV-D-757); Kaiser Aluminum & Chemical Corporation (IV-D-734); Kennecott Corporation (IV-D-663); Mobil Oil Corporation (IV-D-619 and IV-D-720); Natural Gas Pipeline Company of America (IV-D-715); NEDA/CARP (IV-D-689); Occidental Chemical Corporation (IV-D-566); Pennzoil Company (IV-D-588); Phillips Petroleum Company (IV-D-718); Procter & Gamble Company, The (IV-D-665); Rubber Manufacturers Association (IV-D-601); Synthetic

Organic Chemical Manufacturers Association, Inc. (IV-D-603); Texaco Inc. (IV-D-608); Texas Chemical Council (IV-D-587); Texas Mid-Continent Oil & Gas Association (IV-D-719); Texas Utilities Services, Inc. (IV-D-668); Union Camp (IV-D-586); United States Sugar Corporation (IV-D-666); Utility Air Regulatory Group (IV-D-740); Valero Energy Corporation (IV-D-669)

Comment b: Many representatives of small public power systems stated that the rule should explicitly exempt the small power plant units that are exempt from the Acid Rain Program under title IV of the Act. They argued that these units account for a small percentage of overall air pollution and that enhanced monitoring will be too costly for these units. They noted that these types of units are usually operated infrequently but cannot take on federally-enforceable restrictions to reduce their potential to emit because of contractual obligations to supply power in emergencies.

Response: Based on the comments received, the final rule does include an exemption for municipally-owned utility units in certain circumstances. See Section II.B.3. of the preamble to the final rule for further discussion.

Letter(s): Aitken Public Utilities Commission, City of (IV-D-599); Alaska Electric Light and Power Company (IV-D-642); Alaska Rural Electric Cooperative Association (IV-D-693); Alexandria Light and Power (IV-D-711); Anchorage Municipal Light & Power (IV-D-618); Arkansas River Power Authority (IV-D-615); Baudette, City of (IV-D-685); Belleville, City of (IV-D-561); Bluffton, City of (IV-D-761); Bountiful City Light and Power (IV-D-701); Braintree Electric Light Department (IV-D-629); Braintree, Town of (IV-D-737); Bryan, Ohio, City of (IV-D-736); Bryan, Texas, City of (IV-D-548); Cedar Falls Utilities (IV-D-617); Clinton Village (IV-D-622); Coldwater Board of Public Utilities (IV-D-576); Copper Valley Electric Association, Inc. (IV-D-648); Cordova Electric Cooperative, Inc. (IV-D-616); Culpeper, Town of (IV-D-692); Delano Municipal Utilities (IV-D-710); Delta, City of (IV-D-671); Dowagiac, City of (IV-D-706); Elk River Municipal Utilities (IV-D-650); Fairbanks Municipal Utilities System (IV-D-753); Fairmont, City of (IV-D-709); Geneseo Municipal Utilities (IV-D-635); Glencoe Light and Power Commission (IV-D-660); Golden Valley Electric Association, Inc. (IV-D-562); Grand Island, City of (IV-D-657); Greenport, Village of (IV-D-569); Greenville Electric Utility System (IV-D-575); Haines Light & Power Co., Inc. (IV-D-641); Hastings Utilities (IV-D-647); Holly, Town of (IV-D-621); Hugoton, City of (IV-D-572);

Illinois Municipal Electric Agency (IV-D-688); Indiana Municipal Power Agency (IV-D-633); Iola, City of (IV-D-759); Kansas Municipal Energy Agency and Kansas Municipal Gas Agency (IV-D-607); Kodiak Electric Association, Inc. (IV-D-626); La Junta, City of (IV-D-558 and IV-D-627); Lamar Light & Power (IV-D-620); Larned, City of (IV-D-643); Las Animas Municipal Light & Power (IV-D-556); Laurel, City of (IV-D-567); Lewes Board of Public Works (IV-D-662); Lindsay, City of (IV-D-699); Litchfield Public Utilities Commission, City of (IV-D-551); Luverne, City of (IV-D-751); Madelia Municipal Light & Power (IV-D-722); Marshall, City of (IV-D-754); Marshall Municipal Utilities (IV-D-682); Minnesota Municipal Utilities Association (IV-D-623); Mt. Pleasant Municipal Utilities (IV-D-560); Municipal Electric Systems of Oklahoma, Inc. (IV-D-628); Municipal Energy Agency of Nebraska (IV-D-700); Naknek Electric Association, Inc. (IV-D-712); New Prague Municipal Utilities Commission (IV-D-656); Nome Joint Utility System (IV-D-604); North Iowa Municipal Electric Cooperative Association (IV-D-550); Orrville, City of (IV-D-577); Peru Utilities (IV-D-708); Ponca City, City of (IV-D-568); Public Systems (IV-D-702); Raton Public Service Co., The (IV-D-636); Redwood Falls Public Utilities Commission (IV-D-658); River Falls Municipal Utilities (IV-D-684); Santa Clara, City of (IV-D-661); Sitka, City and Borough of (IV-D-644); Southern Minnesota Municipal Power Agency (IV-D-565); Springfield, Town of (IV-D-614); Thief River Falls, City of (IV-D-659); Trinidad, City of (IV-D-630); Two Harbors, City of (IV-D-624); Wayne, City of (IV-D-691); Wilmar Municipal Utilities (IV-D-705); Windom, City of (IV-D-552); Wisconsin Public Systems (IV-D-612); Woodsfield Municipal Power (IV-D-651); Woodsfield Municipal Power (IV-D-651); Zeeland Board of Public Works (IV-D-559)

October 2, 1997

APPENDIX II-A

LIST OF COMMENT LETTERS FOR RESPONSE (Part II):
EPA AIR DOCKET A-91-52

SORTED BY ORGANIZATION

Commenting Organization	Docket #
Aitken, Minnesota Public Utilities Commission	IV-D-599
Alabama Department of Environmental Management	IV-D-695
Alaska Electric Light and Power Company	IV-D-642
Alaska Rural Electric Cooperative Association	IV-D-693
Alexandria Light and Power	IV-D-711
Aluminum Association, The	IV-D-713
Alyeska Pipeline Service Group	IV-D-742
American Petroleum Institute	IV-D-703
American Gas Association	IV-D-735
American Petroleum Institute	IV-D-729
American Automobile Manufacturers Association	IV-D-732
Amoco Corporation	IV-D-760
Anchorage Municipal Light & Power	IV-D-618
Arizona Department of Environmental Quality	IV-D-595
Arkansas River Power Authority	IV-D-615
Arkansas Environmental Federation	IV-D-547
ASARCO	IV-D-654
Association of Texas Intrastate Natural Gas Pipelines	IV-D-610
Association of International Automobile Manufacturers	IV-D-602
AT&T	IV-D-631
Baker Refractories	IV-D-613
Baltimore Gas and Electric Company	IV-D-573
Baudette, Minnesota, City of	IV-D-685
Bay Area Air Quality Management District	IV-D-593
Belleville, Kansas, City of	IV-D-561
Bluffton, Indiana Electric/Water Department	IV-D-761
Board of Public Works	IV-D-662
Borough of Sitka, Alaska, City of	IV-D-644
Bountiful City Light and Power	IV-D-701
BP Oil Company	IV-D-756
Braintree Electric Light Department	IV-D-629

Commenting Organization	Docket #
Braintree, Massachusetts, The Town of	IV-D-737
Bryan, Texas Electric Utilities Services	IV-D-548
Bryan, Ohio, City of	IV-D-736
Bush Boake Allen Inc.	IV-D-646
Cedar Falls Utilities	IV-D-617
Chemical Manufacturers Association	IV-D-640
Chemical Industry Council of New Jersey	IV-D-727
Chevron	IV-D-585
Class of '85 Regulatory Response Group	IV-D-664
Clean Air Implementation Project	IV-D-639
Clinton Village Office, Michigan	IV-D-622
CNG Transmission Corporation	IV-D-721
Coalition for Clean Air Implementation	IV-D-724
Coastal Corporation	IV-D-583
Coldwater Board of Public Utilities	IV-D-576
Colorado Association of Commerce and Industry	IV-D-590
Commonwealth Aluminum Corp.	IV-D-578
Cooper Energy Services	IV-D-555
Copper Valley Electric Association	IV-D-648
Cordova Electric Cooperative, Inc.	IV-D-616
Corn Refiners Association	IV-D-605
County Sanitation Districts of Los Angeles County	IV-D-632
County Sanitation Districts of Orange County, California	IV-D-594
Culpeper, Virginia, Town of	IV-D-692
Dan River, Inc.	IV-D-649
Delano Municipal Utilities	IV-D-710
Delhi Gas Pipeline Corporation	IV-D-557
Delta, Colorado, City of	IV-D-671
Department of Energy	IV-D-762
Dowagiac, Michigan Department of Public Services	IV-D-706
Dow Chemical Company	IV-D-582
DuPont SHE Excellence Center	IV-D-755
DuPont Engineering	IV-D-758
Eastman Kodak Company	IV-D-597
Eastman Chemical Company	IV-D-589
Edison Electric Institute	IV-D-748

Commenting Organization	Docket #
Electronic Industries Clean Air Task Force	IV-D-738
Eli Lilly and Company	IV-D-696
Elk River Municipal Utilities	IV-D-650
Engelhard Corporation	IV-D-694
Engine Manufacturers Association	IV-D-581
ENRON Operations Corp.	IV-D-683
Environmental Forensic Services	IV-D-716
Enviroplan	IV-D-723
ETG Services, Inc.	IV-D-725
Exxon Chemical Americas	IV-D-600
Fairbanks, Alaska Municipal Utilities System	IV-D-753
Fairmont, Minnesota, City of	IV-D-709
Fort Howard Corporation	IV-D-570
Gas Processors Association	IV-D-670
General Electric Company	IV-D-580
Geneseo, Illinois Municipal Utilities	IV-D-635
Golden Valley Electric Association	IV-D-562
Goodyear Tire & Rubber Company, The	IV-D-598
Grand Island, Nebraska, City of	IV-D-657
Greenport, New York, Village of	IV-D-569
Greenville Electric Utility System	IV-D-575
Growth Association of Cleveland, The	IV-D-638
Haines Light & Power Co., Inc.	IV-D-641
Hasting Utilities, Nebraska	IV-D-647
Hawaiian Electric, Inc.	IV-D-571
Holly, Colorado, Town of	IV-D-621
Houston Lighting & Power Company	IV-D-579
Hugoton, Kansas, City of	IV-D-572
Illinois Municipal Electric Agency	IV-D-688
Illinois Power Company	IV-D-625
Independent Liquid Terminals Association	IV-D-747
Indiana Municipal Power Agency	IV-D-633
Institute of Clean Air Companies	IV-D-726
Intel Corporation	IV-D-739
Interstate Natural Gas Association of America	IV-D-757
Iola, Kansas, City of	IV-D-759

Commenting Organization	Docket #
J.M. Huber Corporation, Clay Division	IV-D-563
Kaiser Aluminum & Chemical Corporation	IV-D-734
Kansas Municipal Energy Agency	IV-D-607
Kennecott Corporation	IV-D-663
Kodiak Electric Association, Inc.	IV-D-626
La Junta, Colorado, City of	IV-D-558
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