United States Environmental Protection Agency	Office of Air Quality Planning and Standards Research Triangle Park, NC 27711	EPA-453/C-99-001 May 1999

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP): GENERIC MACT BACKGROUND INFORMATION FOR ACETAL RESINS, ACRYLIC AND MODACRYLIC FIBER, HYDROGEN FLUORIDE, AND POLYCARBONATE PRODUCTION FINAL RULE

SUMMARY OF PUBLIC COMMENTS AND RESPONSES

EPA-453/C-99-001

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) FOR THE ACETAL RESINS, ACRYLIC AND MODACRYLIC FIBER, HYDROGEN FLUORIDE, AND POLYCARBONATE PRODUCTION SOURCE CATEGORIES

Background Information for
Promulgated Standards - Summary of
Public Comments and Responses

Emission Standards Division

U. S. Environmental Protection Agency
Office of Air and Radiation
Office of Air Quality Planning and Standards
Research Triangle Park, NC 27711

May 1999

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ENVIRONMENTAL PROTECTION AGENCY

Promulgation Background Information Document
National Emission Standards for Hazardous Air Pollutants (NESHAP)
for the
Acetal Resins, Acrylic and Modacrylic Fiber, Hydrogen Fluoride,
and Polycarbonate Production Source Categories

1. The EPA's final standards for acetal resins, acrylic and modacrylic fiber, hydrogen fluoride, and polycarbonate production under the generic MACT rule maintain current industrial control levels and their subsequent reduction of emissions of a number of hazardous air pollutants. The hazardous air pollutants controlled by the final standards under the generic MACT rule are associated with a variety of adverse health effects including chronic health disorders (e.g., cancer, structural changes of the lung), and acute health disorders (e.g., dyspnea (difficulty in breathing), and neurotoxic effects).

2. Copies of this document are available from the Internet at http://www.epa.gov/ttn/oarpg/ramain.html or from the U.S. Environmental Protection Agency Library (MD-35), Research Triangle Park, North Carolina 27711, telephone (919) 541-2777.

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1.0 SUMMARY

On October 14, 1999, the U. S. Environmental Protection Agency (EPA) proposed national emission standards for hazardous air pollutants (NESHAP) for the acetal resins production, acrylic and modacrylic fiber production, hydrogen fluoride production, and polycarbonate production source categories (63 FR 55178) under authority of Section 112 of the Clean Air Act (Act). Twenty-one public comment letters were submitted to the generic MACT docket, inclusive of the items submitted to the separate dockets established for each of the source categories proposed to be regulated. Some of the comment letters received are duplicates. At proposal, the EPA requested that commenters submit source category-specific comments to dockets established for each of the generic MACT source categories for which requirements were proposed and general nonsource category-specific comments to the generic MACT docket. This request meant that some comment letters were submitted to both the nonsource category-specific generic MACT docket and one or more of the generic MACT source category-specific dockets.

The comments that were submitted and the responses to these comments are summarized in this document. This summary is the basis for the revisions made to the standards between proposal and promulgation.

1.1 SUMMARY OF CHANGES SINCE PROPOSAL

Numerous changes have been made since the proposal of these standards. Major changes include amendments to the acrylic and modacrylic fiber control requirements applicability for solution process spinning operations; grammatical and structural improvements; clarifications; and removal of provisions for process vents from batch unit operations.

1.2 SUMMARY OF IMPACTS OF PROMULGATED REGULATIONS

The impacts resulting from the promulgated standards for the source categories (i.e., AR production, AMF production, HF production, and PC production) are determined relative to the baseline that is set at the level of control in absence of the rule. The emissions reductions associated with the application of the control or recovery devices for the regulated source categories are expected to be small as the AR, AMF, HF, and PC production facilities affected by this rule essentially already have a level of control equivalent to that determined to be MACT.

Based on previous impacts analyses associated with the application of the control and recovery devices required under the standards and because each of the four regulated source categories have only five or fewer major sources, we believe that there will be minimal, if any, adverse environmental or energy impacts associated with the final standards.

Likewise, based on available information, we estimate that the cost and economic impacts of the final standards for the four source categories being regulated will be insignificant or minimal. The economic analyses for each of the four source categories can be obtained from the dockets established for these source categories.

2.0 OVERVIEW OF PUBLIC COMMENTS

The public comment period following the October 14, 1998 Federal Register notice (proposed rule) lasted from October 14, 1998 to January 12, 1999. Late comments received after January 12, 1999 were also accepted. A total of 21 letters were submitted and have been placed in the dockets established for this rulemaking. Table 2-1 presents a listing of all persons submitting written comments, their affiliations, and the recorded docket item number assigned to their correspondences.

2.1 ORGANIZATION OF COMMENT SUMMARIES

For the purpose of orderly presentation, the comments have been categorized under the following topics:

- preamble comments,
- comments received on 40 CFR part 63, subpart SS,
- comments received on 40 CFR part 63, subpart TT,
- comments received on 40 CFR part 63, subpart UU,
- comments received on 40 CFR part 63, subpart WW, and
- comments received on 40 CFR part 63, subpart YY.

TABLE 2-1. LIST OF COMMENTERS ON PROPOSED NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

Docket number	Commenter and affiliation
A-97-16[a], IV-D-01	Mr. Alphonse McMahon Counsel-Environmental, Health and Safety Programs General Electric Company One Lexan Lane Mount Vernon, Indiana 47620
A-97-16, IV-G-01	Mr. Steve Knis Technical Specialist-Air Expertise Center The Dow Chemical Company 2301 North Brazosport Blvd. Freeport, Texas 77541-3257
A-97-17, IV-D-01	Mr. John W. Webster Manager Regulatory Affairs Devro-Teepak, Inc. 915 North Michigan Danville, Illinois 61832
A-97-17[b], IV-D-02	Ms. Karin Ritter Senior Regulatory Analyst American Petroleum Institute 1220 L Street, Northwest Washington, DC 20005-4070
A-97-17, IV-D-03	Ms. Rasma I. Zvaners Senior Manager Environmental Policy Chemical Manufacturers Association 1300 Wilson Blvd. Arlington, Virginia 22209
A-97-17, IV-D-04	Mr. D.R. Cheuvront Site HSE Leader Allied Signal Inc. Fluorine Products P.O. Box 226 Geismar, LA 70734
A-97-17, IV-D-05	Mr. Raymond P. Berube Acting Director Office of Environmental Policy and Assistance Department of Energy Washington, DC 20585

Docket number	Commenter and affiliation
A-97-17, IV-D-06	Mr. James T. Holcombe Senior Environmental Engineer Environmental Planning Mail Code B24A Post Office Box 7640 San Francisco, CA 94120
A-97-17, IV-D-07	Mr. Brian L. Taranto Safety and Environmental Affairs Exxon Chemical Post Office Box 3272 Houston, Texas 77253-3272
A-97-17, IV-D-08	Mr. Alphonse McMahon Counsel-Environmental, Health and Safety Programs General Electric Company One Lexan Lane Mount Vernon, Indiana 47620
A-97-17, IV-G-01	Ms. Liane Platt EH&S Regulatory Management Expertise Center The Dow Chemical Company 2301 N. Bazosport Blvd. Freeport, Texas 77541-3257
A-97-17, IV-G-02	Mr. John Prokop President and Counsel Independent Liquid Terminals Association 133 15th Street, N.W. Suite 650 Washington, DC 20005
A-97-17, IV-G-03	Ms. Alice E. Boomhower Regulatory Services Coordinator Amoco Corporation Environmental, Health and Safety 28100 Torch Parkway, Suite 500 Warrenville, Illinois 60555-4015
A-97-17, IV-G-04	Mr. Steve Knis Technical Specialist-Air Expertise Center The Dow Chemical Company 2301 North Brazosport Blvd. Freeport, Texas 77541-3257
A-97-17, IV-G-05	Mr. Steve Knis Technical Specialist-Air Expertise Center The Dow Chemical Company 2301 North Brazosport Blvd. Freeport, Texas 77541-3257

Docket number	Commenter and affiliation
A-97-17, IV-G-06	Mr. Edward J. Campobenedetto Deputy Director Institute of Clean Air Companies 1660 L Street NW Suite 1100 Washington, DC 20036-5603
A-97-17, IV-G-07	Ms. Liane Platt EH&S Regulatory Management The Dow Chemical Company 2301 North Brazosport Blvd. Freeport, Texas 77541-3257
A-97-17, IV-F-01	Public Hearing in the Matter of: 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants: Generic Maximum Achievable Control Technology. Transcript of Hearing held in the ERC Auditorium, Research Triangle Park, North Carolina. November 25, 1998.
A-97-18c, IV-D-01	Mr. Alphonse McMahon Counsel-Environmental, Health and Safety Programs General Electric Company One Lexan Lane Mount Vernon, Indiana 47620
A-97-18, IV-D-02	Mr. David S. Krawczyk Manager, Environmental Protection Solutia Applied Chemistry, Creative Solutions
A-97-18, IV-G-01	Ms. Alice E. Boomhower Regulatory Services Coordinator Amoco Corporation Environmental, Health and Safety 28100 Torch Parkway, Suite 500 Warrenville, Illinois 60555-4015
A-97-18, IV-F-01	Public Hearing in the Matter of: 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants: Generic Maximum Achievable Control Technology. Transcript of Hearing held in the ERC Auditorium, Research Triangle Park, North Carolina. November 25, 1998.

Docket number	Commenter and affiliation
A-97-19[d], IV-D-01	Mr. Alphonse McMahon Counsel-Environmental, Health and Safety Programs General Electric Company One Lexan Lane Mount Vernon, Indiana 47620

[a] Polycarbonate production generic MACT source category-specific docket.

[b] Generic MACT nonsource category-specific docket.

[c] Acrylic and modacrylic fiber production source category-specific docket.

[d] Acetal resins production source category-specific docket.

2.2 LIST OF ACRONYMS AND ABBREVIATIONS FOR UNITS OF MEASURE

ACRONYMS

Act	Clean Air Act
Administrator	EPA Administrator
AMF	acrylic and modacrylic fiber
AR	acetal resins
CAA	Clean Air Act
CAR	Consolidated Air Rule
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CPMS	Continuous parameter monitoring system
EPA	U. S. Environmental Protection Agency
FR	Federal Register
GMACT	generic MACT
HAP	hazardous air pollutant(s)
HCl	hydrogen chloride
HF	hydrogen fluoride
HON	hazardous organic NESHAP
LDAR	Leak Detection and Repair
MACT	maximum achievable control technology
NESHAP	national emission standards for hazardous air pollutants
NOCS	Notification of Compliance Status
OAQPS	Office of Air Quality Planning and Standards
OECA	Office of Enforcement and Compliance Assurance
OMB	Office of Management and Budget
PMACT	presumptive MACT
PC	polycarbonate
POD	Point of Determination
ppm	parts per million
ppmv	parts per million by volume
ppmw	parts per million by weight
SOCMI	Synthetic Organic Chemical Manufacturing Industry
SSM	Startup, shutdown, and malfunction
TOC	total organic compounds
TRE	Total Resource Effectiveness
VOC	volatile organic compounds

3.0 GENERIC MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY PREAMBLE

3.1 GENERIC MACT APPROACH

Comment: Six commenters (A-97-17, IV-D-01; A-97-17, IV-D-03; A-97-17, IV-D-04; A-97-17, IV-D-05; A-97-17, IV-D-06; A-97-17, IV-D-07;) expressed concerns about the generic MACT approach. There were two major concerns expressed. One concern expressed was about the criteria proposed to determine similarity with respect to emission controls. The other major concern expressed was that statutory due process not be short-circuited under the generic MACT approach.

Response: The EPA has responded to the major concerns expressed by commenters on the generic MACT approach in the promulgation preamble for the generic MACT rule signed on May 15, 1999.

Comment: One commenter (A-97-17, IV-D-01) stated that the cost and economic impacts of the proposed standards for the AR production, AMF production, HF production, and PC production source categories were not provided and that the economic determination can not be short-circuited.

Response: The EPA agrees with the commenter that in determining MACT, the economic determination can not be short-circuited. The economic impacts of the proposed standards are presented in the Basis and Purpose document for the generic MACT rule proposal. This document can be accessed from the docket for the proposed standards (Docket No. A-97-17, Item No. II-B-7).

Comment: One commenter (A-97-17, IV-D-06) stated that the EPA's proposed generic MACT approach is incompatible with the differing "new" versus "existing" source structure established in section 112(a)(4) of the Act. The commenter

(A-97-17, IV-D-06) questioned that if the EPA establishes a future standard based on the Generic MACT proposal date of October 14, 1999, is the proposal date for the new source category the generic MACT proposal date or the applicability proposal date? The commenter (A-97-17, IV-D-06) explained that this is an important distinction when determining whether new source control should apply as mandated under section 112(d)(3) of the Act.

Response: The EPA's intention was for new source MACT to be contingent on the applicability proposal date which would be consistent with what was intended under section 112(a)(4) of the Act. Separate paragraphs delineating different applicability proposal dates will be delineated in the applicability section of the generic MACT rule. The EPA has clarified this intent in the applicability section of the final rule.

Comment: Two commenters (A-97-17, IV-D-03; A-97-17, IV-D-07) stated that the preamble suggests that the generic MACT approach could assist States with case-by-case MACT determinations under sections 112(j) and 112(g) of the Act. One commenter (A-97-17, IV-D-3) requested that the EPA clarify what the EPA believes the relationship is between the generic MACT and the section 112(j) and section 112(g) rules.

One commenter (A-97-17, IV-D-07) recommended that the EPA delete the paragraph referencing case-by-case MACT determinations.

Response: The preamble states that presumptive MACT, not generic MACT, is intended to assist State and local permitting authorities in making a possible case-by-case MACT determination. The EPA has not proposed to relate case-by-case MACT determinations mandated under section 112(j) and section 112(g) of the Act with the generic MACT approach. The EPA would, however, be able to assess what has been learned under the presumptive MACT process to determine whether a source category "might" be a good candidate for establishment

of MACT under the generic MACT structure and/or approach. Additionally, the EPA would be able to identify, and start communication with, the stakeholders involved in the presumptive MACT process which is an essential initial step towards determining MACT (using the traditional or generic MACT approach).

The EPA does not modify proposal preambles for republication at promulgation. Therefore, the EPA has not deleted the paragraph referencing case-by-case MACT, as recommended by the commenter (A-97-17, IV-D-07).

Comment: One commenter (A-97-17, IV-D-06) was concerned that, by not incorporating all applicable section 112 of the Act requirements affecting each source category in each MACT, may result in Title V permits numerically referencing standards without incorporating their content. The commenter (A-97-17, IV-D-06) explained that the extensive cross-referencing between the different subparts makes the requirements difficult to understand. The commenter (A-97-17, IV-D-06) further stated that the generic MACT regulations are complex because the EPA is designing them to handle all conceivable situations. The commenter (A-97-17, IV-D-06) stipulated that the EPA would be forcing sources to face far more frequent revisions to the MACT standards than was intended by the Act which will raise compliance costs.

Response: The EPA agrees that cross-referencing different regulations can often be confusing. Historically, MACT standards have cross-referenced different regulations to ensure that the integrity and intent of the cross-referenced regulations are maintained. Additionally, cross-referencing has been done to ensure that the benefits associated with changes made to the cross-referenced provisions are transferred to those standards that cross-reference them.

The EPA has proposed the common control requirement subparts to reduce some of the confusion associated with cross-referencing different regulations while maintaining the

benefits. Confusion is reduced by the modular structure of the common control requirement subparts whereby exceptions are minimized and the standards are "standard." The only changes made to the common control requirement subparts under subsequent proposals would be those that are assessed as being beneficial (e.g., clarifications). Historically, the EPA has had to amend previously-promulgated rules (i.e., sometimes numerous) to provide beneficial changes identified in subsequent proposals incorporating similar language.

Comment: One commenter (A-97-17, IV-D-01) agreed that the applicability component for existing and new source MACT should be determined independent of the total number of sources in the source category.

Response: The EPA agrees with the commenter's support for determining the applicability component for existing and new source MACT independent of the total number of sources in the source category.

Comment: One commenter (A-97-17, IV-D-05) requested that the EPA explicitly provide in the regulations for a stakeholder process in all future generic MACT determinations. The commenter (A-97-17, IV-D-05) explained that they were concerned that without this requirement stipulated in regulatory language, the application of generic MACT to small source categories might deny them the protection of due process.

Response: Any additional source category that uses the generic MACT approach will rely on stakeholder involvement and be proposed in the **Federal Register** for public comment.

Comment: One commenter (A-97-17, IV-G-06) stated that the basic approach detailed in the proposed rule does not provide adequate pollution control industry participation or input to properly evaluate and consider application of currently available technology to meet the statutory requirements. The commenter explained that the preamble stated that the EPA's first step in the proposed approach is

to establish a stakeholder group consisting of representatives of the affected industries, state and local agencies, and "other interested parties." The commenter (A-97-17, IV-G-06) stated that the control technology supply industry should also play a major role in identifying applicable control technologies for the source categories under review in order to properly establish the maximum achievable control technology for any source category.

Response: The EPA welcomes the involvement of control equipment vendors in the process of developing rules. Indeed, the EPA has frequently used vendor emission control data to establish emission limits, monitoring requirements, and maintenance schedules in their MACT standard development process.

3.2 COMMON CONTROL REQUIREMENT SUBPARTS

Comment: One commenter (A-97-17, IV-D-03) stated that though not addressed in their comments, they did not agree with several of the individual technology standards set out in the proposed 40 CFR part 63, subparts SS, TT, UU, and WW. The commenter (A-97-17, IV-D-03) referred the EPA to member company comments on specific subparts.

Response: The EPA has addressed all of the commenter's (A-97-17, IV-D-03) member company comment letters regarding the proposed 40 CFR part 63, subparts SS, TT, UU, and WW.

Comment: One commenter (A-97-17, IV-G-05) supports the use of the standard standard MACT approach. The commenter (A-97-17, IV-G-05) stated that the proposed approach will facilitate understanding of the compliance requirements, and will eliminate conflicting or duplicative requirements.

Response: The EPA agrees with the commenter.

3.3 OTHER COMMENTS

Comment: One commenter (A-97-17, IV-G-04) stated that, based on the proposal preamble, the reader might be led to an incorrect evaluation of the requirements and applicability of the rule and requested clarification on their cited items in

the final preamble and rule. A few of the cited items concerned process vent from batch unit operations. Another item cited was that there were inconsistencies in the presentation of outlet concentration standards in table 1 of the proposal preamble. And the last item cited requested that the EPA clarify that, for polycarbonates production, storage vessels have an option to control to a 20 ppm HAP level.

Response: The batch unit operation provisions have been removed from the final rule. The EPA has decided to remove these provisions because there are currently no process vents from solely batch unit operations regulated under the generic MACT at this time. The EPA will add provisions, as necessary, with future proposals. Therefore, the EPA has not made the commenter's clarifications regarding batch unit operations in the promulgation preamble to this rule.

The proposal preamble table 1 has not been republished in the promulgation preamble, therefore, the HAP concentration/TOC concentration inconsistency between the proposal preamble and the rule has not been addressed in the promulgation preamble. The EPA would, however, like to clarify that the proposed rule was correct and not the preamble.

The 20 ppm option is included for process vents, but was included for storage vessels in error. The 20 ppm option is usually an option for process vents, where continuous compliance with a 98% performance standard may be difficult for streams with low concentrations. Since the rule requires 95% control for storage vessels, the 20 ppm option would be less stringent only when the concentration of the vapor stream is less than 400 ppm. It is unlikely that a vapor stream from a storage vessel with a saturated vapor space would be below this low level. The final rule does not include the 20 ppm option for storage vessels.

4.0 NATIONAL EMISSION STANDARDS FOR CLOSED VENT SYSTEMS, CONTROL DEVICES, RECOVERY DEVICES AND ROUTING TO A FUEL GAS SYSTEM OR A PROCESS (40 CFR Part 63, Subpart SS)

4.1 GENERAL

4.1.1 Cross-referencing, Grammatical, and Typographical Comments

Comment: The EPA received many editorial comments on the proposed regulation. These comments primarily addressed typographical errors, minor editorial corrections, and cross-referencing errors.

Other types of comments included the addition of a cross-reference to reporting requirements in the recordkeeping provisions. Another change frequently suggested was that instead of referring to the provisions of the referencing subpart, the reference should be kept within subpart SS, and changed to cross-reference the relevant section and paragraph of subpart SS.

Response: The EPA appreciates the effort made by commenters to identify errors and bring them to the EPA's attention, and many changes have been made to the rule as a result of these comments. The addition of cross-references serves to clarify the regulation, and gives owners and operators subject to the rule a clearer picture of the connection between records that must be kept and information that must be reported to the EPA. Also, where a report is mentioned, the cross-reference is frequently added, again for clarification purposes. Where appropriate, the EPA revised the rule to refer to provisions of subpart SS rather than the referencing subpart, but this was not appropriate in all cases, as some requirements are in fact governed by the

referencing subpart. Comments addressing specific aspects of the rule other than basic editorial or typographical corrections are addressed in more detail in the section of this BID that corresponds to the rule provisions in question.

4.1.2 Structure of the Regulation

Comment: One commenter (A-97-17, IV-D-02) provided the EPA with extensive comments on the organization and structure of subpart SS, with the goal of streamlining the rule and consolidating repeated requirements. The commenter suggested that §63.982 of the rule be deleted and its provisions addressed in an expanded applicability section (§63.980). According to the commenter's suggestion, this expansion of §63.980 would consist of a paragraph that establishes applicability of the rule on the basis of the means used to control emissions (e.g. flare, nonflare, route to fuel gas system or process).

The commenter (A-97-17, IV-D-02) further suggested that many requirements from §§63.982, 63.985, 63.986, and 63.988 through 63.996 be consolidated in a single section addressing general nonflare control and recovery device requirements, thereby eliminating repetition of provisions, and substantially reducing the length of the rule. This single general nonflare control and recovery device requirements section would also include monitoring requirements. The commenter suggested that device-specific requirements be placed in separate sections, thereby eliminating the repetition of provisions common to all devices. The commenter also recommended the consolidation of device-specific sections, so that provisions for incinerators, boilers, and process heaters appear in one section instead of two, and provisions for absorbers, condensers, and carbon adsorbers used as control devices appear in one section instead of three. Finally, the commenter suggested that the provision governing compliance demonstrations and notification for replacement of an existing control or recovery device be

placed once in §63.989, Performance testing and compliance assessment requirements for control devices, instead of repeating the provision in §§63.987 through 63.993 of the rule.

Response: The EPA recognizes the importance of streamlining and consolidating rule requirements wherever possible, so that the owner or operator of an affected facility may more easily determine the provisions to which he or she is subject. To this end, the EPA appreciates the effort made by the commenter to provide an alternative structure to some of the provisions in the proposed rule and to provide suggested language to implement this alternative structure. The EPA has reviewed the commenter's suggested changes carefully, and has decided to follow some, although not all, of the commenter's suggestions. In the interests of ensuring that no substantive changes resulted in the rule from any reorganization, and that the integrity of the rule's provisions would not be affected by any reorganization undertaken, the EPA decided that it was not appropriate to make all of the changes suggested by the commenter. Furthermore, to alter the structure of the rule too substantially would not be fair to other commenters and interested parties, who would not have the opportunity to provide input on the revised rule structure.

However, in cases where identical requirements were repeated multiple times in the proposed rule, the EPA agrees with the commenter that consolidation is possible and desirable. The changes made by the EPA to the promulgated rule are summarized below.

While the EPA did not delete §63.982 and revise §63.980 as suggested by the commenter, substantial changes were made to §63.982, in order to eliminate the unnecessary repetition of requirements. Consequently, requirements for emissions vented through a closed vent system to a flare, nonflare control device, routing to a fuel gas system or process, or a

final recovery device are listed in paragraphs (b) through (e) of §63.982, and paragraph (a) cross-references the relevant requirements in these paragraphs for storage vessels, process vents, low and high throughput transfer racks, or equipment leaks. In contrast, the proposed version of the rule repeated each set of control requirements in separate paragraphs for each emission point, leading to considerable repetition.

The EPA also combined §§63.988 and 63.989 of the rule into a single section governing requirements for incinerators, boilers, and process heaters, because so many of the requirements are the same. All of the differences in the proposed provisions for these devices were retained verbatim in the promulgated rule.

Similarly, the EPA consolidated §§63.990 through 63.992 into a single section governing absorbers, condensers, and carbon adsorbers used as control devices, because of the extensive overlap of requirements for these devices. Again, all the differences in the proposed provisions were retained verbatim in the promulgated rule.

The proposed rule required the owner or operator who elects to replace an existing control or recovery device to notify the Administrator and perform a compliance demonstration. This requirement appeared in §§63.987(b)(2), 63.988(b)(3), 63.989(b)(3), 63.990(b)(2), 63.991(b)(2), 63.992(b)(2), and 63.993(b)(2) of the proposed rule. In the promulgated rule, the EPA has deleted these paragraphs, and placed the requirement in §63.997(c)(3). This section is titled *Performance test and flare compliance assessment requirements*, and thus is the appropriate location for a common requirement.

Finally, §§63.988(c)(2), 63.989(c)(2), 63.990(c)(2), 63.991(c)(2), 63.992(c)(2), 63.993(c)(5), 63.994(c)(3), and 63.995(c)(2) of the proposed rule contained a requirement for the establishment of a range for monitored parameters that indicates proper operation of the control or recovery device.

To eliminate this repetition, in the promulgated rule, the EPA has deleted these paragraphs, and placed the requirement in §63.996(c)(6). Section 63.996 contains the general monitoring provisions for subpart SS, and consequently this is the appropriate location for this common requirement.

The final result of these changes is a substantially consolidated, clarified subpart SS, which the EPA anticipates will be simpler for owners and operators to follow.

In some cases, the extensive reorganization of the rule affected other comments and responses on the proposed rule. These are addressed in more detail in the section of this BID that corresponds to the rule provisions in question.

4.2 DEFINITIONS

4.2.1 Fuel gas system

Comment: One commenter (A-97-16, IV-G-01) noted that the definition of "fuel gas system" in the proposed rule includes the phrase "offsite and onsite piping and flow and pressure control system." The commenter stated that the Organic Liquids Distribution MACT may propose to regulate offsite pipelines and equipment and that the EPA should assure that these regulations do not overlap.

Response: The EPA acknowledges the commenter's concern regarding overlapping, and potentially conflicting, requirements in different regulations. It is the EPA's intent in this case, as in all cases where owners and operators may be affected by more than one regulation, that overlap among requirements be addressed. In this case, any possible overlap between subpart SS and the Organic Liquids Distribution MACT would be addressed by that regulation when it is proposed and promulgated.

4.2.2 Transfer Racks

Comment: A commenter (A-97-16, IV-G-01) stated that the inclusion of the phrase "...containing a regulated material" in the definitions of "high throughput transfer rack" and "low throughput transfer rack" is redundant. Furthermore, the

commenter contended, since there is no indication of a concentration level, a concentration of 1 parts per billion (ppb) or less could render a rack subject to the rule, and, according to the commenter, this would be inappropriate. This commenter suggested that these definitions be revised to include the phrase "...containing a regulated material in the concentration stated and defined in the referencing subpart."

Response: The EPA does not believe that there is any need to make the rule changes suggested by the commenter. Since the referencing subpart will define the circumstances that would make a transfer rack subject to subpart SS in the first place, there is no need to refer back to the referencing subpart in these definitions. If the transfer rack in question does not meet the applicability threshold stated in the referencing subpart, it will not be referred to subpart SS and will not be faced with the issue described by the commenter. For this reason, the EPA believes that the proposed definitions of high and low throughput transfer racks are clear, unambiguous, and do not run the danger of imposing inappropriate requirements on transfer racks.

4.2.3 Control Device

Comment: One commenter (A-97-17, IV-D-02) stated that the term "final recovery device" is sometimes used to indicate a recovery device that is not a control device. If this is the case, the commenter asserted, it should be defined as such in §63.981 and used consistently throughout the standard.

Response: The EPA agrees with the commenter that clarification of the use of the term "final recovery device" was needed. For source categories where a TRE index value is a criteria that is used to determine whether controls are required for a process vent from a continuous unit operation, the accurate identification of the final recovery device is important. The TRE is determined following the final recovery device, and for sources in these source categories, the final recovery device is not considered to be a control device.

Therefore, in the final rule, final recovery device has been defined as "the last recovery device on a process vent stream from a continuous unit operation at an affected source in a subcategory where the applicability criteria includes a TRE index value. The final recovery device usually discharges to a combustion device, recapture device, or directly to the atmosphere."

Comment: One commenter (A-97-17, IV-D-02) asked whether the statement in the definition of "control device" that primary condensers on stream strippers or fuel gas systems are not considered control devices is a clarification of their use with batch unit operations, or a separate circumstance.

Response: First, since provisions for process vents from batch unit operations are not included in the final rule, the definition of control device in the final rule does not contain a sentence related to process vents from batch unit operations. The sentence cited by the commenter regarding primary condensers on steam strippers and fuel gas systems has been retained in the final rule. The EPA intends that primary condensers on steam strippers not be considered control devices in any situation. Similarly, fuel gas systems should not be considered control devices. Since the language regarding process vents from batch unit operations has been removed, the confusion cited by the commenter should not occur. In addition, a typographical error has been corrected in the sentence cited by the commenter. Stream strippers has been changed to steam strippers.

Comment: One commenter (A-97-17, IV-D-02) requested that the EPA define "primary condenser" as used in the definition of control device.

Response: The term "primary condenser" was used twice in the definition of control device in the proposed rule. The first instance was in relation to process vents from batch unit operations. As discussed in the previous response, the sentence in the control device definition that was in the

proposed rule regarding process vents from batch unit operations is not in the final rule. The second instance was in the sentence that stated "Primary condensers on stream strippers or fuel gas systems are not considered control devices." As also noted in the previous response, this sentence has been retained in the final rule (with a typographical correction). The EPA believes this use of primary condenser in this sentence is straightforward, and needs no additional clarification. Therefore, a definition of primary condenser was not included in the final rule.

4.2.4 Temperature Monitoring Device

Comment: One commenter (A-97-17, IV-D-02) stated that the definition of "temperature monitoring device" is missing a value for the percentage tolerance.

Response: The commenter is correct. The definition of "temperature monitoring device" has been revised to indicate that the percentage tolerance should be ±1 percent.

4.2.5 Add and Delete Definitions

Comment: One commenter (A-97-17, IV-D-02) stated that definitions for "automated monitoring and recording system," "closed loop system," "reference method," "sampling connection system," and "set pressure" should be deleted as these terms do not appear in the text of the rule.

Response: The commenter is correct. "Automated monitoring and recording system," "closed loop system," "reference method," "sampling connection system," and "set pressure" were defined in the proposed rule, but never used in the provisions. The EPA deleted these definitions from the final rule.

Comment: One commenter (A-97-17, IV-D-08) noted that the definition of "repaired" that applies to subpart SS is located in subpart TT, and suggested that a definition of "repaired" be added to subpart SS, and references to subpart SS in the subpart TT definition be deleted.

Response: The commenter is correct, and a definition of "repaired" has been added to the subpart SS regulation, and references to subpart SS have been removed from the definition of "repaired" found in subpart TT. In addition, the EPA has added a definition of "first attempt at repair" to subpart SS, as this term is also used in the rule, but was not defined in the proposed rule.

4.3 REQUIREMENTS

4.3.1 Recovery Devices

Comment: One commenter (A-97-17, IV-D-02) stated that distinguishing among requirements in subpart SS for recapture devices, recovery devices that are considered control devices, and recovery devices that are not considered control devices is confusing. Specifically, the commenter asked whether absorbers, condensers and carbon adsorbers are always exempt from performance tests when used as recovery devices, as §63.993(b)(1) indicates, or only when the referencing subpart specifies a TRE threshold as indicated by §63.993(a)(1). Or,

the commenter inquired, does §63.993 apply only when the recapture or recovery device is not considered a control device according to the definition of "control device," or only when stipulated in §63.982(b)(3)?

Response: First, the difference between a recovery device and a recapture device should be noted. Absorbers, carbon adsorbers, and condensers may be either recapture devices or recovery devices. The determining factor whether an adsorber, carbon adsorber, or condenser is a recovery device or a recapture device is the fate of the recovered chemicals. If the recovered chemicals are used, reused, or sold, then the device is considered to be a recovery device. If the recovered chemicals are normally not used, reused, or sold, then the device is considered to be a recapture device. The example in the final definition of recapture device is when chemicals are recovered primarily for disposal. Recapture devices are always considered to be control devices.

The EPA understands that there could be confusion regarding when a recovery device is a control device and when it is not. With two exceptions, a recovery device is considered to be a control device. The first exception is for process vents from continuous unit operations at an affected source in a source category where the applicability criteria includes a TRE index value. Therefore, in the final rule, recovery devices used on back end process vents from continuous unit operations at acetal resins production facilities, and recovery devices on process vents from continuous unit operations at polycarbonates production facilities, are not considered control devices. The second exception is a primary condenser on a steam stripper.

Since a recovery device used in any situation other than those cited above is considered to be a control device, the device is subject to the provisions of §63.990 in the final rule. The performance testing requirements are no different for these recovery devices than for an incinerator or other

combustion device. For control devices for process vents, a performance test is always required. For storage vessels and low throughput transfer racks, a performance test or a design evaluation is required. A performance test is not required for control devices used only to control emissions from equipment leaks.

Therefore, to answer the specific question asked by the commenter, a performance test is required for recovery devices (except primary condensers on steam strippers) used on process vents from continuous unit operations at affected sources in source categories where the applicability criteria do not include a TRE index value. That is, performance tests are required for front end process vents from continuous unit operations at acetal resin production facilities, process vents from continuous unit operations at acrylic and modacrylic fiber production facilities, and process vents from continuous unit operations at hydrogen fluoride production facilities.

As noted earlier, recovery devices on back end process vents from continuous unit operations at acetal resins production facilities, and recovery devices on process vents from continuous unit operations at polycarbonates production facilities, are not considered to be control devices. In these instances, the TRE index value is determined after the final recovery device, which is defined in the final rule as the last recovery device on a process vent stream from a continuous unit operation prior to discharge to a control device or to the atmosphere. If the TRE index value after the last recovery device is below the cutoff value in the table for the source category in §63.1103, then a control device is needed to reduce emissions in accordance with the applicable control requirements. If the TRE is greater than the applicable cutoff, then the final recovery device is subject to the requirements of §63.993, which addresses final recovery devices used to maintain a TRE above a specified level.

Several changes have been made in the final rule to clarify this potentially confusion situation. The EPA believes that these changes answer the final question posed by the commenter. First, in the final rule, control device has been defined as follows:

Control device means, with the exceptions noted below, a combustion device, recovery device, recapture device, or any combination of these devices used to comply with this subpart or a referencing subpart. For process vents from continuous unit operations at affected sources in source categories where the applicability criteria includes a TRE index value, recovery devices are not considered to be control devices. Primary condensers on steam strippers or fuel gas systems are not considered to be control devices.

Second, §63.982(e), which is equivalent to what was §63.982(b)(3) in the proposed rule, has been reworded as follows: "Owners or operators who use a final recovery device to maintain a TRE above a level specified in a referencing subpart ~~control air emissions from process vents from continuous unit operations~~ shall meet the requirements in §63.993 . . ."

Comment: One commenter (A-97-17, IV-D-02) inquired why recovery devices (primary condensers) used on process vents from batch unit operations are not included in paragraph (b)(3) of §63.982 and what requirements apply to them.

Response: The process vent batch unit operation requirements have been removed from the final rule because none of the facilities subject to requirements under the generic MACT currently have process vents from batch unit operations. Requirements for process vents from batch unit operations may be added under the generic MACT in future proposals, as necessary. Since subpart SS no longer includes requirements for batch unit operations, this commenter's concern is no longer relevant.

4.3.2 Transfer Racks

Comment: Two commenters (A-97-17, IV-D-02; A-97-16, IV-G-01) noted that §63.982(c)(2), which addresses provisions for low throughput transfer racks, states, "The requirements of §63.984 through§63.986 do not apply to high throughput transfer racks..." One commenter (A-97-16, IV-G-01) stated that either "high" should be changed to "low," or the sentence should be deleted from this paragraph. The other commenter (A-97-17, IV-D-02) said that the sentence should be deleted.

Response: The sentence in question applies only to high-throughput transfer racks, and appeared correctly in proposed §63.982(c)(3). This sentence has been deleted from §63.982(c)(2) in the final rule. As noted earlier, this section of the rule has been substantially reorganized since proposal.

4.4 CLOSED VENT SYSTEMS

4.4.1 Requirements

Comment: One commenter (A-97-17, IV-D-02) stated that the phrase "Except for closed vent systems operated and maintained under negative pressure..." should be moved from §63.983(b)(1) to §63.983(a), which would be consistent with §63.120(d)(7) and (e)(6) of the HON.

Response: The commenter is correct. The exemption for systems operated and maintained under negative pressure applies to the requirements of §63.983(a), consistent with the HON, and the phrase "Except for closed vent systems operated and maintained under negative pressure..." has been moved from §63.983(b) to §63.983(a) in the final rule.

Comment: The commenter (A-97-17, IV-D-02) stated that, as proposed, there is ambiguity in §63.983(b) regarding whether a given piping component in a closed vent system is subject to closed vent requirements or equipment leak provisions. The commenter suggested that this be rectified by stipulating that closed vent system provisions apply only to systems constructed of ductwork, consistent with §63.119(f)(2) of the HON. The commenter provided suggested revisions to this

paragraph, exempting closed vent systems constructed of hard-piping from paragraphs (c) and (d) of §63.983 (Closed vent system inspection procedures and Closed vent system leak repair provisions).

Response: The reason for the commenter's confusion and claim that the provisions of §63.983(b) are ambiguous is not clear. The paragraph in question explicitly states that owners or operators of closed vent systems constructed of hard-piping are required to conduct an initial inspection according to the provisions of §63.983(c) and annual visual inspections for visible, audible, or olfactory indications of leaks, while owners or operators of closed vent systems constructed of ductwork are required to conduct an initial and annual inspections according to the provisions of §63.983(c). Furthermore, there is no indication in this section that any closed vent systems are exempt from the leak repair requirements of paragraph (d), and there is no ambiguity about this.

The paragraph in the HON referred to by the commenter governs the routing of storage vessel emissions to a fuel gas system or process, and §63.119(f)(2) states: "If the emissions are conveyed by a system other than hard-piping, any conveyance system operated under positive pressure shall be subject to the requirements of §63.148 of this subpart." Section 63.148 contains leak inspection provisions, and thus the implication of §63.119(f)(2) is that a conveyance system constructed of hard-piping would not be subject to these provisions. To apply the language from this specific case in the HON more broadly to the general closed vent system requirements of subpart SS is not appropriate.

4.4.2 Inspection Procedures

Comment: One commenter (A-97-17, IV-D-02) stated that §63.983(c)(1)(ii) should be revised to say "...the detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response

factor criteria in section 3.1.2(a) of Method 21 *may* be for the representative composition of the process fluid and not of each individual VOC in the stream. For process streams that contain nitrogen, air, or other inerts that are not organic HAP or VOC, the representative stream response factor *may* be determined on an inert-free basis."

Response: The exceptions to Method 21 described in §63.983(c)(1)(ii) are inspection specifications, and they are not optional, and therefore the commenter's suggested use of the word "may" instead of "shall" is not appropriate. The paragraph has been revised in the final rule to state that "...the detection instrument shall meet the performance criteria of Method 21...except the instrument response factor criteria ... must be for the representative composition of the process fluid and not of each individual VOC in the stream. For process streams that contain nitrogen, air, or other inerts that are not organic HAP or VOC, the representative stream response factor *must* be determined on an inert-free basis."

4.4.3 Leak Repair

Comment: One commenter (A-97-17, IV-D-02) suggested that language specifying that "technically infeasible repairs" include, but are not limited to, procedures involving imminent or potential risk of accident or damage be added to §63.983(d)(3), which establishes delay of repair requirements.

Response: The EPA agrees with the commenter that delay of repair is also allowed in situations where repair is unsafe. The EPA has revised §63.983(d)(3) to specify that delay of repair is allowed if repair is "technically infeasible or unsafe." It is not necessary to include specific details or explanations of unsafe as suggested by the commenter, as the recordkeeping requirement in §63.998(d)(1)(iii)(E) requires the owner or operator to explain why the repair was delayed.

Comment: One commenter (A-97-17, IV-D-02) stated that the reference in §63.983(d)(3) to "closed vent system shutdown, as defined in the referencing subpart" should be changed to state "...,as defined in §63.981."

Response: The EPA agrees with the commenter, and has revised the rule accordingly. Since "closed vent system shutdown" is defined in §63.981 of subpart SS for the purpose of provisions in subpart SS, this is the definition that should be referenced in §63.983(d)(3).

4.5 NONFLARE CONTROL DEVICES USED TO CONTROL EMISSIONS FROM STORAGE VESSELS AND LOW THROUGHPUT TRANSFER RACKS

4.5.1 Requirements

Comment: One commenter (A-97-17, IV-D-02) suggested amending paragraph (a) of §63.985 to include planned routine maintenance as an exempted activity from the requirements to operate and maintain the nonflare control device so that the monitored parameters remain within the ranges specified in the Notification of Compliance Status report.

Response: The provisions of subpart WW for storage vessels referenced by the generic MACT rule allow for shutdown of control devices during periods of planned routine maintenance for control devices used on storage vessels. Storage vessels are unusual because emissions occur as long as they contain liquids. There is no reason to expect the storage vessels to be empty during periods when other process equipment is shutdown for maintenance. However, the EPA disagrees with the commenter's suggestion that the owner or operator should be exempt from the requirement to operate the control device during planned routine maintenance for other emission sources. The expectation is that control devices will be operated within specified parameters except during periods of startup, shutdown, and malfunction. Because planned, routine maintenance is an integral part of normal operation, it is not appropriate to exempt these periods from the requirement to comply with control device specifications.

If a control system does not meet the applicable specifications during planned routine maintenance, this shall be recorded and reported in the source's Periodic Report.

4.5.2 Performance Testing and Design Evaluation Requirements

Comment: One commenter (A-97-17, IV-D-02) stated that §63.985(b)(1) is self-contradictory as written and meaning is unclear.

Response: The paragraph means that the owner or operator shall submit a design evaluation or performance test results, but the EPA agrees with the commenter that the proposed language was confusing and difficult to follow. The EPA has revised §63.985(b) by adding paragraph (b)(3), stating: "If a design evaluation or performance test is required in the referencing subpart, or was previously conducted and submitted for a storage vessel or low-throughput transfer rack, then a performance test or design evaluation is not required." In addition, the EPA has revised §63.983(b) to state: "...except as provided in paragraphs (b)(2) and (b)(3) of this section." These changes clarify the requirements as they were presented in the proposed rule.

Comment: One commenter (A-97-17, IV-D-02) observed that there are no design evaluation requirements given for absorbers in §63.985(b)(1)(i), while there are for all other control devices. This commenter wondered whether there should be such design evaluation criteria.

Response: The commenter is correct that there are no design evaluation requirements given for absorbers in §63.985(b)(1)(i). Owners or operators are allowed to use an absorber to comply with the specified requirements for storage vessels and low throughput transfer racks. Further, owners or operators are allowed to use a design evaluation to demonstrate that the absorber achieves the required control efficiency. Since there is not a specific paragraph addressing the design evaluation for absorbers, the owner or

operator would need to meet the general information specified in to §63.985(b)(1)(i), which is "documentation demonstrating that the control device being used achieves the required control efficiency during the reasonably expected maximum storage vessel filling or transfer loading rate," along with a description of the gas stream being routed to the absorber.

Comment: One commenter (A-97-17, IV-D-02) asserted that the following sentence in §63.985(b)(1)(i) is almost incomprehensible as written and suggested adding parentheses around the additional requirement for storage vessels as follows: "...This documentation is to include a description of the gas stream that enters the control device, including flow and regulated material content, (and additionally for storage vessels, under varying liquid level conditions,) and the information specified in paragraphs (b)(1)(i)(A) through (b)(1)(i)(E) of this section, as applicable. This documentation shall be submitted with the Notification of Compliance Status report as specified in §63.999(b)(2)."

Response: The commenter is correct regarding this sentence. In order to clarify the provisions of §63.985(b)(1)(i), the EPA has revised the paragraph to read as shown below:

> "...This documentation is to include a description of the gas stream that enters the control device, including flow and regulated material content, and the information specified in paragraphs (b)(1)(i)(A) through (b)(1)(i)(E) of this section, as applicable. For storage vessels, the description of the gas stream that enters the control device shall be provided for varying liquid level conditions. This documentation shall be submitted with the Notification of Compliance Status as specified in §63.999(b)(2)."

Comment: One commenter (A-97-17, IV-D-02) suggested that §63.985(b)(1)(ii) be amended in order to consolidate requirements that overlap with paragraph (b)(1)(iii). The

commenter states that §63.985(b)(1)(iii) should then be deleted. The commenter's revision is as follows: "A performance test is acceptable, whether conducted for this purpose or to demonstrate compliance for a process vent or high-throughput transfer rack or for any other purpose, to demonstrate compliance with emission reduction requirements for storage vessels and transfer racks."

Response: The EPA agrees with the commenter's suggestion that the provisions of §63.985(b)(1)(ii) and (b)(1)(iii) be consolidated in a single paragraph, thereby clarifying these requirements and eliminating some redundancy in the rule. The EPA has deleted §63.985(b)(1)(iii) and revised §63.985(b)(1)(ii) as follows: "A performance test, whether conducted to meet the requirements of this section, or to demonstrate compliance for a process vent or high-throughput transfer rack as required by §§63.988(b), 63.990(b), or 63.995(b), is acceptable to demonstrate compliance with emission reduction requirements for storage vessels and transfer racks."

4.5.3 Monitoring Requirements

Comment: One commenter (A-97-17, IV-D-02) suggested that §63.985(c)(2) be revised to include a reference to the operating permit application or amendment, as follows: "...specified in the Notification of Compliance Status report or in the operating permit application or amendment."

Response: The commenter's suggestion does not substantively change the intent of §63.985(c)(2), and the EPA has made the suggested change in the final rule.

4.6 FLARE REQUIREMENTS

4.6.1 Requirements

Comment: One commenter (A-97-16, IV-G-01) asserted that the EPA should refer to 40 CFR 63.11(b) for flare requirements instead of creating an additional flare section in this rule. The commenter stated that this would eliminate redundancy and

facilitate the modification of flare requirements when necessary.

Response: The commenter is correct regarding the benefits of having flare requirements located in a single location, so that redundancy is eliminated and necessary modifications may be more easily made. The EPA agrees that it is appropriate in this case to refer to 40 CFR 63.11(b) for flare requirements. However, the provisions of 40 CFR 63.11(b) do not address all of the requirements covered by §63.987, and thus §63.987 has not been replaced in its entirety by this reference. Instead, §63.987(a) has been revised to refer to 40 CFR 63.11(b), and all the requirements proposed in this paragraph have been deleted. Section 63.987(b) and (c), however, have been retained intact as proposed, because they establish compliance demonstration and monitoring requirements not addressed by 40 CFR 63.11(b).

Comment: One commenter (A-97-17, IV-D-02) suggested substantial changes to §63.987(a)(6) which would combine the provisions of §63.987(a)(6)(i) and (ii) into a single paragraph, arguing that the intent of the paragraph would be maintained, and the provisions would be abbreviated.

Response: Since the EPA has revised the rule to refer to the provisions of 40 CFR 63.11(b) in §63.987(a), eliminating all other provisions first proposed in this paragraph, the commenter's suggestions are no longer relevant.

4.6.2 Compliance Assessment

Comment: One commenter (A-97-17, IV-D-02) recommended that the EPA add a definition for "n" in Equation 3 of §63.987(b)(3)(ii). The commenter recommended adding the definition as follows: "n = number of sample components."

Response: The EPA agrees that the addition of this definition is appropriate in order to completely define all relevant terms in the equation, and the EPA has made the change suggested by the commenter.

Comment: One commenter (A-97-17, IV-D-02) noted that the current version of ASTM D1946-77 referred to in §63.987(b)(3)(ii) is ASTM D1946-90. The commenter also noted that ASTM D2382-76 was discontinued in 1994 by ASTM.

Response: The EPA has revised the final rule to include the correct version of ASTM D1946-90, and has also removed the reference to discontinued ASTM D2382-76.

Comment: One commenter (A-97-17, IV-D-02) stated that the cross-reference to the compliance assessment report in §§63.987(b)(2), 63.989(b)(3), 63.990(b)(2)(ii), 63.991(b)(2)(ii), 63.992(b)(2)(ii) should be changed from 63.999(a)(2)(ii) to 63.999(a)(1)(ii). The sentence as proposed reads. "The compliance assessment report shall be submitted ... within 60 days...as provided in §63.999(a)(2)(ii)."

Response: The commenter is correct. The cross-reference as proposed referred to the requirements for the content of the report, whereas the revisions suggested by the commenter refers to general requirements for the report, including timing of submission. The EPA has revised this cross-reference accordingly.

4.6.3 Monitoring Requirements

Comment: One commenter (A-97-17, IV-D-02) stated that a reference to reporting requirements should be included in §63.987(c), so that the sentence reads as follows: "Flare monitoring and compliance records shall be kept as specified in §63.998(a)(1) and reported as specified in §63.999(b)(9)."

Response: The EPA agrees that this is a useful change to make, as it clarifies the relationship between recordkeeping and reporting requirements, and should simplify the owner or operator's task of determining his or her reporting responsibilities. The EPA revised the rule as suggested by the commenter, except that the cross-reference changes were amended to reflect other changes made in the rule.

4.7 INCINERATORS, BOILERS, AND PROCESS HEATERS

Comment: One commenter (A-97-17, IV-D-02) stated that the reference in §§63.988(c)(1) and 63.989(c)(1) to the requirement to record monitoring results, "as specified in §63.998(b)" should be modified to also cross-reference §63.998(c)(3) and (4).

Response: While the commenter is correct that recordkeeping requirements for monitoring results are also specified in §63.998(c)(3) and (4), there are also monitoring recordkeeping requirements specified in §63.999(c)(1) and (2). Consequently, the EPA has revised this cross reference to refer more broadly to "§63.998(b) and (c), as applicable."

4.8 ABSORBERS, CONDENSERS, AND CARBON ADSORBERS USED AS CONTROL DEVICES

4.8.1 Requirements

Comment: A commenter (A-97-17, IV-D-02) stated that §63.990(b)(1) refers to any absorber used as a recapture device and §63.990(b)(2)(ii) refers to any absorber used as a control device, and asked whether these should be the same, and which - recapture device or control device - is intended. The commenter noted a similar discrepancy in §§63.991 and 63.992.

Response: The EPA agrees that the terminology in these paragraphs should be consistent. The proper language should be when an absorber/condenser is used as a control device. The proposed §§63.990, 63.991, and 63.992, which addressed absorbers, condensers, and carbon adsorbers, used as control devices have been combined into one section - §63.990 - in the final rule. This was because the requirements for these recovery devices used as control devices were largely redundant. The language in the final §63.990 clearly and consistently refers to the situation when an absorber, condenser, or carbon adsorber is used as a control device.

Comment: One commenter (A-97-17, IV-D-02) stated that the meaning of the phrase "the applicable applicability determination provisions of a referencing subpart" with which

the owner or operator shall comply when replacing a recovery device, or replacing a control device with a recovery device, which is found in §§63.990(b)(2)(i), 63.991(b)(2)(i), 63.992(b)(2)(i), and 63.993(b)(2), is unclear. The commenter suggested that it would be clearer if the required determination were specified, for example indicating whether a TRE index value determination must be performed.

Response: The EPA agrees with the commenter's statement that the proposed rule language is confusing. Accordingly, the rule has been revised to require that the owner or operator comply with the "applicable provisions of a referencing subpart or this subpart." Furthermore, the rule has been consolidated so that this requirement appears only once in the final rule, in §63.997(c)(3).

4.8.2 Monitoring Requirements

Comment: One commenter (A-97-17, IV-D-02) stated that the reference in §§63.990(c)(1), 63.991(c)(1), and 63.992(c)(1) to the requirement to record monitoring results, "as specified in §63.998(b)" should be modified to also cross-reference §63.998(c)(3) and (4).

Response: While the commenter is correct that recordkeeping requirements for monitoring results are also specified in §63.998(c)(3) and (4), there are also monitoring recordkeeping requirements specified in §63.999(c)(1) and (2). Consequently, the EPA has revised this cross reference to refer more broadly to "§63.998(b) and (c), as applicable."

4.9 ABSORBERS, CONDENSERS, AND CARBON ADSORBERS AND OTHER RECOVERY DEVICES USED AS FINAL RECOVERY DEVICES

4.9.1 Performance Test Requirements

Comment: Two commenters (A-97-17, IV-D-08; A-97-17, IV-D-08) noted that §63.993(b)(2) requires that, if an owner or operator replaces an existing final recovery or control device with a recovery device, the owner or operator must notify the EPA and comply with applicability provisions. The commenters requested that §63.993(b)(2) be modified to clarify that an

owner or operator be allowed to replace a recovery device that is similar in all material respects (e.g., devices that are manufactured by the same manufacturer and are the same model) without needing to notify the EPA, even if it is not permitted by the applicable title V permit. One commenter proposed language for this paragraph that specifies that the notification requirement is for replacement of a control device with a recovery device or replacement of an existing final recovery device with a *different* recovery device. The commenter suggested that the EPA explain in the final preamble that "different" means "not the same in all material respects." One other commenter suggested that an example of recovery devices that are similar in all respects would be devices manufactured by the same manufacturer with the same model number. One commenter also noted that the cross-reference to §63.999(d) is incorrect and should be changed to §63.999(b)(7).

Response: Due to revisions in the final rule, the paragraphs referred to by the commenters are §63.993(c)(3) and §63.999(c)(7). The EPA doubts that a control or final recovery device will ever be replaced with another that is exactly the same in all material respects, even devices from the same manufacturer with the same model number. Further, the EPA believes that it would be difficult to define specific criteria for each type of device that would be applied to determine that two devices are materially the same. The EPA also believes that a demonstration by an owner or operator that two devices were the same in all material respects would likely be as time consuming as a new compliance demonstration. Therefore, the EPA did not make the rule change requested by the commenter or provide the suggested preamble discussion. The cross referencing error was corrected.

Comment: One commenter (A-97-17, IV-D-02) stated that §63.993(c)(5) should be revised to specify that the monitoring range should be based upon a prior TRE index value

determination rather than a prior performance test. The commenter suggested the following language: "The range may be based upon a prior TRE index value determination meeting the specifications in §63.997(b)(1) or upon existing ranges or limits established under a referencing subpart."

Response: Under the reorganized subpart SS, this paragraph appears in §63.996(c)(6) instead of being repeated in various sections of the rule. That revised, consolidated paragraph refers to establishing the range for a control or recovery device, so the issue raised by the commenter regarding how to refer to prior performance test or TRE index value determination results is pertinent. In order to address this issue, the EPA revised the rule to include the following sentence in §63.996(c)(6): "The range may be based upon a prior performance test meeting the specifications of §63.997(b)(1) or a prior TRE index value determination, as applicable, or upon existing ranges or limits established under a referencing subpart."

4.9.2 Monitoring Requirements

Comment: One commenter (A-97-17, IV-D-02) stated that the reference in §63.993(c)(3) to the requirement to record monitoring results, "as specified in §63.998(b)" should be modified to also cross-reference §§63.998(c)(3) and (c)(4). The commenter further suggested that §63.993(c)(1) and (c)(2) be modified by the addition of the sentence, "Monitoring results shall be recorded as specified in §§63.998(b), (c)(3), and (c)(4)," as the second to last sentence of the paragraph.

Response: While the commenter is correct that recordkeeping requirements for monitoring results are also specified in §63.998(c)(3) and (4), there are also monitoring recordkeeping requirements specified in §63.999(c)(1) and (2). Consequently, the EPA has revised this cross reference to refer more broadly to "§63.998(b) and (c), as applicable." The commenter's suggestion that the monitoring cross-reference

sentence be added to §63.993(c)(1) and (2) is also appropriate, and the EPA revised the rule accordingly.

4.10 HALOGEN SCRUBBERS AND OTHER HALOGEN REDUCTION DEVICES

4.10.1 General

Comment: This commenter (A-97-16, IV-G-01) stated that since paragraph (b)(2) of §63.994 uses the phrase "combustor," the EPA must either define this term or replace it with another defined term.

Response: The EPA has revised this paragraph to use the term "combustion device" instead of "combustor."

4.10.2 Monitoring Requirements

Comment: One commenter (A-97-17, IV-D-02) stated that the reference in §63.994(c)(1) to the requirement to record monitoring results, "as specified in §63.998(b)" should be modified to also cross-reference §63.998(c)(3) and (c)(4).

Response: While the commenter is correct that recordkeeping requirements for monitoring results are also specified in §63.998(c)(3) and (4), there are also monitoring recordkeeping requirements specified in §63.999(c)(1) and (2). Consequently, the EPA has revised this cross reference to refer more broadly to "§63.998(b) and (c), as applicable."

4.11 GENERAL MONITORING REQUIREMENTS FOR CONTROL AND RECOVERY DEVICES

4.11.1 Alternative Monitoring Requirements

Comment: One commenter (A-97-17, IV-D-02) asked that §63.996(b)(1)(ii) be revised to replace the reference to the referencing subpart with a cross-reference to §63.998(c)(4), in the following manner: "The Administrator approves the use of alternatives to any monitoring requirements or procedures as provided in the §63.998(c)(4)."

Response: The commenter is partially correct. The suggestion to include a cross-reference to alternative monitoring requirements is appropriate. However, there could also be relevant provisions in the referencing subpart, and so it is not appropriate to eliminate the reference to the

referencing subpart. Furthermore, the EPA has revised the rule to move the provisions governing alternative monitoring requirements to §63.996(d) and the paragraph cited by the commenter now includes a reference to both §63.996(d) and the referencing subpart.

4.11.2 Backup Monitoring Equipment

Comment: One commenter (A-97-16, IV-G-01) stated that paragraph (b)(2) of §63.996, which governs the use of backup monitoring equipment and reporting results during a given time period, could be interpreted to mean that all the data from all the instruments used during the relevant six month period must be reported. The commenter proposed that the sentence be revised to read "...for the time during the six month period that the instrument was relied upon to demonstrate compliance," to clarify that results from each monitoring instrument must be reported only for the periods during which they are relied upon to demonstrate compliance.

Response: The commenter's suggestion is consistent with the EPA's intent, and the EPA has revised the rule accordingly.

4.11.3 Operation and Maintenance of CPMS

Comment: One commenter (A-97-17, IV-D-02) asserted that the provisions of §63.996(c)(1) are repeated in more detail in §63.996(c)(3) and thus this paragraph should be deleted.

Response: While the commenter is correct that some of the provisions in these two paragraphs overlap and could be consolidated, there are distinctions between these paragraphs as well. In the interests of maintaining these distinctions and ensuring that none of the intent of the rule is lost or altered, the EPA chose to leave the rule as proposed.

Comment: One commenter (A-97-17, IV-D-02) stated that the requirement in §63.996(c)(2)(ii) for an owner or operator to report actions taken in accordance with the startup, shutdown, and malfunction plan in the startup, shutdown, and malfunction report is incorrect. The commenter asserts that

the paragraph should be revised to require that such actions be recorded as specified in §63.998(c)(1)(ii)(E).

Response: The commenter is correct that under subpart SS, when the startup, shutdown, and malfunction plan is followed and the continuous parameter monitoring system (CPMS) is repaired immediately, the owner or operator is required only to keep a record of these actions. Subpart SS does not require owners or operators to submit semiannual startup, shutdown, and malfunction reports, although the referencing subpart may include such a requirement, or may refer the owner or operator to the general provisions (subpart A of part 63), which include such a requirement. Thus, the change requested by the commenter is appropriate, and the EPA has revised this paragraph of the rule to cross-reference the appropriate recordkeeping requirement in §63.998(c)(1)(ii)(E).

Comment: One commenter (A-97-17, IV-D-02) stated that the EPA should specify in §63.996(c)(2)(iii) that the operation and maintenance records that the EPA may use to determine whether acceptable operation and maintenance procedures for CPMS are being followed are those records specified in §63.998(c)(1)(i) and (c)(1)(ii).

Response: The commenter's requested revisions constitutes a clarification of what is intended by operation and maintenance records, and it is thus a useful change. The EPA agrees with the commenter that these are the relevant records, and has revised the rule to cross-reference the recordkeeping requirements of §63.998(c)(1)(i) and (ii). The EPA also notes that §63.996(c)(2)(iii) says that the Administrator's determination of whether acceptable practices are being used will be based on information that "may include, but is not limited to" the listed items, including operation and maintenance records.

4.12 PERFORMANCE TEST AND COMPLIANCE ASSESSMENT REQUIREMENT FOR CONTROL DEVICES

Comment: One commenter (A-97-17, IV-D-02) noted that §63.997(e)(1)(ii) contains an incorrect cross-reference to §63.997(e)(1)(i) which should be revised to §63.997(e)(1)(ii)(D). Further, the commenter stated that the reference to "combustion, recovery, control or recovery device" should be revised to read "control or recovery device."

Response: The cross-reference change suggested by the commenter is correct, and the revision has been made in the final rule. The commenter's observation that the phrase "combustion, recovery, control or recovery device" is wrong is also correct. To be consistent with §63.997(e)(1), the EPA has revised this phrase to state "control or halogen reduction device."

4.13 RECORDKEEPING REQUIREMENTS

4.13.1 Performance Test Records

Comment: One commenter (A-97-17, IV-D-02) states that the cross-reference in §63.998(a)(2)(ii)(A) to the Initial Compliance Status report should be changed from §63.999(a)(1) to (a)(2).

Response: Because of changes made to consolidate the reporting requirements of subpart SS, the commenter's suggested correction is no longer appropriate, although the EPA agrees that the cross-reference as proposed was incorrect. The correct cross-reference is to §63.999(b). In addition, the EPA revised the name of this report to Notification of Compliance Status, in order to be consistent with other MACT standards.

Comment: One commenter (A-97-17, IV-D-02) stated that the record retention period should be clearly stated in §63.998, and that it should be consistent for all records that must be retained, except for records related to a piece of equipment that should be kept for the life of the equipment. As proposed, the commenter said, the rule requirements are confusing, as paragraph (b)(5)(i)(F)(4) requires the

description of the monitoring system to be kept as long as it is current, but no less than 5 years from the date of creation; paragraph (b)(5)(ii)(c) requires records to be kept as long as required by the referencing subpart; and paragraph (d)(4) requires equipment records to be kept for the life of the equipment and operational records to be kept for 2 years.

Response: While the commenter's interest in clarity and consistency of recordkeeping requirements is reasonable, the EPA does not agree that the record retention period must be the same for all records. However, the 2 year record retention period in §63.998(d)(1) and (4) has been changed to 5 years in order to be consistent with the EPA's 5 year recordkeeping requirement for MACT standards. The rationale for the lifetime (of the equipment) record retention requirements is that this information is relevant as long as the equipment is in use. Finally, some record retention periods are left to the discretion of the referencing subpart as there may be circumstances particular to that subpart that are used to establish the record retention requirement.

4.13.2 Continuous Monitoring Records

Comment: One commenter (A-97-17, IV-D-02) recommends that paragraphs (a)(3) and (b)(3) of §63.998 of the rule be amended to cross-reference the associated reporting requirements §§63.999(a)(2)(iii)(C) and (b)(6), respectively.

Response: Section 63.998(a)(3) establishes recordkeeping requirements for owners or operators using a recovery device to maintain a TRE above a specific level. Paragraph (b)(3) establishes monitoring recordkeeping requirements, applicable except when an alternative monitoring or recordkeeping system has been approved. The commenter's suggested revisions cross-reference, respectively, the performance test report requirements, and the periodic reporting requirements. These additions to the rule, while not necessary, may clarify the owner or operator's reporting requirements, and thus are appropriate revisions to make. The EPA has revised the

promulgated rule accordingly, while noting that the cross-reference to the periodic reports has been revised to §63.999(c).

Comment: One commenter (A-97-17, IV-D-02) recommends including the specific cross-reference for the Initial Compliance Status Report (now the Notification of Compliance Status report in the final rule) and the Periodic Report referred to in §63.998(b)(5)(i), (b)(5)(ii)(A), and (b)(5)(ii)(B).

Response: The EPA agrees with the commenter that this change adds clarity to the requirements of the rule. The EPA has revised and simplified the reporting requirements in the promulgated rule, and the added reference to the Notification of Compliance Status Report "as specified in §63.999(b)" and to the Periodic Report "as specified in §63.999(c)" reflects those changes.

Comment: One commenter (A-97-17, IV-D-01) stated that §63.998(b)(5)(ii)(D)(1) should be modified to specify that the 3-hour average value won't be considered an excursion if the owner or operator follows the startup, shutdown, and malfunction plan and "maintains the records specified in paragraph (d)(3) of this section."

Response: The EPA agrees that the commenter's suggested change would clarify the EPA's intent. The EPA has changed the final rule to allow an owner or operator to keep records and determine excursions on a daily basis rather than on the proposed 3-hour basis. The EPA has also made changes to this section of the rule to clarify that the provisions governing excursions apply throughout the section, not just under the alternative recordkeeping scenario described in §63.998(b)(5), and thus the cross-reference that has been added is to §63.998(b)(6)(i)(A).

Comment: Two commenters (A-97-17, IV-D-02; A-97-16, IV-G-01) pointed out that §63.998(b)(1) discusses continuous records and monitoring data handling, and references

subparagraphs (b)(1)(i) and (b)(1)(ii). However, this paragraph also contains subparagraphs (iii) and (iv). One commenter (A-97-16, IV-G-01) asserted that paragraph (b)(1) or (b)(1)(i) should indicate that (ii) and (iii) are options. The other commenter (A-97-17, IV-D-02) stated that the reference should be to "(b)(1)(i) or (b)(1)(ii) or (b)(1)(iv)."

Response: While the EPA agrees with the commenter's contention that this paragraph as proposed was confusing, the commenters' suggestions do not fully address subparagraphs (iii) and (iv). In order to clarify the requirements of this paragraph, the EPA has revised §63.998(b)(1) to state that the owner or operator "...shall maintain a record as specified in paragraphs (b)(1)(i) through (iv) of this section, as applicable."

Comment: One commenter (A-97-17, IV-D-02) stated that the 2 hours allotted for retrieving data regarding the monitoring system description in §63.998(b)(5)(i)(F)(4) is not a realistic time allowance. The commenter asserted that the standard should require all applicable records to be accessible within 24 hours.

Response: The EPA disagrees with the commenter and has retained the requirement for monitoring data to be retrieved within 2 hours as proposed. The monitoring system description is a fundamental piece of information that the EPA may choose to review for the purposes of assessing compliance, and it is important, therefore, that this information be readily available to the EPA when conducting an inspection.

4.13.3 Control and Recovery Device Monitoring Records

Comment: One commenter (A-97-17, IV-D-02) stated that §63.998(c)(3)(i) and (iii) should include a reference to the recovery device monitoring provisions of §63.993(c) in the list of references to equipment monitoring parameters to be monitored for different control and recovery devices.

Response: The EPA agrees with the commenter and has made the suggested change in the final rule.

Comment: A commenter (A-97-17, IV-D-02) claimed that conditioning the requirement to establish a monitoring range as part of the Initial Compliance Status Report upon the referencing subpart is inappropriate because the Initial Compliance Status Report requirements are contained within subpart SS. The commenter suggested that the phrase "if required under a referencing subpart" be deleted from §63.998(c)(5)(ii) of the rule. This commenter also requested that the final sentence of this paragraph be revised to include a reference to the operating permit application "or amendment."

Response: The EPA agrees with the commenter that requirements of the Notification of Compliance Status should be completely contained within subpart SS, and should not be conditional upon requirements in a referencing subpart. The final rule has been changed in accordance with this commenter's suggestion. The EPA also agrees that it is appropriate to refer to the "operating permit application or amendment" rather than just the application, and the rule has been revised accordingly.

Comment: One commenter (A-97-16, IV-G-01) stated that the requirement in §63.998(c)(1) that "(the owner or operator) subject to this subpart...keep the records specified in this paragraph, as well as other records specified elsewhere in this part" could be interpreted to mean any records specified in 40 CFR 63 must be kept whether they are relevant or not. The commenter said that the EPA should revise this paragraph to indicate that only applicable records for the subpart must be kept. Furthermore, the commenter thought that the EPA should specify exactly which records must be kept by referencing the applicable paragraphs, and suggested that a table of these requirements might be appropriate.

Response: The commenter's concern is reasonable, and the rule has been revised to state "... as well as other records specified elsewhere in this subpart." In addition, the EPA is

preparing summary tables of monitoring, recordkeeping, and reporting requirements for subpart SS. These tables will cross-reference the applicable regulatory text, and will assist owners and operators in determining the requirement to which they are subject.

Comment: Two commenters (A-97-17, IV-D-08; A-97-17, IV-D-02) noted that §63.998(c)(1)(ii)(D) refers to a period "during which excess emissions" but is not clear whether the excess emissions *occur* or something else.

Response: Consistent with §63.998(c)(1)(ii)(E), the phrase has been revised to state "during which excess emissions occur."

Comment: One commenter (A-97-17, IV-D-02) stated that §63.998(c)(1)(ii)(D) and (E) should be revised to refer to "...excess emissions as defined in paragraphs (c)(2)(iii) and (c)(3)(iii) of this section" instead of "excess emissions as defined in a referencing subpart."

Response: The commenter's suggested revisions of these paragraphs are not appropriate. Section 63.998(c)(2)(iii) and (c)(3)(iii), to which the commenter believes the rule should refer for the definition of excess emissions, describe exceedances of parameter boundaries. Such exceedances constitute excursions, which are different from excess emissions. Excess emissions refers to the exceedance of a known emission limitation, and this is defined in the referencing subpart. For this reason, the change suggested by the commenter is not appropriate, and no rule change has been made regarding these provisions.

Comment: One commenter (A-97-17, IV-D-02) stated that §63.998(c)(1)(iii) should be deleted since it is redundant with §63.998(b)(2)(ii) and §63.998(b)(3)(ii).

Response: Because requirements for batch unit operations were removed from subpart SS, §63.998(c)(1)(iii) was also deleted, as it applied specifically to batch unit operations. Consequently, the commenter's concern about redundancy between

this requirement and that in §63.998(b)(2)(ii) and §63.998(b)(3)(ii) is no longer an issue.

Comment: One commenter (A-97-17, IV-D-02) stated that the phrase "...with the permitting application..." in §63.998(c)(4)(i) and (c)(5) assumes that the operating permit application will be filed after promulgation of this rule, but before submitting the Initial Compliance Status Report (now the Notification of Compliance Status report), which may not be an appropriate assumption.

Response: The rule as proposed also includes the phrase "... or as otherwise specified by the permitting authority..." This phrase allows for the permitting authority to establish how information or requests should be submitted if the operating permit has already been submitted. The EPA believes that this language permits various circumstances to be adequately addressed, and that consequently, no rule change is necessary.

Comment: One commenter (A-97-17, IV-D-02) stated that since §63.998(c)(5) requires a notification, it should be moved from §63.998 to §63.999. The commenter suggests that the new paragraph should be labeled §63.999(b)(10), and would also result in cross-referencing changes throughout the rule.

Response: The commenter is correct that this is a notification rather than a recordkeeping requirement. However, because the requirement pertains specifically to monitoring of different parameters than those specified in a referencing subpart or subpart SS, the EPA considers this provision to be primarily a monitoring requirement which overlaps with the requirement proposed in §63.996(d). Thus, the EPA has revised the rule to consolidate this requirement with that proposed in §63.996(d), and cross-references throughout the rule have been revised accordingly. The specific contents of a request to implement alternative monitoring are listed in a new section of the rule, §63.999(d). The intent of the rule, or

requirements for owners and operators, are not altered by this rule change.

Comment: One commenter (A-97-17, IV-D-02) stated that the reference to "periodic reports as specified in §63.999(b)" in §63.998(d)(1)(iii)(F) is meaningless, because the commenter believes that only §63.999(b)(1), which deals with routine maintenance for storage vessel control systems, is pertinent to closed vent systems and the associated recordkeeping requirements are in §63.998(d)(2). Thus, the commenter suggested that this paragraph be deleted or clarified.

Response: The reporting section of subpart SS has been reorganized to consolidate the requirements for notifications of compliance status and periodic reports. As a result, the cross-reference mentioned by the commenter has been corrected to §63.999(c).

4.13.4 Storage Vessel Records

Comment: One commenter (A-97-17, IV-D-02) requested that a second sentence be added to §63.998(d)(2)(i), stating, "This information shall be submitted in the periodic reports as specified in §63.999(b)(4)."

Response: The record kept in the §63.998(d)(2)(i) is of the measured values of monitored parameters. The EPA does not agree that it is necessary for this information to be submitted in the periodic reports if the parameters were within the specified parameter ranges. Instead, the owner or operator should specify in the periodic reports required under §63.999(c) that the measured values did not fall outside parameter boundaries.

Comment: One commenter (A-97-17, IV-D-02) suggested that §63.998(d)(2)(iii), which discusses the bypass provisions in §63.983(a) for storage vessels routed to a process or fuel gas system, be deleted in its entirety, since it is clear from §63.982(a)(3) that §63.983 does not apply to storage vessels routed to a process or fuel gas system.

Response: The commenter is correct. Under the provisions of §63.982, storage vessels routed to a process or fuel gas system are subject to §63.984 and the monitoring, recordkeeping and reporting requirements referenced therein, and no other provisions. Thus, it is clear, as the commenter stated, that §63.983 does not apply to these storage vessels, and that the recordkeeping requirement in §63.998(d)(2)(iii) is not relevant. this paragraph has been deleted from the final rule.

4.13.5 Start-up , Shutdown, and Malfunction Records

Comment: One commenter (A-97-17, IV-D-02) wanted the reference to "excess emissions as defined in a referencing subpart" in §63.998(d)(3)(i) to be changed to "...as defined in paragraph (b)(5)(ii)(D) of this section."

Response: The EPA has not made the commenter's suggested revisions. Section 63.998(b)(5)(ii)(D) defines excursions, which are different from excess emissions. A definition for excess emissions has been added to the final rule to clarify that excess emissions are "emissions in excess of those that would have occurred if there were no start-up, shutdown, or malfunction and the owner or operator complied with the relevant provisions of this subpart." Excess emissions refers to the exceedance of a known emission limitation which would be specified in a referencing subpart, whereas excursions refer to the exceeding of a monitoring parameter boundary which would be established under the requirements of 40 CFR part 63 subpart SS, which is why it refers to the referencing subpart for a definition.

4.13.6 3-Hour Averaging

Comment: One commenter (A-97-17, IV-D-08) requested that the EPA change §§63.998 and 63.999 of the proposed rule to allow an owner or operator to keep records and determine excursions on a daily basis rather than on the proposed 3-hour basis. The HON allows an owner or operator to keep records and determine excursions on a daily basis and subpart SS

requires that an owner or operator keep records and determine excursions on a 3-hour basis.

The commenter explained that the reason for using daily averages in the HON was to provide an opportunity for an owner or operator to identify and fix problems with the process, recovery device, or control device before being deemed noncompliant (57 FR 62608, 62658).

The commenter (A-97-17, IV-D-08) also explained that the use of a 3-hour average does not recognize and allow for fluctuations in the monitored parameter. In the HON promulgation BID, the EPA recognized the possibility of such fluctuations, and felt that the use of a daily average would mitigate the possibility that a source be deemed out of compliance as a result of such a fluctuation.

The commenter stated that the Generic MACT approach relies on the use of the HON as the basis for the proposed requirements. The EPA has not offered any explanation for either the increase in recordkeeping requirements or the increased stringency of the compliance provisions as compared to what was deemed achievable under the HON.

Response: The EPA evaluated the commenter's request and has changed §§63.998 and 63.999 in the final rule to allow an owner or operator to keep records and determine excursions on a daily basis rather than on the proposed 3-hour basis. The EPA has made the commenter's suggested change because the EPA acknowledges that the Generic MACT approach relies on the use of the HON as the basis of MACT and the compliance averaging time required under the HON is linked with that determination. The EPA does not intend for the daily averaging allowance to be a default. The compliance averaging time is determined as part of the MACT determination and future rules may not allow for a daily averaging option.

4.13.7 Absorber Specific Gravity Monitoring

Comment: One commenter (A-97-17, IV-D-08) requested that §§63.998(a)(3)(i), 63.990(c)(1), 63.993(c)(1), and

63.998(a)(2)(ii)(C)(*1*) regarding the use of an absorber as a final recovery device be modified to adequately address their situation.

The commenter explained that when scrubbers use a fluid containing a reactive chemical that is depleted during use, e.g., caustic, monitoring of the specific gravity makes sense. The commenter stated that they use fresh water as the scrubbing fluid to scrub HAPs (primarily methylene chloride), where the specific gravity between fresh water and methylene chloride-saturated water is so small that it can not be accurately measured.

The commenter provided data indicating that the specific gravity difference between fresh water and water saturated with methylene chloride is approximately 0.005 specific gravity units. The commenter stated that the proposal only requires an owner or operator to measure the specific gravity to the nearest .02 units and that measuring the specific gravity of the scrubbing fluid has no practical relevance in their case.

Response: The EPA agrees with the commenter that measuring the specific gravity of the scrubbing fluid has no practical relevance for their specified case. It was the EPA's intent to receive and consider comment on such cases. The EPA has made changes to the promulgated rule that specify that the specific gravity should not be monitored where the difference between the specific gravity of the saturated scrubbing fluid and specific gravity of the fresh scrubbing fluid is less than 0.02 specific gravity units. However, in such cases, the final rule specifies that a continuous organic monitoring device or a viable alternative monitoring parameter capable of measuring organic HAP emissions must be used to monitor compliance with the rule.

4.14 REPORTING REQUIREMENTS

4.14.1 Compliance Assessment Reports

Comment: One commenter (A-97-17, IV-D-02) stated that §63.999(a)(1)(i), which established general requirements for performance test and flare compliance assessment notifications and reports, should be revised to refer to flare compliance demonstrations, as well as performance tests, throughout.

Response: The commenter's suggested revision is in keeping with the intent of the paragraph, as described by the title of the paragraph. Thus, the EPA has revised this paragraph to refer more generally to compliance demonstrations, instead of performance tests, and to explicitly include a reference to flare compliance demonstrations.

Comment: One commenter (A-97-17, IV-D-02) asserted that the results of compliance demonstrations conducted after submission of the Initial Compliance Status Report should be allowed to be submitted with the next periodic report, rather than within 60 days, as specified in §63.999(a)(1)(ii). The commenter also pointed out various other paragraphs that should be modified if this change is made.

Response: The requirement that the results of compliance demonstrations conducted after submission of the Initial Compliance Status be submitted to the Administrator within 60 days is consistent with §65.164(b)(2) of the CAR, and with requirements listed in §§63.7(g)(1), 63.9(h), and 63.10(d)(2) of the General Provisions. The CAR contains exactly the same requirement as subpart SS, while the General Provisions requires that compliance demonstration results be submitted with the Notification of Compliance Status, and that this submission must occur within 60 days. While the EPA appreciates that the commenter would prefer additional time to submit the results and would prefer to include these results with another report, the results of compliance assessments are important information for the EPA to use in its determination of owners and operators' compliance with regulatory requirements. For this reason, and in order to be consistent

with other regulations, this requirement in the rule has not been altered.

Comment: One commenter (A-97-17, IV-D-02) stated that the reference in §63.999(a)(2)(iii)(B) to "nonflare combustion device" should be revised to "nonflare control device."

Response: The commenter is correct, because this paragraph refers to performance tests for a broad range of control devices, rather than just combustion and halogen reduction devices, as implied by the proposed language. The rule has been revised accordingly.

Comment: One commenter (A-97-17, IV-D-02) stated that the reference in §63.999(a)(2)(iii)(C) to "process vents" should be revised to refer to "recovery devices."

Response: The commenter is correct. The paragraph in question refers to recovery device monitoring records during TRE index value determinations that must be submitted as part of the compliance assessment report. The rule has been revised accordingly.

4.14.2 Control Device Monitoring Reports

Comment: One commenter (A-97-16, IV-G-01) asserted that the requirement in §63.999(b)(1)(ii) to include in the periodic report the number of hours that the control system did not meet the requirements from the current *and previous* reporting periods is unnecessarily duplicative and burdensome to the owner or operator. The commenter stated that EPA should refer to earlier reports for information from previous reporting periods.

Response: The EPA requires the information from current and previous reporting periods in order to have in one location a compiled historical record of the number of hours a control system does mot meet requirements. This facilitates the EPA's evaluation of compliance and assessment of a source's performance. Furthermore, this provision in the rule is consistent with a reporting requirement in §65.166 of the

CAR. No rule change was made in response to the commenter's concern.

Comment: A commenter (A-97-17, IV-D-02) asserted that there is no benefit or purpose served by reporting anticipated planned maintenance on storage vessel control devices, and that this provision in §63.999(b)(1)(iii) should therefore be deleted.

Response: The EPA has made no rule change in response to this comment. The EPA believes that the information provided by reporting anticipated planned maintenance on storage vessel control devices is important to the EPA's efforts to assess compliance and source performance. Furthermore, the provision as written is consistent with §65.166 of the CAR.

Comment: One commenter (A-97-17, IV-D-02) stated that the following subparagraph should be added to §63.999(b)(5):"(iv) The owner or operator shall notify the Administrator in the Initial Compliance Status Report or, if the Initial Compliance Status Report has already been submitted, in the Periodic Report specified in paragraph (b)(6) of this section immediately preceding implementation of the alternative recordkeeping requirements of §63.998(b)(5)."

Response: The commenter's suggested change is appropriate, as it places in the reporting section of the rule a reporting requirement that is referred to in §63.998(b)(5). It is important that all reporting requirements be specified in §63.999, the reporting section of subpart SS, so that owners and operators can accurately determine their obligations. For this reason, the rule revision suggested by the commenter, with changes to reflect other revisions to the rule, has been added to §63.999(b)(5).

Comment: A commenter (A-97-17, IV-D-02) suggested that the following subparagraph should be added to §63.999(b)(6): "(iii) The owner or operator shall notify the Administrator in the Initial Compliance Status Report specified in paragraph (b)(5) of this section or, if the Initial Compliance Status

Report has already been submitted, in the Periodic Report immediately preceding implementation of the alternative recordkeeping requirements of §63.998(b)(5). The notifications specified in §63.998(b)(5)(ii) shall be included in the next Periodic Report following the identified event."

Response: As discussed in the response to the previous comment, the commenter's suggested change is appropriate, as it places in the reporting section of the rule a reporting requirement that is referred to in §63.998(b)(5). It is important that all reporting requirements be specified in §63.999, the reporting section of subpart SS, so that owners and operators can accurately determine their obligations. For this reason, the rule revision suggested by the commenter, with changes to reflect other revisions to the rule, has been added to §63.999(c)(6)(iv).

Comment: One commenter (A-97-17, IV-D-02) suggested that a new paragraph (b)(11) be added to §63.999, and that it state: "Requests for approval of an alternative monitoring method, as specified in §63.998(c)(4) shall be included in the operating permit application or as otherwise specified by the permitting authority." The commenter suggested a related cross-referencing change to §63.998(c)(4)(i).

Response: The EPA does not agree with the commenter's suggestion, as it is entirely redundant with §63.998(c)(4), and it is not a report or a notification. Thus, there is no reason to add this paragraph to §63.999 of the rule, which governs reporting requirements, and no rule change was made. Furthermore, as discussed in the response to a previous comment, the provisions of §63.998(c)(4) have been moved to 63.996(d), governing monitoring alternatives, and §63.999(d), which establishes the content for requests to implement monitoring alternatives.

Comment: One commenter (A-97-17, IV-D-02) stated that the cross-references in §§63.988(c)(2), 63.989(c)(2), 63.990(c)(2), 63.992(c)(2), 63.993(c)(5), 63.994(c)(3),

63.995(c)(2) to the information required in §63.999(b)(3) should be changed to §63.999(b)(5). In each of these cases, the rule states, "In order to establish the range (for monitored parameters), the information required in §63.999(b)(3) shall be submitted in the Initial Compliance Status Report..."

Response: The reporting section of the rule was revised to consolidate requirements for the Notification of Compliance Status in §63.999(b). Because of this change, the cross-referencing issue raised by the commenter has changed since proposal. Correct cross-references to this reporting requirement have been inserted in the paragraphs identified by the commenter.

5.0 NATIONAL EMISSION STANDARDS FOR EQUIPMENT LEAKS - CONTROL LEVEL 1 (40 CFR PART 63, SUBPART TT)

5.1 DEFINITIONS

Comment: One commenter (A-97-17; IV-G-01) indicated that terms used in the equipment leak provisions of Subpart TT should be defined in §63.1001.

Response: The EPA has added clarifications and definitions to §63.1001.

5.2 COMPLIANCE DETERMINATION

Comment: One commenter (A-97-17; IV-G-01) suggested that, for the purpose of using an alternative means of emission limitation, it may be unreasonable and costly to require an owner or operator to demonstrate the emission reduction achieved by a required work practice for 12 months. The commenter stated that EPA should already know the emission reduction achieved by the required work practice, and that the owner or operator should only be required demonstrate the emission reduction achieved by the proposed alternative work practice. The commenter also noted that in §63.1002(b)(4)(ii), the term "equipment" is used rather than "work practice."

Response: The EPA agrees with the commenter and the 12 month requirement, §63.1002(b)(4)(ii), was removed from the regulation. It is the operator's burden to provide sufficient data to support an alternative work practice. The EPA has no basis supporting the need for a minimum data requirement.

5.3 EQUIPMENT IDENTIFICATION

Comment: One commenter (A-97-17; IV-G-01) noted that the equipment identification requirements in §63.1003(e) should not contain the provision that equipment designated as having

no detectable emissions must have no external actuating mechanism in contact with the process fluid. The commenter noted several related sections in Subpart TT [§§63.1007(e)(2) -- agitators with no external shaft, §63.1006(e)(4) -- valves designated for no detectable emissions, and §63.1012(f) -- compressors designated for no detectable emissions] that did not prohibit external actuating mechanisms in contact with the process fluid. The commenter recommended that §63.1003(e) include language from §65.103 of the Consolidated Air Rule in lieu of language in §§63.1003(e)(1) through (3). The commenter also noted that other sections should be revised as follows: (1) Section 63.1017(b)(4) should read: "As specified in §63.1003(e), the owner or operator shall maintain the identity of compressors operating with an instrument reading of less than 500 parts per million." (2) Section 63.1017(c)(1) should read: "For valves, the owner or operator shall maintain the records specified in paragraphs (c)(1)(i) through (c)(1)(iii) of this section. (i)..... (ii) For valves designated for no detectable emissions under the provisions of §63.1007(e)(2), record the dates and results of each compliance test as specified in §63.1006(e)(4)(i)(2)."

Response: The EPA has not made the changes suggested by the commenter. Subpart TT was developed to parallel the base leak detection and repair programs of 40 CFR part 60, subpart V and 40 CFR part 61, subpart VV. The suggested provision changes to 40 CFR part 63, subpart TT would create a deviation from those base programs. The EPA may allow an owner or operator of an affected source under the generic MACT rule the option of complying with either subpart TT or subpart UU of 40 CFR part 63. The EPA has provided this option so that an owner or operator that is already complying with provisions similar to 40 CFR part 60, subpart V or 40 CFR part 61, subpart VV would not have to change their existing LDAR program. The suggested revisions to subpart TT could cause confusion and burden for an owner or operator who has

already developed monitoring and recordkeeping regimens to comply with these other subparts. The EPA developed the 40 CFR part 63 subpart TT "standard standard" in order to streamline the NSPS requirements so they did not want to deviate too much from those requirements and the "standard standard."

Comment: One commenter (A-97-17; IV-G-01) stated that the three percent limit imposed on difficult-to-monitor valves should be clarified. The commenter asserted that the three percent limit should only be applied to new sources. The commenter supplied recommended language to address their comment.

Response: To be consistent with subpart H of the HON, EPA revised the language in §63.1003 to include a 3 percent limit on the number of valves that can be designated as difficult-to-monitor at new or reconstructed sources, and to impose no limit on the number of difficult-to-monitor valves at existing sources. It is appropriate to limit new sources because designers can consider equipment layout when designing a new source.

5.4 LEAK REPAIR

Comment: One commenter (A-97-17; IV-G-01) suggested that the leak identification removal requirement in §63.1005(b)(1) for valves and connectors be revised to apply only to valves and connectors in gas/vapor or light liquid service. The commenter pointed out that, according to §63.1010(b), no monitoring is required for valves and connectors in heavy liquid service if a leak detected by auditory, visual or olfactory inspection is eliminated within 5 days.

Response: The EPA agrees with the commenter and has revised §63.1005(b)(1) to apply only to valves and connectors in gas/vapor or light liquid service. However, it was the EPA's intent to have all leaking equipment identified. Therefore, §63.1010(b)(2) was changed to require

identification of leaking equipment i.e., equipment with an instrument reading of 10,000 part per million.

Comment: One commenter (A-97-17; IV-G-01) suggested that subpart TT should include language that addresses what is and what is not considered a violation when attempting to repair a leak, similar to language in §63.162(h) of subpart H (HON equipment leaks). The commenter pointed out that §63.162(h) of the HON states that if an attempt to repair a leak is made within the specified time, but the attempt is unsuccessful, the owner or operator is not in violation of the HON. The commenter expressed concern that successful repair of a leak may require multiple attempts and that applicable State regulations and permit conditions may prevent an owner or operator from designating the leaking piece of equipment for delay of repair. The commenter suggested that similar language be included in §63.1005 which would clarify that failing to take action upon discovering a leak is violation, but that good-faith, unsuccessful attempts at repair are not violations.

Response: Subpart TT contains language that clarifies that leaks, in and of themselves, are not considered violations of the standard. The standards require action upon detecting leaks, such as repair and recordkeeping requirements. Failing to take the required actions are violations of the standards; detecting a leak is not a violation of the standards. Therefore, it is not necessary to add language from the HON to Subpart TT to clarify this issue. If it is necessary to delay repair beyond the required repair time, the source can employ the delay of repair provisions. A source that neither repairs a leak nor uses the delay of repair provisions is in violation.

5.5 VALVES IN GAS AND VAPOR SERVICE AND IN LIGHT LIQUID SERVICE

Comment: One commenter (A-97-17; IV-G-01) requested that valve monitoring language from §§61.242-7(c)(1) and

60.482(b)(3)(ii)(A) be used in lieu of language in §63.1006(b)(3)(ii)(A). The commenter stated that the requirements for "same month" monitoring place an undo burden on the monitoring system and assume that a quarterly period is a calendar quarter. The commenter maintains that a quarterly period is a combination of 3 months dependent on when the rule becomes effective. The commenter recommended that the EPA be consistent with other similar subparts.

Response: The language "(first, second, or third month)" clarifies that all equipment need not be monitored in the same month within a 3 month period. That is, the plant may stagger the monitoring of valves, connectors, etc., across the 3 month period as long as subsequent monitoring of individual components occurs every 3 months. It is not the intent of the language to require the 3 month period coincide with calendar quarters.

5.6 PUMPS IN LIGHT LIQUID SERVICE

Comment: One commenter (A-97-17; IV-G-01) stated that there is no reason to require the calculation of percent leaking pumps in Subpart TT. The commenter noted that there is no QIP requirement and that the semi-annual report does not require this information. The commenter recommended that §63.1007(c) be deleted. This commenter also noted that if the EPA retains this requirement, then §63.1007(c)(2) should be revised to apply only to continuous process units within 1 month after startup (delete the "or" in this phrase) and the P_L calculation should exclude pumps found to be leaking by a visual inspection under §63.1007(b)(3).

Response: The EPA agrees with the commenter that §63.1007(c) should be deleted, therefore it has been deleted in the promulgated rule.

5.7 ENCLOSED-VENTED PROCESS UNITS

Comment: One commenter (A-97-17; IV-G-01) recommended that the enclosed-vented process unit provisions in §63.1016 be revised to allow for either a process unit or a portion of

a process unit to be designated as an enclosed-vented process. The commenter also requested that enclosed-vented process units be given the option to be routed to a fuel gas system or to a process. In addition, the commenter suggested that enclosed-vented process units should not be exempt from the closed vent system requirements of § 63.1015.

Response: The EPA notes that the enclosed-vented process unit alternative is intended for process units entirely contained within large buildings, where all emissions will vent through a limited number of exhaust ports. Many of these process units are unmanned. Pharmaceutical processors are typical examples of this type of operating scenario.

The EPA maintains that it is inappropriate to allow the enclosed-vented alternative for portions of process units. Doing so creates confusing compliance situations and stretches the scope of the allowance beyond what was originally intended.

5.8 GENERAL

Comment: One commenter (A-97-17, IV-G-01) suggested that all references made in subpart TT to compliance with the provisions of subpart SS should be revised to refer instead to §63.1015, which governs closed vent systems and control devices, or emissions routed to a fuel gas system or process, so that no requirements are overlooked.

Response: The commenter is correct, and the final rule has been revised to make this change. By referencing §63.1015, the EPA ensures that the appropriate requirements for closed vent systems and control devices, or emissions routed to a fuel gas system or process are met by the owner or operator subject to these provisions. Section 63.1015 itself cross-references subpart SS, and this cross-reference has been maintained in the final rule, as subpart SS holds the detailed requirements that must be met.

Comment: A commenter (A-97-17, IV-G-01) stated that references to the monitoring method requirements in each

equipment section are incorrect and inconsistent. Sometimes both paragraphs (b) and (c) are referred to, while at other times only paragraph (b) is referenced. The commenter said that all of these references should be consistent, and should either refer to §63.1004(b), or §63.1004(b) and (c).

Response: The commenter is correct about the need for consistency and accuracy in cross-referencing monitoring method requirements. Section 63.1004(b) addresses instrument monitoring methods for leak detection and §63.1004(c) addresses instrument monitoring using background adjustments, which is optional, at the owner or operator's discretion. Therefore, the EPA has revised the rule to refer to the monitoring requirements of "§63.1004(b) and, as applicable, (c)."

5.8.1 Applicability

Comment: One commenter (A-97-16, IV-D-01) stated that since the referencing subpart controls what equipment is regulated and subpart TT governs how the equipment is regulated, §63.1000(b) and the definition of "equipment" in §63.1001 should be deleted from the rule.

Response: The EPA agrees with the commenter that the designation of applicability belongs in Subpart YY. Appropriate changes have been made to both Subparts YY and TT.

5.8.2 Definitions

Comment: One commenter (A-97-17, IV-G-01) wondered why there was no explanation in the preamble as to why both of the terms "relief device or valve" and "pressure relief device or valve" are needed. The commenter thought that, consistent with the CAR, "relief device or valve" is intended to include relief valves that do not relieve pressure, and stated that if this is the case, the definition of relief device or valve should mention those relief valves that let in nitrogen to prevent vacuums.

Response: The commenter is correct that the EPA intended the use of these definitions in subpart TT to be consistent

with their use in the CAR. Therefore, the EPA has revised the definition of "relief device or valve" in accordance with the commenter's suggestion, and the definition in the final rule includes relief valves that let in nitrogen to prevent vacuums.

Comment: One commenter (A-97-16, IV-D-01) stated that all references to subpart SS in the definition of "repaired" should be deleted, and a definition of this term should be added to subpart SS.

Response: The commenter is correct, and the EPA has added a definition of "repaired" to subpart SS and removed the references to subpart SS in the definition of "repaired" found in subpart TT. In addition, the EPA has added a definition of "first attempt at repair" to subpart SS, as this term, as well as the term "repaired," is used in subpart SS and was not defined in the proposed rule.

5.8.3 Compliance assessment

Comment: One commenter (A-97-17, IV-G-01) stated that §63.1002(b), provisions for alternative means of emissions limitation, should be revised to include the performance standard exemption that is in subpart UU. The commenter further stated that if the designation of valves as having no detectable emissions is considered a performance standard, then valves should be included in the exemption.

Response: The commenter is correct about including the performance standard exemption in §63.1002(b), and is also correct that the designation of valves as having no detectable emissions is considered a performance standard. Accordingly, the EPA revised the final rule to include a performance standard exemption which specifies that the alternative means of emission limitation provisions do not apply to the performance standards for pressure relief devices, valves designated as having no detectable emissions, or compressors operating under the alternative compressor standards.

Comment: One commenter (A-97-17, IV-G-01) stated that references to §§63.1002(b), 63.1005(c), and 63.1016 are inconsistent throughout the rule. This commenter asserted that the "leak detection" part of each section should reference §§63.1002(b) and 63.1016, and that §63.1005(c) should only be referenced in the "leak repair" part of each section. The commenter listed the following paragraphs where this is necessary: §§63.1006(b), 63.1007(b), 63.1008(b), 63.1009(b), 63.1010(b), 63.1011(b), 63.1012(b), 63.1013(b), and 63.1014(b). This is similar to a comment on analogous provisions of subpart UU.

Response: The commenter is correct regarding the need for consistent referencing of exemptions throughout the rule. The commenter is also correct regarding the appropriate placement of exemptions on the leak detection parts of the rule and delay of repair conditions in the leak repair parts of the rule. The EPA has revised the final rule accordingly, and the leak detection parts of each section of the rule include the exemptions provided under §63.1002(b) (Alternative means of emission limitation), §63.1016 (Alternative means of emission limitation: Enclosed-vented process units), and within the respective sections of the rule (e.g. the special provisions for pumps found in §63.1007(e)). Furthermore, the references to delay of repair exceptions have been revised to appear only in the leak repair parts of the sections in the final rule, as these are not relevant to the leak detection requirements found in the rule.

5.8.4 Equipment Identification

Comment: One commenter (A-97-17, IV-G-01) stated that the reference in §63.1003(b)(1) to the initial survey required by §63.1008(a)(1)(I) is incorrect, and that this final sentence should be deleted, since there is no initial survey required, and this section does not exist.

Response: The EPA agrees with the commenter; the sentence was deleted.

Comment: One commenter (A-97-17, IV-G-01) pointed out that §63.1003(c)(3), which establishes provisions for the identification of unsafe or difficult-to-monitor equipment, is redundant with requirements in §§63.1003(c)(4), which also addresses the identification of such equipment, and 63.1003(c)(5), which establishes requirements for a written plan. The commenter suggests that paragraph (c)(3) be deleted and paragraphs (c)(4) and (c)(5) be renumbered.

Response: As indicated by the commenter, §63.1003(c)(3) is entirely redundant with paragraph(c)(4) of the same section. The provisions found in paragraph (c)(3) are repeated in their entirety in (c)(4), and thus, the EPA deleted and reserved §63.1003(c)(3) in the final rule. This paragraph was reserved in order to eliminate the need for renumbering and the possibility of cross-referencing errors.

Comment: The commenter (A-97-17, IV-G-01) stated that the written plan requirements under §63.1003(c)(5) establish monitoring provisions for unsafe-to-monitor equipment. However, §63.1008 does not require periodic monitoring for connectors in gas/vapor or light liquid service. Monitoring is only required if evidence of a potential leak is found. Thus, the commenter claimed that the written plan requirements of §63.1003(c)(5) should not apply to unsafe-to-monitor connectors.

Response: The EPA agrees with the comment and has removed the requirement that unsafe-to-monitor connectors be included in the written plan requirements of §63.1003(c)(5).

5.8.5 Instrument and Sensory Monitoring for Leaks

Comment: One commenter (A-97-17, IV-G-01) stated that language in subpart YY explaining what to do if the initial compliance date occurs after the beginning of a standard calendar period should be added to §63.1004 of subpart TT.

Response: The EPA does not agree with the commenter's recommendation that provisions addressing the circumstances when the initial compliance date occurs after the beginning of

a standard calendar period should be included in subpart TT. Instead, the EPA believes that it is appropriate to address this issue in the referencing subpart, which is why this language is included in subpart YY. Furthermore, there is no need for this information to appear in more than one location. The referencing subpart will establish initial compliance dates for the sources it regulates, and thus it is appropriate that issues regarding this initial compliance date would also be addressed in the referencing subpart. The EPA has made no rule change in response to this comment.

Comment: One commenter (A-97-17, IV-G-01) stated that while §63.1004(a)(2)(ii) requires monitoring pursuant to §63.1008(d)(2), there are in fact no inspection requirements in §63.1008(d)(2) for inaccessible, ceramic, or ceramic-lined connectors. Section 63.1008(d)(2)(ii) requires repair if leaks are found by auditory, visual, or olfactory means. The same commenter pointed out that while §63.1004(a)(2)(iv) requires monitoring for pumps, valves, agitators and connectors in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service, these components do not in fact need to be visually inspected. The commenter explained that §63.1010(b)(1) only requires monitoring if an auditory, visual, or olfactory leak is found, and this requirement should be cross-referenced in §64.1004(a)(1).

Response: The commenter is correct regarding inspection requirements for inaccessible, ceramic, or ceramic-lined connectors and for pumps, valves, agitators and connectors in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service. Thus, the EPA has deleted the provisions of the proposed §63.1004(a)(2)(ii) and §63.1004(a)(2)(iv) from the final rule, and reserved the paragraphs.

Comment: One commenter (A-97-17, IV-G-01) stated that water is usually given as an example of an inert, and the commenter recommended adding this example to the phrase found

in §63.1004(b)(2): "For process streams that contain nitrogen, air, or other inerts that are not organic HAP."

Response: The commenter's requested change has been made in the final rule, and water is included in §63.1004(b)(2) as an example of an inert that is not an organic HAP. This does not change the intent of the regulation, but the EPA believes that if this revision is helpful to the owner or operator, then it is beneficial and appropriate.

Comment: Section 63.1004(b)(6) addresses monitoring data obtained prior to the source becoming subject to the standard and its use to qualify for less frequent monitoring, and the commenter (A-97-17, IV-G-01) states that the reference to §63.1008 in this paragraph should be deleted, since connectors are not subject to periodic monitoring requirements.

Response: The commenter is correct, and the reference to §63.1008 has been deleted accordingly.

Comment: The commenter (A-97-17, IV-D-02) states that language in §§63.1004(c)(3) governing monitoring should read "within one centimeter" rather than "as close to the interface as possible" for monitoring of moving components such as pumps and compressors.

Response: The EPA has revised this paragraph in the final rule to remove the phrase "as close to the interface as possible." Instead, this paragraph will refer simply to Method 21 of 40 CFR part 60, appendix A, for requirements on how monitoring should be conducted.

Comment: The commenter (A-97-17, IV-G-01) states that since §63.1006(e)(4) allows the owner or operator to designate valves as having no detectable emissions, §§63.1004(c) and (c)(4) also need to reference NDE valves.

Response: The EPA interprets the comment to mean there should be a provision to allow for adjustment of the Method 21 parts per million reading to account for background. The EPA disagrees with the comment. The no detectable emission definition of 500 parts per million is not supported by

rigorous data analysis but was based on 5% of the leak definition. This threshold level is reasonable as a basis for selecting valves for which "leak" detection would provide little to no benefit. There's no technical basis for refining the 500 parts per million threshold.

Comment: Section 63.1004(e)(2) requires that when a leak is detected, the information in paragraphs (e)(2)(i) and (ii) be recorded and kept. The commenter (A-97-17, IV-G-01) stated that paragraphs (e)(2)(i) and (ii) should be deleted, and the reference should instead be to §63.1005(e), Leak repair records, because this contains a more complete list of the information that needs to be recorded and retained.

Response: The commenter is correct. The list of information required to be kept under §§63.1004(e)(e)(i) and (e)(2)(ii) when a leak is detected is a subset of the information listed in §63.1005(e), Leak repair records. The EPA has revised §§63.1004(e)(2)(i) and (e)(2)(ii), and the cross-referencing in §63.1005(e).

5.8.6 Leak Repair

Comment: Section 63.1005(c)(3)(ii) requires that purged material be collected and destroyed or recovered in a control device complying with subpart SS after repair. The commenter (A-97-17, IV-G-01) stated that the option of routing the purged material to a process or fuel gas system should be added. The commenter also asserted that the reference to subpart SS should be changed to §63.1015 or §63.1002(b).

Response: The commenter's assertion that §63.1005(c)(3)(ii) should allow for the option of routing purged material to a fuel gas system or process is a valid one, and the EPA has added this option to the final rule. Also, in accordance with changes made throughout the rule to refer to §63.1015 (Closed vent systems and control devices; or emissions routed to a fuel gas system or process standards) instead of to subpart SS, it is also appropriate that this

provision require compliance with the requirements of §63.1015 or §63.1002(b), Alternative means of emission limitation.

Comment: The commenter (A-97-17, IV-G-01) stated that paragraphs (d)(1) and (d)(2) of §63.1005 should be deleted, since they repeat criteria already referred to in §63.1003(d) regarding unsafe-to-repair connectors.

Response: Section 63.1005(d) addresses unsafe-to-repair connectors "as described in §63.1003(d)," and then subparagraphs (d)(1) and (d)(2) restate the criteria listed in §63.1003(d) for designation as unsafe-to-repair. The commenter is correct that §§63.1005(d)(1) and (d)(2) are redundant with the provisions of §63.1003(d), and the EPA has deleted these paragraphs from the final version of the rule.

5.8.7 Valves in Gas and Vapor Service and in Light Liquid Service Standards

Comment: The commenter (A-97-17, IV-G-01) requested clarification of the EPA's intent in §63.1006(b)(6)(iii). The commenter assumed that if the percentage of leaking valves exceeds 2 percent, then monthly monitoring must be implemented. If, after two months, the percentage of leaking valves is 2 or less, the process unit can revert to skip monitoring, and no further notification is required.

Response: This language is identical in content to 40 CFR Part 60 Subpart VV §60.483-2. The EPA will interpret this language consistent with interpretations of 40 CFR Part 60 Subpart VV.

Comment: The commenter (A-97-17, IV-G-01) stated that the language in §§63.1006(e)(1) and (2) is confusing and redundant and should be revised. Specifically, the commenter identifies the following sentence in §63.1006(e)(1) as troublesome: "Any valve that is designated...as an unsafe to monitor valve, and the owner or operator monitors the valve according to the written plan...is exempt from the monitoring requirements of paragraph (b)...and the owner or operator shall monitor the valve according to the written plan." The

analogous sentence, discussing difficult-to-monitor valves, in §63.1006(e)(2) is also identified as being confusing and redundant. The commenter provides specific suggestions drawn from language in subpart UU which has analogous provisions.

Response: While the commenter is correct regarding the confusing language in these paragraphs, the revisions suggested by the commenter were not consistent with one another. Since these are parallel provisions, it is appropriate that the language governing these provisions also be parallel. Consequently, the EPA revised both paragraphs to exempt unsafe and difficult-to-monitor valves from monitoring requirements in §63.1006(b), and to require them to monitor according to the written plan specified in §63.1003(c)(5). The revised language is shown below:

> "(1) Unsafe-to-monitor valves. Any valve that is designated, as described in §63.1003(c)(1), as an unsafe-to-monitor valve, is exempt from the monitoring requirements of paragraph (b) of this section, and the owner or operator shall monitor the valve according to the written plan specified in §63.1003(c)(5).
>
> (2) Difficult-to-monitor. Any valve that is designated, as described in §63.1003(c)(2), as a difficult-to-monitor valve, is exempt from the requirements of paragraph (b) of this section, and the owner or operator shall monitor the valve according to the written plan specified in §63.1003(c)(5)."

Comment: One commenter (A-97-17, IV-G-01) stated that, as written, §63.1006(e)(4)(ii) implies that if a valve has ever had an instrument reading above 500 ppm, it can no longer be designated as having "no detectable emissions." The commenter asserted that this eliminates any incentive to upgrade a valve, and that this sentence should therefore be deleted. The commenter further observed that this sentence is not in NESHAP

subpart V or NSPS subpart VV, and noted that the same sentence is included for compressors in the CAR, and the CAR's preamble makes it clear that if an instrument reading of 500 ppm or greater is detected for a compressor designated as operating below 500 ppm, the compressor is in violation of the standard.

Response: The EPA's designation of "no detectable emissions" is included to eliminate monitoring of valves for which there is little to no benefit of monitoring for leaks. Obviously, if a particular valve exceeds the threshold limit then there exists a potential benefit to monitoring. The provision in §63.1006(e)(4)(ii) does not preclude plants from replacing valves with better valves which meet the criteria of "no detectable emissions."

5.8.8 Pumps in Light Liquid Service Standards

Comment: One commenter (A-97-17, IV-G-01) observed that §63.1007(e)(1)(v) incorrectly requires that if there are visual indications of liquids dripping at the weekly inspection, the owner or operator must comply with §63.1007(e)(1)(v)(A) or (B). Instead, the commenter stated, (A) and (B) should be combined into a single statement, similar to the language in §63.1026(e)(1)(v)(A) of subpart UU. Alternatively, the commenter stated that the reference could be to §63.1007(e)(1)(v)(A) and (B) or (C), or (A) through (C) could be deleted entirely and replaced with language taken from §§63.1007(b)(3) and (b)(4).

Response: The commenter is correct that the provisions as proposed are incomplete. While §63.1007(e)(1)(v) requires the owner or operator to comply with §63.1007(e)(1)(v)(A) or (B) if there are visual indications of liquids dripping at the weekly inspection, there is also a §63.1007(e)(1)(v)(C) which is not addressed. The EPA has revised these provisions in accordance with the approach used in subpart UU. In this case, (A) and (B) have been combined into one paragraph, (A). Section 63.1007(e)(1)(v)(C) became §63.1007(e)(1)(v)(B) and

the owner or operator is required to comply with either (A) or (B).

Comment: One commenter (A-97-17, IV-G-01) stated that in §§63.1007(e)(2) and (e)(3) the exemption from the "monitoring requirements of paragraph (b)" for pumps with no external shaft or pumps routed to a process or fuel gas system or equipped with a closed vent system to a control device, is incomplete. The commenter stated that such pumps should also be exempt from the weekly visual inspection requirements of paragraph (b), and the paragraph should be revised to state "...exempt from the requirements of paragraph (b) of this section." The commenter stated that this would be consistent with the HON subpart H, NSPS subpart VV and NESHAP subpart V.

Response: The commenter is correct and the EPA has revised the rule to indicate that pumps with no external shafts, or pumps routed to a process or fuel gas system or equipped with a closed vent system to a control device, are exempt from all of the requirements of §63.1007(b).

Comment: The commenter (A-97-17, IV-G-01) stated that unsafe-to-monitor pumps should be exempt from paragraphs (b) through (d) of this section, not just (b) as stated in §63.1007(e)(5). The commenter also recommended that the exemption from "the repair requirements of §63.1005" be deleted, since it contradicts the requirement within the written plan of §63.1003(c)(5), which is also referenced.

Response: In response to this comment the EPA revised the proposed language to read as follows:

> "Any pump that is designated, as described in §63.1003(c)(1), as an unsafe-to-monitor pump is exempt from the monitoring requirements of paragraph(b) of this section. The owner or operator shall monitor the pump according to the written plan specified in §63.1003(c)(5)."

5.8.9 Connectors in Gas and Vapor Service and in Light Liquid Service Standards

Comment: One commenter (A-97-17, IV-G-01) pointed out that the final sentence of §63.1008(b) is redundant with the leak repair provisions of §63.1008(c). Furthermore, the commenter stated that the leak detection sections for other components do not reference the identification requirement under §63.1004(e).

Response: The commenter is correct on both counts. For the sake of consistency, the final sentence of §63.1008(b) was deleted from the promulgated rule, and no further change was made.

Comment: Section 63.1008(d)(2) provides that inaccessible, ceramic, or ceramic-lined connectors are exempt from the monitoring requirements of §63.1008(b), the recordkeeping requirements of §63.1017, and the reporting requirements of §63.1018. One commenter (A-97-17, IV-G-01) asserted that these connectors should also be exempted from the leak repair requirements of paragraph (c) of this section, since §63.1008(d)(2)(ii) establishes the timing or repair of inaccessible connectors.

Response: Paragraph (c) of §63.1008, the leak repair paragraph, specifies what must be done if a leak is detected pursuant to paragraph (b). Inaccessible, ceramic, or ceramic-lined connectors are exempt from paragraph (b), leak inspection requirements, so (c) does not apply either. Furthermore, as the commenter states, §63.1008(d)(2)(ii) establishes repair requirements. Specifically, this paragraph states that if a leak is observed in these connectors, it shall be repaired as soon as practical. Thus, the commenter is correct, and the rule has been revised to include an exemption to §63.1008(c) for inaccessible, ceramic, or ceramic-lined connectors.

5.8.10 Agitators in Gas and Vapor Service and in Light Liquid Service

Comment: The commenter (A-97-17, IV-G-01) stated that NSPS subpart VV, NESHAP subpart V, and RCRA subpart BB do not

regulate agitators. If Control Level 1 (subpart TT) is supposed to be similar to these rules, the commenter asserted, perhaps agitators should not be regulated in subpart TT either.

Response: It is the EPA's intent that agitators be regulated under subpart TT, and this has not been changed in the final rule. Because many owners and operators are already subject to leak detection and repair requirements, the EPA chose to allow owners or operators to comply with either subpart TT or subpart UU. In this way, the owner or operator would not have to change an existing leak detection and repair program in order to comply with the requirements of the generic MACT. This was an effort to reduce regulatory burden associated with switching from one work practice to another when there is little evidence of environmental benefit.

5.8.11 Compressor Standards

Comment: Section 63.1012(g) provides an exemption for reciprocating compressors that become an affected facility under 40 CFR 60.14 or 60.15 of subpart VV, provided that the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options for compliance. The commenter (A-97-17, IV-G-01) noted that the references are in subpart A, not VV. The commenter further stated that unlike the HON, which gives such compressors an extension, but requires that they comply, this paragraph implies that the compressor is exempt from paragraphs (b), (c), and (d) forever. The commenter sought confirmation that this is true.

Response: The commenter is correct in noting that as written the rule would not require control of reciprocating compressors at facilities associated with these 4 source categories. It was not the EPA's intent to exempt reciprocating compressors. However, the EPA believes this to be a moot point since the EPA is unaware of any reciprocating compressors at the 10 major sources affected by the final

rule. However, the language may be amended for future source categories proposed for incorporation into Subpart YY if reciprocating compressors are in use at their facilities.

5.8.12 Sampling Connection Systems Standards

Comment: One commenter (A-97-17, IV-G-01) stated that §63.1013(c) should be amended to specify that the fuel gas system or process in (c)(1) must be in compliance with the requirements of §63.1015. The commenter also said that paragraph (c)(2) should be deleted as it is a subset of paragraph (c)(1).

Response: To be consistent with other changes made to the rule, §63.1013(c)(1) was revised to specify that a fuel gas system or process to which purged process fluid is returned must be in compliance with §63.1015 or §63.1002(b).

5.8.13 Closed Vent Systems and Control Devices; or Emissions Routed to a Fuel Gas System or Process Standards

Comment: One commenter (A-97-17, IV-G-01) recommended that §§63.1015(b)(1) through (b)(3), which govern closed vent systems and control devices, or emissions routed to a fuel gas system or process, be revised to be similar to §63.172(a) through (c) of the HON, subpart H, while also incorporating information particular to subpart TT. The commenter stated that as proposed, the provisions are incomplete and misleading. The commenter provided specific recommended language, as follows:

> "(b) Compliance standard. (1) Owners or operators routing emissions from equipment leaks to a fuel gas system or process shall comply with the provisions of subpart SS of this part, except as provided in §63.1021(b).
>
> (2) Owners and operators of closed vent systems and control devices used to comply with provisions of this subpart shall comply with the provisions of

subpart SS of this part and (b)(2)(i) through (b)(2)(iii), except as provided in §63.1021(b).
(i) Nonflare control devices shall be designed and operated to reduce emissions of regulated material vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. The 20 parts per million by volume performance standard is not applicable to the provisions of §63.1037.
(ii) Enclosed combustion devices shall be designed and operated to reduce emissions of regulated material vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent, or to proved a minimum residence time of 0.50 seconds at a minimum temperature of 760°C.
(iii) Flares used to comply with this subpart shall comply with the requirements of subpart SS of this part."

Response: After careful review of the proposed rule, analogous provisions in the HON, and the commenter's suggested revisions to the rule, the EPA decided to adopt the commenter's suggested language and organization for this paragraph. These changes, while not altering the intent or the requirements of the rule, increase the clarity of its provisions, thereby facilitating compliance by owners and operators.

5.8.14 Recordkeeping Requirements

Comment: Section 63.1017(c)(1)(ii) requires records for valves added to or removed from a process unit if net credits for removed valves are used. One commenter (A-97-17, IV-G-01) asserted that the net credit language is not relevant, because the credit is not applicable to the valve percent equation being used. The commenter stated that §63.1017(c)(1)(ii)

should be replaced with the recordkeeping requirement in §63.1006(e)(4)(i)(2) for valves with no detectable emissions.

Response: The commenter is correct. There is no other reference in subpart TT to use of net credits. Furthermore, the cross-reference to §63.1006(b)(6)(iv) has nothing to do with net credits. Thus, the language was deleted.

Comment: One commenter (A-97-17, IV-G-01) stated that §63.1017(c)(3) should be deleted, because connectors do not have to be monitored on a particular schedule.

Response: Section 63.1017(c)(3) cross-references the "monitoring schedule...as specified in §63.1008(b)," which requires that connectors shall be monitored within 5 days if evidence of a potential leak is found. However, no periodic monitoring is required, and therefore the commenter is correct, and there is no "schedule" for monitoring. The EPA has deleted this paragraph from the promulgated rule.

5.8.15 Reporting Requirements

Comment: Sections 63.1018(a)(2)(ii)(B), (D), and (F) requires that the Periodic Report include the number of valves, pumps, or compressors, respectively, for which leaks were not repaired. The commenter (A-97-17, IV-G-01) assumed that this covers only those valves, pumps, or compressors that missed the 5 day first attempt at repair or the 15 day repair deadline, and *not* those covered by delay of repair provisions. The commenter stated that equipment covered by the delay of repair provisions will be reported under §63.1018(a)(2)(ii)(G). The commenter requested clarification of EPA's intent regarding these provisions.

Response: Section §63.1018(a)(2)(ii)(B),(D), and (F) require the reporting of the number of all valves, pumps, and compressors which were not repaired. Section §63.1018(a)(2)(ii)(G) requires an explanation of each delay of repair.

6.0 NATIONAL EMISSION STANDARDS FOR EQUIPMENT LEAKS - CONTROL LEVEL 2 (40 CFR PART 63, SUBPART UU)

6.1 GENERAL COMMENTS

Comment: One commenter (A-97-17; IV-G-07) recommended that Subpart UU allow the owner or operator to designate sealless valves as operating with no detectable emissions, as is allowed in 40 CFR part 60 subpart VV and 40 CFR part 61, subpart V. The commenter stated that allowing this designation would provide an incentive for facilities to install sealless valve technology. The commenter also noted that facilities subject to subpart VV and subpart V would incur an increased monitoring burden if they had previously designated some sealless valves as operating with no detectable emissions. The commenter supplied suggested modifications to regulatory text for the sections of UU that would be affected by this change.

Response: The provisions in 40 CFR part 60, subpart VV and 40 CFR part 61, subpart V for designating valves as operating with no detectable emissions require that the owner or operator monitor these valves annually to verify that these valves continue to operate with no detectable emissions. The extended monitoring periods and valve subgrouping provisions of Subpart UU allow an owner or operator to monitor valves even less frequently. The EPA expects that an owner or operator would continue to have incentive to install advanced valve technology, because these valves could be designated as part of a subgroup, and could potentially be monitored as infrequently as once every 2 years if the technology proves effective. Therefore, EPA did not find it necessary to revise Subpart UU as suggested by the commenter.

6.2 APPLICABILITY

Comment: One commenter (A-97-17; IV-G-07) indicated that terms used in the equipment leak provisions of Subpart UU should be defined in §63.1020

Response: The EPA has added clarifications and definitions to §63.1020.

6.3 ALTERNATIVE MEANS OF EMISSION LIMITATION

Comment: One commenter (A-97-17; IV-G-07) suggested that it may be unreasonable and costly to require an owner or operator to demonstrate the emission reduction achieved by an alternative work practice for 12 months. The commenter reasoned that EPA should already know the emission reduction achieved by the required work practice, and that the owner or operator should only be required to demonstrate the emission reduction achieved by the proposed alternative work practice. The commenter also noted that in §63.1021(d)(2)(ii), the term "equipment" is used rather than "work practice."

Response: The EPA agrees with the commenter and the 12 month requirement, §63.1002(b)(4)(ii), was removed from the regulation. It is the operator's burden to provide sufficient data to support an alternative work practice. The EPA has no basis supporting the need for a minimum data requirement.

6.4 EQUIPMENT IDENTIFICATION

Comment: One commenter (A-97-17; IV-G-07) stated that the three percent limit imposed on difficult-to-monitor valves in §63.1022(c)(2)(i)(B) should be clarified. The commenter asserted that the three percent limit should only be applied to new sources. The commenter supplied recommended language to address their comment.

Response: To be consistent with subpart H of the HON, EPA revised the language in §63.1022 to include a 3 percent limit on the number of valves that can be designated as difficult-to-monitor at new or reconstructed sources, and to impose no limit on the number of difficult-to-monitor valves at existing sources. It is appropriate to limit new sources

because designers can consider equipment layout when designing a new source.

6.5 LEAK REPAIR

Comment: One commenter (A-97-17; IV-G-07) suggested that the leak identification removal requirement in §63.1024(c)(1) for valves and connectors be revised to apply only to valves and connectors in gas/vapor or light liquid service. The commenter stated that, according to §63.1029(b), no monitoring is required for valves and connectors in heavy liquid service if a leak detected by auditory, visual or olfactory inspection is eliminated within 5 days.

Response: The EPA agrees with the commenter and has revised §63.1024(c)(1) to apply only to valves and connectors in gas/vapor or light liquid service.

6.6 VALVES IN GAS AND VAPOR SERVICE AND IN LIGHT LIQUID SERVICE

Comment: One commenter (A-97-17; IV-G-07) recommended that unsafe-to-monitor and difficult-to-monitor valves be exempted from the provisions in §63.1025(d)(2) which require follow-up monitoring 3 months after a leak is repaired. The commenter stated that it would be impractical and costly to conduct follow-up monitoring within 3 months for unsafe-to-monitor and difficult-to-monitor valves. The commenter noted that such an exemption is provided in §63.1027(e)(1) where unsafe-to-monitor connectors are exempted from the requirement for follow-up monitoring 90 days after repair.

Response: In order to remain consistent with the provisions of §63.168(h) of the HON, §63.1025(e)(1) has been revised to state that unsafe-to-monitor valves are exempt from the 3 month follow-up monitoring provisions of § 63.1025(d)(2). To remain consistent with §63.168(i) of the HON, however, § 63.1025(e)(2) has not been revised and difficult-to-monitor valves continue to be subject to the 3 month follow-up monitoring provisions of §63.1025(d)(2).

Difficult-to-monitor valves have some obstacle to overcome before they can be monitored, but monitoring does not pose a safety hazard. The written plan required for difficult-to-monitor valves specifies annual monitoring at a minimum. Because personnel are not put at risk and the valves must be monitored at least annually, it is not appropriate to exempt difficult-to monitor valves from the 3 month follow-up monitoring upon repair of a leak.

Comment: One commenter (A-97-17; IV-G-07) expressed concern with the wording in § 63.1025(c)(1)(i) which states that "the owner or operator shall decide no later than the implementation date of this part or upon revision of an operating permit whether to calculate percent leaking valves on a process unit or group of process units basis." The commenter stated that the phrase, "group of process units basis" in §63.1025(c)(1)(i), is confusing if it is intended to refer to a subgroup of valves within a process unit. The commenter suggested that the language be revised to read, "...on a process unit or a valve subgroup basis."

Response: The intent of §§63.1025(b) and 63.1025(c) is to provide the owner or operator with maximum flexibility for managing the monitoring of valves. The decision regarding upon what to base the overall calculation and how to subgroup are different. To be eligible for valve subgrouping provisions, the owner or operator must demonstrate that less than 2 percent of valves are leaking either within a process unit or within a group of process units. If the owner or operator decides to calculate the percentage of leaking valves on a process unit basis, and less than 2 percent of the valves are leaking within that process unit, then the valve subgrouping provisions of §63.1025(b) apply to valves within the process unit. If the owner or operator decides to calculate the percentage of leaking valves on a group of process units basis (more than one process unit), and less than 2 percent of the valves are leaking within that group of

process units, then subgroups of valves may be designated within the group of process units (both within and across individual process units). The owner or operator may decide whether or not to group several process units together for the purpose of calculating the percentage of leaking valves. Section 63.1025(c)(1)(i) specifies that this decision must be made no later than the implementation date of this part or upon revision of an operating permit.

6.7 PUMPS IN LIGHT LIQUID SERVICE

6.7.1 Calculation of P_L and P_T

Comment: One commenter (A-97-17; IV-G-07) suggested that the definition of P_T (the total number of pumps in regulated material service) within the calculation of the percent leaking pumps in §63.1026(c)(4) be changed to explicitly include pumps routed to a process or fuel gas system or equipped with a closed vent system routed to a control device. The results of the equation in §63.1026(c)(4) affect whether or not a plant must implement a quality improvement program (QIP). The commenter reasoned that if sealless pumps and dual mechanical seal pumps can be included in the P_T term, then a plant should be given credit for pumps vented to a closed vent system routed to a control device or pumps routed to the process or a fuel gas system.

Response: The EPA agrees with the commenter that the P_T term of the percent leaking equation in §63.1026(c)(4) should include pumps routed to a process or fuel gas system or equipped with a closed-vent system. The definition of the P_T term in this section has been revised to include pumps meeting the criteria in §63.1026(e)(3), in addition to paragraphs (e)(1) and (e)(2).

Comment: One commenter (A-97-17; IV-G-07) requested clarification on how unsafe-to-monitor pumps should be accounted for in the percent leaking pump calculation in §63.1026(c)(4). The commenter inquired whether unsafe-to-monitor pumps should be excluded from the P_L term

(the number of pumps found leaking as determined through monthly monitoring) because they are not considered part of the "monthly monitoring" of pumps. Also, the commenter inquired whether unsafe-to-monitor pumps should be included in the P_T term (the total number of pumps in regulated material service). The commenter (IV-G-01) reasoned that if the P_L term excludes unsafe-to-monitor pumps then the P_T term should exclude them as well. Similarly, the commenter noted that if the P_L term includes unsafe-to-monitor pumps, then they should be included in the P_T term.

Response: The P_L term in §63.1026(c)(4) is defined as the number of pumps found leaking as determined through monthly monitoring as required in §63.1026(b)(1). The EPA agrees with the commenter that the P_L term does not include unsafe-to-monitor pumps because they are not included in the monthly monitoring required by §63.1026(b)(1). The P_T term is defined as the total number of pumps in regulated material service, and therefore includes unsafe-to-monitor pumps in regulated material service.

6.7.2 Sealless Pumps

Comment: One commenter (A-97-17; IV-G-07) suggested that language in §63.1026(e)(5) be revised to state that if more than 90 percent of the pumps at a process unit are equipped with dual mechanical seals or have no externally actuated shaft (i.e. sealless pumps), then the process unit should be exempt from the percent leaking calculation in §63.1026(c) rather than being exempt from the leak detection requirements in §63.1026(b). The commenter stated that this revision would make Subpart UU consistent with §63.163(i) of the HON.

Response: The EPA agrees with the commenter, and EPA has revised the language in §63.1026(e)(5) to state that if more than 90 percent of the pumps at a process unit are either equipped with dual mechanical seals or have no externally actuated shaft then, the process unit is exempt from the

percent leaking calculation in §63.1026(c) and not exempt from the leak detection requirements in §63.1026(b).

6.8 CONNECTORS IN GAS AND VAPOR SERVICE AND IN LIGHT LIQUID SERVICE

Comment: One commenter (A-97-17; IV-G-07) suggested that §63.1027 should include language that addresses what is and what is not considered a violation when attempting to repair a leak, similar to language in §63.162(h) of subpart H (HON equipment leaks). The commenter pointed out that §63.162(h) of the HON states that if an attempt to repair a leak is made within the specified time, but the attempt is unsuccessful, the owner or operator is not in violation of the HON. The commenter expressed concern that successful leak repair may require multiple attempts and that applicable State regulations and permit conditions may prevent an owner or operator from designating the leaking piece of equipment for delay of repair. The commenter suggested that similar language be included in subpart UU which would clarify that failing to take action upon discovering a leak is violation, but that good-faith, unsuccessful attempts at repair are not violations.

Response: Subpart UU contains language that clarifies that leaks, in and of themselves, are not considered violations of the standard. The standard requires action upon detecting leaks, such as repair and recordkeeping requirements. Failing to take the required actions is a violation of the standard; detecting a leak is not an inherent violation of the standard. Therefore, the EPA believes that it is not necessary to add the suggested language from the HON to clarify this issue. If it is necessary to delay repair beyond the required repair time, the source can employ the delay of repair provisions. A source that neither repairs a leak nor uses the delay of repair provisions is in violation.

Comment: One commenter (A-97-17; IV-G-07) stated that §63.1027(c) should use an equation in §65.108(c) [from the

proposed consolidated federal air rule (CAR)] to calculate the connector leak rate. The commenter also suggested that the EPA clarify that C_L in §63.1027(c) should exclude those connectors found leaking during the 90 day follow-up monitoring. The commenter noted that such an exclusion is warranted to avoid double counting of leakers that could result since the percent leak rate is calculated after all (or a certain percentage of) connectors in the process unit have been monitored.

Response: The EPA agrees with the commenter that including connectors found leaking during the 90 day follow-up monitoring in the $\%C_L$ term of the percent leaking connector calculation could lead to double counting of leaking connectors. The EPA has revised the language in §63.1027(c), as suggested by the commenter, in order to clarify that connectors found leaking during the 90 day follow-up monitoring are not included in the percent leaking connector calculation.

6.9 PUMPS, VALVES, CONNECTORS, AND AGITATORS IN HEAVY LIQUID SERVICE

Comment: One commenter (A-97-17; IV-G-07) recommended changing the leak definition for heavy liquid pumps that are not in polymerizing monomer or food/medical service from 1,000 ppm to 2,000 ppm. The commenter pointed out that, although the leak definition for heavy liquid pumps is 1,000 ppm, they are not required to be repaired unless they are detected to be leaking at or above 2,000 ppm. The commenter also stated that a 2,000 ppm leak definition for heavy liquid pumps would be consistent with the requirements of 40 CFR part 63, subpart H (HON equipment leaks).

Response: The EPA agrees with the commenter. For all heavy liquid pumps that are not in polymerizing monomer service, EPA has previously held that an instrument reading of 2000 parts per million indicates a leak. The EPA has revised the portions of §63.1029(b)(2) relating to pumps in heavy

liquid service to read: "If an instrument reading of ... 2,000 parts per million or greater for all other pumps (including pumps in food/medical service) ... is measured, ... a leak is detected...."

6.10 QUALITY IMPROVEMENT PROGRAM FOR PUMPS

Comment: One commenter (A-97-17; IV-G-07) requested clarification on portions of the quality improvement program (QIP) requirements for pumps in §63.1035. The commenter interpreted that data analysis of pumps in the QIP, which according to §63.1035(d)(5) must be completed within 18 months of beginning the QIP, is not required if the facility meets the criteria to exit the QIP in less than 18 months. The commenter requested that this point be clarified. The commenter also requested clarification on whether a facility subject to QIP requirements for the first time would be required to comply with the requirements of the trial evaluation in §63.1035(d)(6) if a data analysis has already identified a superior pump design, technology or operating and maintenance practice. Similarly, the commenter requested clarification on whether a facility subject to QIP requirements for the first time would be required to conduct performance trials required in §63.1035(d)(6) if a superior performing pump seal or pump technology has already been identified. The commenter also pointed out that the quality assurance program in §63.1035(d)(7) and the pump replacement program in §63.1035(d)(8) require that a facility implement these programs after having been in the QIP for 3 or 4 years, depending on the number of employees and number of pumps at the facility. The commenter requested clarification on how to determine the length of time a facility has been in the QIP program if the facility has exited and reentered the QIP program one or more times.

Response: In response to clarifying what to do for a facility that exits a QIP in less than 18 months, EPA agrees

with the commenter that the first data analysis would not be required.

In response to the issue of facilities implementing a QIP for the first time, EPA agrees that a trial evaluation program would not be necessary if a data analysis specific to the individual situation at the facility had previously been conducted. This pre-existing data analysis would have already identified the services, operating or maintenance practices, and pump or pump seal design technologies with better than average emission performance. The requirement under the QIP would then be to begin implementation of the superior technology through the replacement program.

In response to the question regarding the time period requirements of the QIP, EPA notes that the 3 and 4 year requirements would refer to the time passed since the first triggering of the QIP. The EPA notes that the QIP was developed for poorly performing facilities and was not envisioned as an additional burden to facilities operating on the edge of triggering a QIP. The EPA recognizes that, in the absence of data identifying a superior technology, a facility entering and exiting a QIP must re-enter the QIP at the performance trial step.

6.11 ENCLOSED VENTED PROCESS UNITS OR AFFECTED FACILITIES

Comment: One commenter (A-97-17; IV-G-07) recommended that the enclosed-vented process unit provisions in §63.1037 be revised to allow for either a process unit or a portion of a process unit to be designated as an enclosed-vented process. The commenter also requested that enclosed-vented process units be given the option to be routed to a fuel gas system or to a process. In addition, the commenter suggested that enclosed-vented process units should not be exempt from the closed vent system and control device requirements of §63.1034.

Response: The EPA notes that the enclosed-vented process unit alternative is intended for process units entirely

contained within large buildings, where all emissions will vent through a limited number of exhaust ports. Many of these process units are unmanned. Pharmaceutical processors are typical examples of this type of operating scenario.

The EPA maintains that it is inappropriate to allow the enclosed-vented alternative for portions of process units. Doing so creates confusing compliance situations and stretches the scope of the allowance beyond what was originally intended.

6.12 REPORTING REQUIREMENTS

Comment: One commenter (A-97-17; IV-G-07) recommended that the requirement to report nonrepairable components as part of the periodic reporting requirements of §63.1039(b)(1) be removed. This paragraph requires the owner or operator to "include the number of leaking components that were not repaired as required by §63.1024(a), and for valves and connectors identify the number of components that are determined by §63.1025(c)(3) to be nonrepairable." The commenter stated that this requirement is redundant with the requirement in §63.1039(b)(2) to report occurrences of delay of repair. The commenter also stated that §63.1025(c)(3) is referenced in the valve section, but there is no parallel reference for nonrepairable connectors in the connector section. The commenter requested clarification on reporting the number of leaking components that were not repaired as required by §63.1024(a). The commenter inquired if the intent was for the owner or operator to report the number of components which missed either the 5 day first attempt and/or the 15 day final repair for reasons other than delay of repair.

Response: With regard to the apparent redundancy in periodic reporting requirements, EPA notes that §63.1039(b)(1) requires reporting of the number of leaking components that were not repaired. This number refers to the components not repaired within the 15 day time period. It does not include

the number of components that are not repaired pursuant to the requirement to perform a first attempt at repair within 5 days.

In addition, this number may not be the same number as the instances of delay of repair, which is required to be reported under §63.1039(b)(2). For example, one component may leak multiple times during a reporting period. This may necessitate more than one instance of delay of repair, but the number of components that leaked is still one.

With regard to reporting the number of nonrepairable connectors, EPA recognizes that subpart UU does not provide for designating connectors as nonrepairable. To correct this oversight, EPA has revised §63.1039(b)(1) so that the section does not refer to connectors.

6.13 OTHER COMMENTS

6.13.1 General Comments

Comment: One commenter (A-97-17, IV-G-07) suggested that all references made to subpart SS in subpart UU should be revised to refer instead to §63.1034, which governs closed vent systems and control devices, or emissions routed to a fuel gas system or process, so that no requirements are overlooked.

Response: The commenter is correct, and the final rule has been revised to make this change. By referencing §63.1034, the EPA ensures that the appropriate requirements for closed vent systems and control devices, or emissions routed to a fuel gas system or process are met by the owner or operator subject to these provisions. Section 63.1034 itself cross-references subpart SS, and this cross-reference has been maintained in the final rule, as subpart SS holds the detailed requirements that must be met.

Comment: One commenter (A-97-17, IV-G-07) stated that references to the monitoring method requirements in each equipment section are incorrect and inconsistent. In most of these sections, the owner or operator is referred to the monitoring requirements of §63.1023(b), (c), and (e), when in

fact only (b) and (c) address monitoring methods, and paragraph (e) is about identification and records. The commenter stated that all of these references should be consistent, and should either refer to §63.1023(b) or §63.1023(b) and (c).

Response: The commenter is correct about the need for consistency and accuracy in cross-referencing monitoring method requirements. Section 63.1023(b) addresses instrument monitoring methods for leak detection and §63.1023(c) addresses instrument monitoring using background adjustments, which is optional. Therefore, the EPA has revised the rule to refer to the monitoring requirements of "§63.1023(b) and, as applicable, (c)."

Comment: One commenter (A-97-17, IV-G-07) noted that §63.1025(b) gives exceptions to monitoring requirements for valves pursuant to §§63.1021(b), 63.1036, 63.1037, and paragraph (e) of this section. However, the commenter stated, all of the other equipment sections omitted some of these exceptions, and therefore these need to be added to the following sections: 63.1026(b), 63.1027(b), 63.1028(c), 63.1029(b), 63.1030(b), 63.1031(b), 63.1032(b), and 63.1033(b). The commenter noted that for §63.1030(b), the exception from §63.1021(b) is not appropriate, as §63.1030 is a performance standard. This comment is similar to one received on analogous provisions in subpart TT.

Response: The commenter is correct regarding the need for consistent referencing of exemptions throughout the rule. The commenter is also correct regarding the appropriate placement of exemptions on the leak detection parts of the rule and delay of repair conditions in the leak repair parts of the rule. The EPA has revised the final rule accordingly, and the leak detection parts of each section of the rule include the exemptions provided under §63.1021(b) (Alternative means of emission limitation), §63.1036 (Alternative means of emission limitation: Batch processes), §63.1037 (Alternative means of emission limitation: Enclosed-vented process units), and within

the respective sections of the rule (e.g. the special provisions for pumps found in §63.1026(e)). Furthermore, the references to delay of repair exceptions have been revised to appear only in the leak repair parts of the sections in the final rule, as these are not relevant to the leak detection requirements found in the rule.

Comment: One commenter (A-97-17, IV-G-07) stated that whenever subpart UU refers to routing emissions to a fuel gas system or process, or to a closed vent system and control device meeting the requirements of §63.1034 or subpart SS, reference should also be made to the alternative means of emission limitation provision of §63.1021(b). The commenter listed several sections which do include this, and several more which do not, but should. For example, §63.1030(d) is cited as an example of appropriate language.

Response: The commenter is correct that this language should be consistent throughout the rule, and that each reference to meeting the requirements of §63.1034 should also reference the alternative means of emission limitation provisions of §63.1021(b). The rule has been revised to include this reference wherever appropriate, and the language in these various paragraphs now reads as follows: "...is routed to a fuel gas system or process or equipped with a closed vent system....meeting the requirements of either §63.1034 or §63.1021(b)..."

6.13.2 Applicability

Comment: One commenter (A-97-17, IV-G-07) stated that surge control vessels and bottoms receivers should be deleted from the list of equipment in §63.1019(b) to which subpart UU is applicable, since there are no standards within subpart UU pertaining to them. Likewise, the reference to surge control vessels and bottoms receivers in the equipment definition of §63.20 should be deleted.

Response: The EPA has deleted the definition of "equipment" from the final rule. Subpart UU of 40 CFR part 63

was not meant to specify the applicability. The referencing subpart (to subpart UU) is required to specify the applicability which then directs an owner or operator of a subject source to subpart UU.

6.13.3 Definitions

Comment: One commenter (A-97-17, IV-G-07) stated that the definitions for "first attempt at repair" and "repaired" need to include a reference to §63.1023(c) for those owner or operators who choose to monitor using background adjustments. Furthermore, the commenter asserted that when referring to §63.1023(b) or (c), "as appropriate" should be added, since visual leakers may not require remonitoring [as in §63.1026(b)(5)].

Response: The EPA notes that "visual leakers" requirements typically include language to the effect of "repaired in this instance means that the visual indications of a leak have been eliminated." Therefore, the standard definition of "repaired" would not apply, and adding the phrase "as appropriate" to the definition of "repaired" is confusing and is not necessary. The EPA maintains that it is not appropriate to add the suggested language to §§63.1023(b) and (c).

Also, EPA notes that §§63.1023(b) and (c) require follow-up monitoring after a leaking valve has been repaired. The requirement is equally applicable whether "repair" was successful on the first, second, third, or any subsequent attempt at repair. If the required "first attempt at repair" is successful (and proven through monitoring to be "repaired"), then follow-up monitoring is required within 3 weeks.

Comment: One commenter (A-97-17; IV-G-07) wondered why there was no explanation in the preamble as to why both of the terms "relief device or valve" and "pressure relief device or valve" are needed. The commenter believes that, consistent with the CAR, "relief device or valve" is intended to include relief valves that do not relieve pressure, and stated that if this is the case, the definition of relief device or valve

should mention those relief valves that let in nitrogen to prevent vacuums.

Response: The definition for "pressure relief device or valve" contained in Subpart UU specifically notes that "devices activated... by a vacuum are not pressure relief devices." A "relief device or valve" in Subpart UU means a "device or valve used only to release an unplanned, non-routine discharge," not necessarily relieving pressure. Pressure relief devices are a subset of relief devices.

The change noted by the commenter is regarding the definition of "open-ended valve or line." The intent of this term is that relief devices, the broader category of devices needed for safety purposes or equipment protection, are not considered open-ended valves. The language used in Subpart UU, therefore, specifically exempts "relief valves" in the definition of "open-ended valve or line" instead of exempting "pressure relief valves," as was done in the HON and 40 CFR part 61, subpart V. (The EPA notes that no change is being proposed to the HON definition of "pressure relief device or valve."

Comment: One commenter (A-97-17; IV-G-07) stated that the definition of "set pressure" needs to remove the reference to subparts F and G, since these reference the CAR, not subpart UU.

Response: The commenter is correct that these cross-references should not remain in the definition of set pressure, and the EPA has revised the final rule accordingly.

6.13.4 Equipment Identification

Comment: One commenter (A-97-17; IV-G-07) stated that the reference in §63.1022(b)(1) to the initial survey required by §63.1027(a)(1) or paragraph (a) (of §63.1022) is incorrect, and that the reference to paragraph (a) should be removed as it does not make sense, and the reference to §63.1027(a)(1) should be changed to §63.1027(a) since there is no (a)(1).

Response: The commenter is only partially correct. While there is no §63.1027(a)(1), §63.1027(a) does not require an initial survey, and this is the reference that should be deleted from the cited sentence. The final rule has been modified to read as follows: "With respect to connectors, the identification shall be complete no later than the completion of the initial survey required by paragraph (a) of this section."

Comment: One commenter (A-97-17; IV-G-07) stated that the reference in §63.1022(b)(5) should specifically reference "§63.1029" instead of "the provisions of this subpart."

Response: Since the paragraph in question refers to equipment in service less than 300 hours per calendar year, and §63.1029 is entitled "Pumps, valves, connectors, and agitators in heavy liquid service; pressure relief devices in liquid service; and instrumentation systems standards," the EPA does not believe that further clarification is needed.

6.13.5 Instrument and Sensory Monitoring for Leaks

Comment: One commenter (A-97-17; IV-G-07) stated that language in subpart YY explaining what to do if the initial compliance date occurs after the beginning of a standard calendar period should be added to §63.1023 of subpart UU.

Response: The EPA does not agree with the commenter's recommendation that provisions addressing the circumstances when the initial compliance date occurs after the beginning of a standard calendar period should be included in subpart UU. Instead, the EPA believes that it is appropriate to address this issue in the referencing subpart, which is why this language is included in subpart YY. Furthermore, there is no need for this information to appear in more than one location. The referencing subpart will establish initial compliance dates for the sources it regulates, and thus it is appropriate that issues regarding this initial compliance date would also be addressed in the referencing subpart. The EPA has made no rule change in response to this comment.

Comment: One commenter (A-97-17; IV-G-07) stated that while §63.1023(a)(1) lists cases for which instrument monitoring for leaks is required, monitoring required by other sections should also be included in this paragraph. The commenter specifically stated that the monitoring required by §§63.1025(d)(2), 63.1026(b)(4)(i), 63.1026(e)(1)(v)(A), 63.1027(b)(3)(iv), 63.1028(c)(3)(ii)(A), 63.1028(e)(1)(iv)(A), 63.1029(b), 63.1036(c), and also monitoring required after the first attempt at repair and final repair (according to the definitions) should all be included in §63.1023(a)(1).

Response: The EPA disagrees with the commenter regarding the need to list these cross references individually. Because of the high number of cases where monitoring would be required, the addition of these examples to §63.1023(a)(1) would not clarify the intent of the requirements.

Comment: One commenter (A-97-17; IV-G-07) stated that the requirement in §63.1036(b)(6)(iii) for sensory monitoring should be included in the list of sensory monitoring for leaks requirements in §63.1023(a)(2).

Response: The EPA disagrees with the commenter's suggested modification. There is no clarification benefit associated with providing such a cross reference.

Comment: One commenter (A-97-17; IV-G-07) stated that §63.1023(a)(2)(ii) requires that "...inaccessible, ceramic, or ceramic-lined connectors...be observed pursuant to §63.1027(e)(2)." However, §63.1027(e)(2) does not require observation; it only requires that if a connector is found leaking, it must be repaired. Therefore, the commenter asserted, §63.1023(a)(2)(ii) should be deleted. The same commenter noted that §63.1023(a)(2)(iv) requires monitoring for pumps, valves, agitators and connectors in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service, "pursuant to §63.1029(b)(1)," but that §63.1029(b)(1) does not in fact require observation. Instead it requires monitoring within 5 days if a potential leak is

found. Again, the commenter recommended that the paragraph be deleted.

Response: The commenter is correct regarding inspection requirements for inaccessible, ceramic, or ceramic-lined connectors and for pumps, valves, agitators and connectors in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service. Thus, the EPA has deleted the provisions of §63.1023(a)(2)(ii) and §63.1023(a)(2)(iv) from the final rule, and reserved the paragraphs.

Comment: One commenter (A-97-17; IV-G-07) stated that water is usually given as an example of an inert, and the commenter recommends adding it to the phrase found in §63.1023(b)(2): "For process streams that contain nitrogen, air, or other inerts that are not organic HAP."

Response: The commenter's requested change has been made in the final rule, and water is included in §63.1004(b)(2) as an example of an inert that is not an organic HAP. This does not change the intent of the regulation, but the EPA believes that if this revision is helpful to the owner or operator, then it is beneficial and appropriate.

Comment: The commenter (A-97-17, IV-D-02) states that language in §§63.1023(c)(3) governing monitoring should read "within one centimeter" rather than "as close to the interface as possible" for monitoring of moving components such as pumps and compressors.

Response: The EPA has revised this paragraph in the final rule to remove the phrase "as close to the interface as possible." Instead, this paragraph will refer simply to Method 21 of 40 CFR part 60, appendix A, for requirements on how monitoring should be conducted.

Comment: Section 63.1023(e)(2) requires that when a leak is detected, the information in paragraphs (e)(2)(i) and (ii) be recorded and kept. The commenter (A-97-17; IV-G-07) stated that paragraphs (e)(2)(i) and (ii) should be deleted, and the reference should instead be to §63.1024(f), Leak repair

records, because this consists of a more complete list of the information that needs to be recorded and retained.

Response: The commenter is correct. The list of information required to be kept under §§63.1023(e)(2)(i) and (e)(2)(ii) when a leak is detected is a subset of the information listed in §63.1024(f), Leak repair records. The EPA has revised the rule by deleting §§63.1023(e)(2)(i) and (e)(2)(ii), and cross-referencing the provisions of §63.1024(f).

6.13.6 Leak Repair

Comment: Section 63.1024(d)(3)(ii) requires that purged material be collected and destroyed or recovered in a control device complying with subpart SS after repair. The commenter (A-97-17; IV-G-07) stated that the option of routing the purged material to a process or fuel gas system should be added. The commenter also asserted that the reference to subpart SS should be changed to §§63.1034 or 63.1021(b).

Response: The commenter's assertion that §63.1024(d)(3)(ii) should allow for the option of routing purged material to a fuel gas system or process is a valid one, and the EPA has added this option to the final rule. Also, in accordance with changes made throughout the rule to refer to §63.1015 (Closed vent systems and control devices; or emissions routed to a fuel gas system or process standards) instead of to subpart SS, it is also appropriate that this provision require compliance with the requirements of §63.1034 or §63.1021(b), Alternative means of emission limitation.

Comment: One commenter (A-97-17; IV-G-07) stated that the reference in §63.1024 to paragraphs (e)(1) and (e)(2) of this section for the description of unsafe-to-repair should be deleted, since this paragraph already refers to §63.1022(d), and the information in (e)(1) and (e)(2) is the same as that in §63.1022(d). The commenter further recommended that paragraphs (e)(1) and (e)(2) be deleted.

Response: Section §63.1024(e) addresses unsafe-to-repair connectors "as described in §63.1022(d)," and then subparagraphs (e)(1) and (e)(2) restate the criteria listed in §63.1022(d) for designation as unsafe-to-repair. The commenter is correct that §§63.1024(e)(1) and (e)(2) are redundant with the provisions of §63.1022(d), and the EPA has deleted these paragraphs from the final version of the rule.

6.13.7 Valves in Gas and Vapor Service and in Light Liquid Service Standards

Comment: Section 63.1025(b)(4)(v) requires the owner or operator to notify the Administrator of the decision to begin or end subgrouping of valves no less than 30 days before the beginning of the next monitoring period, and states that this notification can be included in the next periodic report. The commenter (A-97-17; IV-G-07) requested clarification regarding whether the option to include the notification in the next periodic report applies regardless of when the beginning of the next monitoring period occurs.

Response: The notification to begin or end subgrouping of valves must be submitted at least 30 days prior to the beginning of the monitoring period in which the change is made. This notification can be included with a periodic report if this will be submitted at least 30 days before the beginning of the next monitoring period; in this case, a separate notification is not required. The EPA also notes that only a single notice of the decision to begin or end subgrouping is required.

Comment: The commenter (A-97-17, IV-G-07) stated that the V_L term in the percent leaking valves calculation in §63.1025(c)(1)(ii) should include valves found leaking pursuant to §63.1025(d)(2)(iii)(A) and (B), as applicable. The commenter believed that otherwise, the owner or operator may overlook the requirement to consider valves found leaking during follow up monitoring.

Response: The EPA agrees with the commenter and has revised §63.1025(c)(1)(ii) accordingly.

Comment: Section 63.1025(d)(2) requires that a valve be monitored at least once in the first 3 months after its repair, and states that the monitoring required is in addition to the monitoring required to satisfy the definition of "repaired." The commenter (A-97-17; IV-G-07) believed that this statement should also reference the definition of "first attempt at repair" since monitoring is also required after this.

Response: The EPA notes that subpart UU requires follow-up monitoring after a leaking valve has been repaired. The requirement is equally applicable whether "repair was successful on the first, second, third, or any subsequent attempt at repair. If the required "first attempt at repair" is successful (and proven through monitoring to be "repaired"), then follow-up monitoring is required within 3 months.

Comment: Section 63.1025(e)(3) establishes requirements when there are fewer than 250 valves. The commenter (A-97-17; IV-G-07) pointed out that the cross-reference to (b)(4)(iii), (iv), or (v) doesn't make sense as an alternative to quarterly monitoring, as those paragraphs address valve subgrouping. The commenter believed that the cross-reference is a carryover from subpart TT, but that there is no equivalent for UU, and the reference should be deleted.

Response: The EPA acknowledges that the provisions for plant sites with fewer than 250 valves contained an incorrect reference at proposal. The EPA has edited the section to specify that at plant sites with fewer than 250 valves, monitoring will be required quarterly or at a frequency specified through the optional subgrouping procedure.

6.13.8 Pumps in Light Liquid Service Standards

Comment: One commenter (A-97-17; IV-G-07) stated that §63.1026(e)(1)(viii), which states, "When a leak is detected pursuant to paragraph (e)(1)(vi) of this section...", should

refer to (e)(1)(v) as well as (e)(1)(vi), as there is otherwise no repair time limit.

Response: The EPA has modified the cross reference in §63.1026(e)(1)(viii) to refer to §63.1024.

Comment: One commenter (A-97-17; IV-G-07) stated that the exemption in §63.1026(e)(2) and (e)(3) from the "monitoring requirements of paragraph (b)" for pumps with no external shaft or pumps routed to a process or fuel gas system or equipped with a closed vent system to a control device, is incomplete. The commenter stated that such pumps should also be exempt from the weekly visual inspection requirements of paragraph (b), and the paragraph should be revised to state "...exempt from the requirements of paragraph (b) of this section." The commenter said that this would be consistent with the HON subpart H, NSPS subpart VV and NESHAP subpart V.

Response: The commenter is correct and the EPA has revised the rule to indicate that pumps with no external shafts, or pumps routed to a process or fuel gas system or equipped with a closed vent system to a control device, are exempt from all of the requirements of §63.1026(b).

Comment: One commenter (A-97-17; IV-G-07) stated that unsafe-to-monitor pumps should be exempt from paragraphs (b) through (d) of this section, not just (b) as stated in §63.1026(e)(6). The commenter also recommended that the exemption from "the repair requirements of §63.1024" be deleted, since it contradicts the requirement within the written plan of §63.1022(c)(4), which is also referenced.

Response: In response to this comment, the EPA revised §63.1026(e)(6) of the final rule to read as follows:

> "Any pump that is designated, as described in §63.1022(c)(1)(ii), as an unsafe-to-monitor pump is exempt from the requirements of paragraph (b) of this section and the requirements of §63.1024 and the owner or operator shall monitor the pump according to the written plan specified in §63.1022(c)(4)"

6.13.9 Connectors in Gas and Vapor Service and in Light Liquid Service Standards

Comment: One commenter (A-97-17; IV-G-07) wondered whether unsafe-to-monitor connectors should be exempt from the initial monitoring requirements in paragraph (a) as well as those in (b)(1) through (b)(3) as specified in §63.1027(e)(1). The commenter asked, "what if the connector is not safe to monitor for the whole first 12 months?"

Response: The EPA agrees with the commenter and has modified §63.1027(e)(1) to exempt unsafe-to-monitor connectors from the requirements of §§63.1027(a) and (b).

Comment: One commenter (A-97-17; IV-G-07) stated that the provision in §63.1027(e)(2)(i) should exempt inaccessible, ceramic, or ceramic-lined connectors from leak repair provisions in paragraph (d) as well as the provisions of (a) and (b), since §63.1027(e)(2)(ii) specifies a leak repair requirement for these connectors.

Response: The EPA agrees with the commenter and has exempted inaccessible, ceramic, or ceramic-lined connectors from the leak repair requirements in section §63.1027.

6.13.10 Agitators in Gas and Vapor Service and in Light Liquid Service Standards

Comment: One commenter (A-97-17; IV-G-07) stated that the reference in §63.1028(c)(3)(ii)(A) to the repair requirements of §63.1024 should be deleted because it is redundant with paragraph (d), the leak repair section.

Response: The EPA agrees with the commenter and has removed the cross reference to §63.1024; the final rule does reference the leak repair requirements in §63.1028(d).

6.13.11 Pumps, Valves, Connectors, and Agitators in Heavy Liquid Service; Pressure Relief Devices in Liquid Service; and Instrumentation Systems Standards

Comment: One commenter (A-97-17; IV-G-07) stated that the phrase "5,000 parts per million or greater for pumps handling agitators" in §63.1029(b)(2) should be deleted, because 5,000

ppm applies to pumps handling polymerizing monomers, and 10,000 ppm applies to agitators.

Response: The commenter is correct, and the final rule has been revised accordingly.

6.13.12 Sampling Connection Systems Standards

Comment: One commenter (A-97-17, IV-G-07) stated that §63.1032(c) should be amended to specify that the fuel gas system or process in (c)(1) be in compliance with the requirements of §§63.1034 or 63.1021(b). The commenter also stated that paragraph (c)(2) should be deleted as it is a subset of paragraph (c)(1).

Response: The commenter is correct on both counts. Paragraph (c)(1) and (c)(2) both require purged process fluid to be collected and returned to a fuel gas system or process, though the requirement is worded differently in each paragraph. Therefore, the EPA deleted and reserved paragraph (c)(2), as its intent is addressed by paragraph (c)(1). Furthermore, to be consistent with other changes made to the rule, §63.1032(c)(1) was revised to specify that a fuel gas system or process to which purged process fluid is returned must be in compliance with §63.1034 or §63.1021(b).

6.13.13 Closed Vent Systems and Control Devices; or Emissions Routed to a Fuel Gas System or Process Systems

Comment: The commenter (A-97-17; IV-G-07) stated that §63.1034(b) is incomplete, because it does not specify an efficiency (for control devices) and instead refers to the referencing subpart. The commenter further noted that the special case for enclosed combustion devices is missing. The commenter proposed rewriting this paragraph (similar to §63.172(a) through (c) of the HON, subpart H), as follows:

> "(b) Compliance standard. (1) Owners or operators routing emissions from equipment leaks to a fuel gas system or process shall comply with the provisions of subpart SS of this part, except as provided in §63.1021(b).

(2) Owners and operators of closed vent systems and control devices used to comply with provisions of this subpart shall comply with the provisions of subpart SS of this part and (b)(2)(i) through (b)(2)(iii), except as provided in §63.1021(b).
(i) Nonflare control devices shall be designed and operated to reduce emissions of regulated material vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. The 20 parts per million by volume performance standard is not applicable to the provisions of §63.1037.
(ii) Enclosed combustion devices shall be designed and operated to reduce emissions of regulated material vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent, or to proved a minimum residence time of 0.50 seconds at a minimum temperature of 760°C.
(iii) Flares used to comply with this subpart shall comply with the requirements of subpart SS of this part." Similar comment received on subpart TT.

Response: After careful review of the proposed rule, analogous provisions in the HON, and the commenter's suggested revisions to the rule, the EPA decided to adopt the commenter's suggested language and organization for this paragraph. As proposed, the requirements itemized in §63.1034 of the rule did not completely and clearly establish the provisions for enclosed combustion devices. The requirements of this section, as revised in the final rule, are clearer, more complete, and easier to follow. These changes, while not altering the intent or the requirements of the rule, increase the clarity of its provisions, thereby facilitating compliance by owners and operators.

6.13.14 Quality Improvement Program for Pumps

Comment: The commenter (A-97-17; IV-G-07) stated that §63.1035(c) should be revised to clarify the criterion for resumption of the QIP. The commenter's suggested revision is shown below:

> "the process unit has the greater of either 10 percent of the pumps leaking or three pumps leaking..."

Response: The commenter is correct that this language needs revising for clarity. The EPA has revised the language in this paragraph to refer to "greater than either 10 percent of the pumps leaking or three pumps leaking..."

6.13.15 Alternative Means of Emission Limitation: Batch Processes

Comment: One commenter (A-97-17; IV-G-07) was confused about the pressure test provisions of §63.1036(b). Sections 63.1036(b)(4)(ii) and 63.1036(b)(7)(v) refer to "two consecutive pressure tests," but the commenter inquired where §63.1036 allows two consecutive pressure tests. If the first test indicates a leak, the commenter noted, the owner or operator must repair and retest. Is the retest the second consecutive pressure test? Furthermore, the commenter noted that if you fail the retest, you have 30 days after the second pressure test to repair the leak, and asks whether this means 30 days after the test?

Response: The EPA clarifies that the intent of the requirements in this §63.1036(b) is as follows: The retest is the second of two consecutive pressure tests. The "or" in the rule has been replaced by parenthesis to help make the issue clearer. The rule now reads, "...if a batch product process fails the retest (the second of two consecutive pressure tests)...."

The EPA believes that this action should clarify that an owner or operator has 30 days after failing the retest to

repair the leak. This is the same as specifying 30 days after failing the second of two consecutive pressure tests.

Comment: One commenter (A-97-17; IV-G-07) stated that §63.1036(b)(5)(iv) requires that if necessary, the test must be extended "for the time necessary to detect a pressure loss or rise that equals a rate of 1 [psig] per hour..." The commenter wondered whether this means that the test must continue indefinitely if the required pressure loss or rise is not seen?

Response: To clarify how long the test would need to be extended, consider the following example. A process operating at 200 pounds per square inch gauge (psig) is tested, and the owner or operator elects to use a pressure measurement device with a precision of 20 psig (± 10 percent of the test pressure). Such a device would not be able to detect a pressure drop of 1 psig/hour in 1 hour because it could only detect a change of ±20 psig. The test must be extended to 20 hours. After 20 hours, if the process is losing pressure at a rate greater than 1 psig/hour, then the instrument would be able to detect this change because the change would be greater than the precision of the device (±20 psig).

6.13.16 Recordkeeping Requirements

Comment: One commenter (A-97-17; IV-G-07) stated that the cross-reference in §63.1038(c)(1)(i) to the monitoring schedule for valves should be changed to §63.1025(b)(3)(vi) from §63.1025(b)(3)(i).

Response: The commenter is correct. Paragraph (b)(3)(vi) contains the recordkeeping requirement for the monitoring schedule, and the final rule has been revised accordingly.

Comment: One commenter (A-97-17; IV-G-07) stated that the cross-reference in §63.1038(c)(3) to the monitoring schedule in §63.1027(b)(3) is erroneous because there is no such schedule in that paragraph. The commenter asserted that the correct reference is §63.1027(b)(3)(v).

Response: The commenter is correct, and the rule has been revised accordingly.

Comment: One commenter (A-97-17; IV-G-07) contended that visual inspection records required by §§63.1028(b)(3)and (e)(1)(iv) should be included in the recordkeeping requirement of §63.1038(c)(4).

Response: The commenter is correct that clarification is needed to the visual inspection recordkeeping requirements in §63.1038(c)(4). The EPA has revised the final regulation to reflect visual inspections as specified in §63.1028.

7.0 NATIONAL EMISSION STANDARDS FOR STORAGE VESSELS (TANKS) - CONTROL LEVEL 2 (40 CFR PART 63, SUBPART WW)

7.1 GENERAL COMMENTS

Comment: Two commenters (A-97-17, IV-D-02; A-97-17, IV-G-02) stated that subpart WW should address startup, shutdown, and malfunction events.

Response: The commenter did not provide examples of situations where startup, shutdown, and malfunction provisions may be needed. The EPA is unaware of situations where such provisions are needed that are specific to Subpart WW. Subpart YY references subpart WW for control of storage vessel emissions. Subpart YY contains general startup, shutdown, and malfunction provisions. Therefore, any vessel subject to subpart WW would also be subject to subpart YY, and so the provisions of subpart YY would apply.

Comment: One commenter (A-97-17, IV-G-05) stated that the "standard standard" and generic MACT approaches will be beneficial to setting reasonable and cost-effective control standards.

Response: The EPA agrees.

7.2 APPLICABILITY

Comment: Two commenters (A-97-17, IV-D-02; A-97-17, IV-G-02) stated that "physical process change" used in §63.1060(b) should be defined or explained in the regulation.

Response: The EPA has removed the paragraph in question from the final rule because it served only as an explicit reminder that the control requirements of subpart WW do not apply if a tank no longer satisfies the applicability criteria of the subpart which references subpart WW.

Comment: One commenter (A-97-17, IV-D-02) requested clarification on whether flares and recovery devices were acceptable control devices to which an enclosure may be vented under §§63.1062(a)(8) and 63.1065.

Response: Flares and recovery devices which meet specified requirements are acceptable control devices for storage vessels. In the final subpart YY, all possible control options are not listed. The owner or operator is referred to subparts SS and WW (floating roofs). Subpart SS lists options for storage vessels and their associated requirements.

7.3 DEFINITIONS

Comment: Two commenters (A-97-17, IV-D-02; A-97-17, IV-G-05) noted that "safety device" is not defined in Subpart WW. (The commenter noted that this term is defined in Subpart DD (Off Site Waste and Recovery Operations NESHAP). One commenter (A-97-17, IV-G-05) suggested referring to Tank Level 1 control definitions of 40 CFR 63.901.

Response: The EPA has decided to remove these provisions from the final rule. They were included in the proposed subpart WW not for the source categories that were proposed with it (in subpart YY), but for future source categories that may need such provisions. The EPA has decided to add such provisions in the future if they are needed.

Comment: One commenter (A-97-17, IV-G-02) stated that the definition for "capacity" should be deleted because it is not used or needed in this regulation. Another commenter (A-97-17, IV-D-02) stated that "capacity" should not refer to the tank's "external shell height" but rather should incorporate "its design liquid level" (per American Petroleum Institute (API) Standard 650). The commenter stated that the design liquid level is "the highest level to which the tank may be filled, which is the internal height of the tank shell unless restricted by overflow slots or by fixed roof obstructions and the profile of the floating roof."

Response: The term "capacity" is used in Subpart WW. In the proposed subpart WW, the definition of capacity stated that it is based on the external shell height. It should have stated that capacity is based on the internal shell height, as is stated in the proposed subpart YY. Existing rules use the term "capacity" but do not define it, which has led to questions on the determination of capacity. In response to those questions, the EPA has stated that capacity is the internal cross-sectional area of a tank multiplied by the internal height of the tank shell, and that operational restrictions such as design liquid levels and overflow valve heights shall not be a consideration in determining internal height. The final subpart WW contains a definition of capacity which reflects the EPA's previous determination.

Comment: One commenter (A-97-17, IV-D-02) stated that the definitions for "deck cover," "empty or emptying," "fill or filling," and "initial fill or initial filling" be deleted and any control or operational requirements implied by them should be specified in the design requirements.

Response: The definition of deck cover in the final rule has been revised to exclude the phrase which describes the cover gasket. This requirement was moved to the section of the rule containing design requirements. The other terms remain in the final rule, and have been slightly modified.

Comment: One commenter (A-97-17, IV-D-02) suggested modifications to definitions "pole float," "pole sleeve," "pole wiper," and "slotted guidepole" to address concerns over guidepoles and guidepole controls.

Response: The EPA agrees with the commenter, and the definitions for these terms have been revised in the final rule.

Comment: One commenter (A-97-17, IV-D-02) suggested redefining "regulated material" to include "properties or characteristics that exceed the cutoffs for control requirements in the regulating subpart."

Response: The term "regulated material" has been removed from the final subpart WW, and has been replaced with the word "liquid" in most instances. Owner and operators are referred to subpart WW (by subpart YY) for control of emissions from storage vessels that store liquids with vapor pressures that exceed the applicability cutoffs in subpart YY. Therefore, an owner or operator would be referred to subpart WW only when a stored liquid is subject to regulation.

Comment: One commenter (A-97-17, IV-G-05) stated that definitions for "pressurized storage vessel," "closure device," and "closed system" need to be added to §63.1061. The commenter stated that the EPA should not refer to rules that are unrelated to the generic MACT standard or the standards proposed under the generic MACT approach.

Response: The EPA has decided to remove from the final rule the provisions in which the terms are used. The provisions were included in the proposed subpart WW not for the source categories that were proposed with it (in subpart YY), but for future source categories that may need such provisions. The EPA has decided to add such provisions in the future if they are needed.

7.4 STORAGE VESSEL CONTROL REQUIREMENTS

Comment: Two commenters (A-97-17, IV-D-02; A-97-17, IV-G-04) stated that the Subpart SS references that are found in Subpart WW [one commenter noted §63.1062(a)(3) and (a)(4); another commenter noted §63.1163] should not contain additional requirements for flares and control devices.

Response: The EPA agrees. The final subpart WW is only for floating roofs, and subpart SS includes all the requirements for closed vent systems and control devices that may be used for the control of storage vessel emissions.

Comment: The commenter also noted that §63.1062 only has requirements at the paragraph (a) level and recommended the addition of paragraph (b) as "reserved."

Response: The EPA has made the commenter's recommended change.

7.5 FLOATING ROOF REQUIREMENTS

Comment: One commenter (A-97-17, IV-D-02) suggested that the final rule clearly address seams in rim seal materials. The commenter supplied recommended text for §63.1063(a)(1) concerning rim seal seams.

Response: Most questions about rim seals in existing rules have resulted from the use of the term "continuous" when describing seals. The term has been used to convey that a seal must cover the entire annular space between the rim of the floating roof and the tank shell (except for gaps smaller than those specified in the rule). The term does not require that a rim seal must consist of only one piece. The proposed and final subpart WW do not use the term "continuous" when describing seals. The definition of mechanical shoe seal in the final subpart WW states that the band that contacts the tank shell may consist of a series of sheets (shoes) that are overlapped or joined together to form a ring.

Comment: One commenter (A-97-17, IV-D-02) stated that "emptied and degassed" should be replaced with "taken out of service and degassed" in §63.1063(a)(1)(i)(D), (ii)(C), and (2)(ix). Two commenters (A-97-17, IV-D-02; A-97-17, IV-G-02) stated that §63.1063(c)(1)(i)(B), (1)(ii)(B), and (2)(iii) should include the phrase "taken out of service and degassed" rather than "emptied and degassed."

Response: The final rule uses the phrase "completely emptied and degassed" to describe when certain requirements must be satisfied. The EPA believes that this phrase is understandable. The phrase "taken out of service" is also understandable, but would require a definition that would include reference to the complete emptying of a storage vessel.

Comment: One commenter (A-97-17, IV-D-02) noted that §63.1063(a)(2)(ix) should address requirements listed in paragraphs (a)(2)(i) through (a)(2)(viii).

Response: The EPA agrees with the commenter and has amended §63.1063(a)(2)(ix) of the final rule to address requirements listed in paragraphs (a)(2)(i) through (a)(2)(viii).

Comment: One commenter (A-97-17, IV-D-02) suggested that the deck fitting requirements in §63.1063(a)(2) for internal and external floating roof tanks should be separated so that they are consistent with the requirements for the rim seal. The commenter stated that controls for deck drains should only apply to external floating roof tanks. The commenter supplied suggested language for §63.1063(a)(2).

Response: The rim seal requirements are separate because the type of rim seal system allowed depends on whether a tank is an internal or external floating roof tank. For example, an internal floating roof tank may have a single liquid-mounted seal, but an external floating roof tank must have double seals. For deck fittings, the control requirements do not differ based on tank type. Of course, external floating roof tanks have some fittings that most internal floating roof tanks do not (e.g., rim space vents), and vice-versa. In these cases the fitting requirements simply would not apply if a particular tank did not have the fitting.

Comment: One commenter (A-97-17, IV-D-02) suggested clarifications to the deck fitting control requirements in §63.1063(a)(2)(ii) through (v). The commenter also stated that gasketed deck fitting covers should be clearly specified in these sections.

Response: The fitting control requirements in the final rule have been clarified, and the requirement of gasketed deck covers has been included in §63.1063, instead of defining deck covers to include gaskets.

Comment: One commenter (A-97-17, IV-D-02) recommended that the requirement to bolt covers for gauge float (automatic gauge) openings be deleted from §63.1063(a)(2)(vi). The

commenter stated that such requirements could cause gauging errors or damage to the floating roof.

Response: The commenter did not provide actual cases of damage caused by bolted covers on openings for gauge floats, and the EPA has no information indicating that such damage has occurred with existing bolted covers. The API has developed an emission factor for gauge float openings with gasketed, bolted covers, and the factor is significantly lower than the factor for a cover with only a gasket. The requirement of a gasketed, bolted cover appears in existing rules, and remains in the final subpart WW.

Comment: One commenter (A-97-17, IV-D-02) stated that flexible fabric sleeve seals should not be included as options for guidepoles because such seals are control devices specific to fixed roof support columns constructed of round pipe. The commenter suggested that a pole sleeve be specified as an option to a pole wiper for unslotted guidepoles. The commenter also recommended that §63.1063(a)(2)(vii), (viii), and (ix) specify that the height of the float for slotted guidepoles, when used without a pole sleeve, be specified - the commenter noted that the height should be specified in these sections rather than in the definitions for this subpart.

Response: The EPA agrees with the comment on the flexible fabric sleeve seal, and the final rule does not include such a seal as an option for guidepoles. Information contained in API's Manual of Petroleum Measurement Standards (Chapter 19, Section 2) indicates that a pole wiper has a lower emission factor than a pole sleeve at most wind speeds. The pole sleeve is an option for slotted guidepoles, but a pole wiper is required in addition to the sleeve. Since pole sleeves are more commonly used for slotted guidepoles, the EPA believes that pole sleeves would be supplied with pole wipers, even when used for unslotted guidepoles. The final rule does not include pole sleeves as an option for unslotted guidepoles. The EPA agrees that the specification of the pole float wiper height

should appear in the section containing the fitting requirements, not in the definitions section, and the final rule reflects this.

Comment: One commenter (A-97-17, IV-G-05) stated that continuous emptying of a vessel if fluctuations lower the liquid level below the leg level [per §63.1063(b)] is not appropriate. The commenter stated that the increased vapor space would increase emissions from continuous emptying. The commenter noted that the proposed consolidated air rule for SOCMI sources contains modifications to this emptying requirement in the proposal preamble. The commenter suggested that the EPA maintain consistency with §65.47(e) of the consolidated air rule.

Response: The provision in the proposed rule basically stated that when a floating roof rests on its legs, the tank must be filled or completely emptied as soon as practical. The language regarding emptying was included to make clear that an owner or operator is allowed to remove liquid from a vessel when its floating roof is resting on its legs. The EPA has decided to remove this language in the final rule because owners and operators are likely aware that the provision does not prohibit emptying in such cases.

Comment: Two commenters (A-97-17, IV-G-02; A-97-17, IV-D-02) suggested that §63.1063(b)(2) regarding what is required when a floating roof is supported by its leg supports be modified. One commenter (A-97-17, IV-G-02) stated that §63.1063(b)(2) is confusing and should be clarified. Specifically, the commenter stated that §63.1063(b)(2) should not require continuous filling or emptying when the floating roof is supported by its leg supports, but should require that the floating roof be refloated as soon as is practical. Two commenters (A-97-17, IV-D-02; A-97-17, IV-G-02) recommended that language in §§63.1063(b)(2) and 63.1068(c) requiring recordkeeping of dates when floating roofs are landed and refloated be deleted. The commenters stated that such

recordkeeping is not required by any existing regulation and adds no environmental value.

One commenter (A-97-17, IV-D-02) suggested that §63.1063(b)(2) include additional language to minimize the time when a floating roof is landed.

Response: The purpose of the provision in question is, as one commenter noted, to minimize the amount of time that a floating roof rests on its legs (or other supports) while a tank stores liquid. The EPA contends that the noncontinuous filling of a tank while the floating roof rests on its legs would not be refloating the floating roof as soon as practical. The final rule contains the language requiring continuous filling. The record that includes the date when a floating roof is rested on its legs and the date it is refloated remains in the final rule. Without this record, the EPA would have no information to determine if the length of time a floating roof rests on its legs is excessive.

Comment: One commenter (A-97-17, IV-D-02) stated that the description of landing a floating roof should allow for support devices other than deck legs, including hangers from the fixed roof. The commenter supplied suggested language for §63.1063(b)(1).

Response: The EPA agrees and the final rule includes language regarding support devices other than legs.

Comment: One commenter (A-97-17, IV-D-02) stated that internal floating roof tank inspection requirements should only apply following the first introduction of regulated material into a vessel that is either newly constructed or has not been in regulated material service for a year or longer. The commenter further recommended that this section should not apply to the temporary introduction of liquid into a vessel due to episodic or nonroutine events, such as those associated with startup, shutdown, malfunction, testing, or maintenance activities. The commenter supplied regulatory text incorporating their comments. This commenter also recommended

similar changes (and supplied language) to address inspections of external floating roof tanks.

Response: The EPA agrees with the first comment, and "initial filling" in the final rule is defined as the first introduction of liquid into a storage vessel that is either newly constructed or has not been in liquid service for a year or longer. The EPA does not agree that vessels are subject to inspection only during "permanent" storage. The inspection in question requires entry into an internal floating roof tank, which is a confined space. For this reason, it is required only before the initial filling of a vessel, when the vessel contains no liquid and has been degassed. If an initial filling were to occur because of some situation that could not have been predicted by the owner or operator, then the inspection likely could not be performed because the vessel would be a confined space. The inspection requirements would not apply in these cases of startup, shutdown, or malfunction. In cases where the initial filling results from scheduled maintenance or testing, the inspection is required. The inspection requirements for internal and external floating roofs have not been revised in the final rule due to this comment.

Comment: One commenter (A-97-17, IV-D-02) stated that a cross reference in §63.1063(c)(1)(ii) should read (c)(1)(ii)(B) instead of (c)(1)(ii)(E).

Response: The EPA agrees with the commenter and has amended §63.1063(c)(1)(ii) of the final rule to read (c)(1)(ii)(B) instead of (c)(1)(ii)(E).

Comment: Two commenters (A-97-17, IV-D-02; A-97-17, IV-D-02) stated that 10-year inspections of external floating roof tanks should not be required in §63.1063(c)(2)(iii). The commenter stated that this requirement has not appeared in previous regulations and is unnecessary since annual inspections of floating roof secondary seal gaps are required.

Response: The commenter is correct in that existing rules have not required the specific inspection every 10 years. In existing rules, the inspection is required every time a tank is emptied and degassed. The inspection includes examining fittings as well as rim seals, and is essentially the same as the inspection required for internal floating roof tanks any time they are completely emptied and degassed, or every 10 years, whichever occurs first. The EPA has simply made the requirements consistent for internal and external floating roof tanks.

Comment: One commenter (A-97-17, IV-D-02) stated that §63.1063(d)(3)(iii) should be modified to exempt periods when secondary seals must be pulled back or removed to inspect a primary seal.

Response: The EPA agrees, and the final rule states that the gap specifications do not apply in such cases.

Comment: One commenter (A-97-17, IV-D-02) suggested that 105 days be allowed in §63.1063(e)(2) for repair or removal from service of a storage vessel. The commenter noted that this interval would be consistent with the Hazardous Organic and Refinery NESHAP.

Response: The HON requires repair (or removal from service) within 45 days, with up to two 30-day extensions where justified. The EPA proposed a 75-day period (with no extensions) to ease any administrative burden that may result from using extensions. The EPA has decided to include in the final rule the same provisions for repair times that are included in the HON.

Comment: One commenter (A-97-17, IV-D-02) noted that the prior notice requirements in §63.1063(d)(2) should not apply to tank-top inspections.

Response: The EPA agrees, and the final rule does not require prior notification of such inspections.

Comment: One commenter (A-97-17, IV-D-02) suggested that the definition of an internal floating roof tank be revised to

NOT include external floating roof tanks to which a fixed roof has been added. The commenter stated that this installation of a fixed roof on an external floating roof tank should be considered a control option. The commenter also stated that §§63.1063(a)(1)(ii), (1)(ii)(D), (2)(ii), and (2)(ii)(B) should require specified rim seals and deck fittings OR require installation of fixed roofs. The commenter included new §63.1063(c)(3) language to address inspection requirements for a covered external floating roof tank. Another commenter (A-97-17, IV-G-02) stated that such tanks should be subject to the inspection requirements for internal floating roofs tanks instead of the external floating tank inspection requirements. The commenter also supplied a suggested new §63.1063(c)(3) to address such inspections.

Response: External floating roof tanks that have been covered before the proposal date of this rule are considered to be internal floating roof tanks for the purposes of this rule, and must meet the requirements in the rule for such tanks. Owners or operators of external floating roof tanks that were not covered as of the proposal date have several options, including: 1) meet the requirements for external floating roof tanks, 2) add a fixed roof and meet the requirements for internal floating roof tanks, and 3) using the provisions for alternate means of emission limitation. All covered external floating roof tanks are treated as internal floating roof tanks for inspections.

7.6 PRESSURIZED STORAGE VESSEL REQUIREMENTS

Comment: One commenter (A-97-17, IV-D-02) stated that the pressurized storage vessel requirements of §63.1064 have not been present in previously-promulgated NESHAP; the commenter recommended that this section be deleted.

Response: The EPA has decided to remove these provisions from the final rule. They were included in the proposed subpart WW not for the source categories that were proposed with it (in subpart YY), but for future source categories that

may need such provisions. The EPA has decided to add such provisions in the future if they are needed.

7.7 PROCEDURE FOR DETERMINING NO DETECTABLE EMISSIONS

Comment: One commenter (A-97-17, IV-D-02) recommended that references to "cover(s)" be deleted from §63.1067(a)(1), (2), and (7). The commenter also recommended that "unit" be replaced with "storage vessel" in §63.1067(a)(1), (2), and (3).

Response: The EPA has decided to remove these provisions from the final rule. They were included in the proposed subpart WW not for the source categories that were proposed with it (in subpart YY), but for future source categories that may need such provisions. The EPA has decided to add such provisions in the future if they are needed.

Comment: One commenter (A-97-17, IV-D-02) stated that §63.1067(a)(3) should specify that the use of the instrument response factor criteria in Method 21 is optional and that it may be used for representative composition instead of average composition.

Response: The EPA has decided to remove these provisions from the final rule. They were included in the proposed subpart WW not for the source categories that were proposed with it (in subpart YY), but for future source categories that may need such provisions. The EPA has decided to add such provisions in the future if they are needed.

7.8 RECORDKEEPING REQUIREMENTS

Comment: One commenter (A-97-17, IV-D-02) stated that "readily accessible" records in §63.1068 should be clarified to mean "retrievable within 24 hours" per the Refinery NESHAP.

Response: The EPA disagrees with the commenter that "readily accessible" should mean "retrievable within 24 hours." Monitoring data and other records contain important information that an inspector may need to look at in order to properly assess a facility's compliance. For the purposes of the generic MACT rule the EPA defines readily accessible as records that can be retrieved within 2 hours, as proposed.

Comment: One commenter (A-97-17, IV-D-02) stated that records for floating roof landings required in §63.1068(c) should only be kept for 5 years.

Response: The EPA agrees, and the final rule contains the 5-year retention time for records of roof landings.

7.9 REPORTING REQUIREMENTS

Comment: One commenter (A-97-17, IV-D-02) stated that the Notification of Initial Startup required in §63.1069(a) should be replaced with an Initial Compliance Status Report to be submitted with the facility's 6-month Periodic Report.

Response: The EPA has not made the commenter's suggested change. The commenter's proposed change does not meet the intent of the part 63 General Provisions. A new source needs to be in compliance upon startup of such source and to allow reporting of compliance 6 months after startup would be unacceptable.

Comment: One commenter (A-97-17, IV-G-05) noted that §63.1069(b) is labeled "periodic reports" but includes a notification requirement. The commenter suggested that the EPA clarify the notification requirement or make §63.1069(b)(3) a separate section.

Response: The requirement of notification of inspection is done on a periodic basis, and, therefore, is included in the section for periodic reports.

Comment: One commenter (A-97-17, IV-D-02) stated that the permitting authority may require a 7 day prior notice for unscheduled inspections under §63.1069(b)(1). The commenter noted the proposed standards would require that tanks taken out of service for an unplanned repair stand idle for a 15-day period to provide for sufficient prior notice. The commenter also noted that the tanks would continue to emit vapors during this period. Another commenter (A-97-17, IV-G-02) noted a similar scenario, and suggested that §63.1063(b)(1) refer to any "planned internal inspection" rather than "inspection."

Response: The final rule has been revised to include a 7-day notice for unplanned inspections.

Comment: One commenter (A-97-17, IV-D-02) stated that inspection failures [§63.1069(b)(2)] should be reported semiannually to be consistent with the Refinery NESHAP.

Response: In the final rule, reports of failed inspections must be submitted with the periodic report required by the subpart which references subpart WW. The frequency of these reports are to be determined under the referencing subpart and not in 40 CFR part 63 subpart WW.

8.0 GENERIC MACT STANDARDS (40 CFR PART 63, SUBPART YY)

8.1 APPLICABILITY

8.1.1 Flexible Operation Units

Comment: One commenter (A-97-17, IV-G-04) stated that a demonstration that the parameter monitoring levels established for the primary product are appropriate for those periods when products other than the primary product are produced is inappropriate and unnecessary. The commenter (A-97-17, IV-G-04) explained that the nature of flexible operations is where raw materials and products and the nature of the operation itself is changed. The commenter cited an example where two different products being produced by the same production chain are processed differently and the material being vented varies in pH (neutral and non-neutral) and flow rate (high and low). The commenter (A-97-17, IV-G-04) explained that it would be extremely difficult to set parameters that would be applicable for both products. The commenter also stated that an owner or operator would have to use the primary product parameters to meet the requirement for a range for all products and would incur the costs of doing that with no environmental benefit.

Response: The EPA agrees with the commenter that it could be difficult, and potentially impossible, to establish a single parameter monitoring level for all products produced in a flexible operation unit. In the final rule, at §63.1100(d)(5), the EPA has clarified compliance options when products other than the primary product are being produced. First, the option to control emissions during the production of all products based on the requirements for the production of the primary product has been retained. This option includes the

establishment of a single parameter monitoring level based on the primary product.

The second option is to determine, for each product produced in the flexible operation unit, whether control is required using the applicable criteria in §63.1100 for the primary product source category. For the production of each product where control is required, a separate parameter monitoring level must be established to ensure that the control requirements are met during the production of that product.

In either instance, the parameter monitoring level(s) must be submitted in the Notification of Compliance Status report.

Comment: One commenter (A-97-17, IV-G-04) stated that §63.1100(d)(4) should be amended to clarify that the Notification of Compliance Status (NOCS) must also include the information specified in paragraph (d)(4)(iii) (i.e., material demonstrating that the parameter monitoring levels established for the primary product are also appropriate for those periods when products other than the primary product are produced) of this section if you have a flexible type operation.

Response: The EPA agrees that a cross-reference clarification to §63.1100(d)(4)(ii) is warranted. The EPA's intention was to require an owner or operator of a flexible operation unit to submit material demonstrating that the parameter monitoring levels established for the primary product are also appropriate for those periods when products other than the primary product are produced if such product is also subject to the generic MACT rule. Therefore, §63.1100(d)(4)(ii) of the final rule has been modified to indicate that the Notification of Compliance Status Report shall include the information specified in paragraphs (d)(4)(ii)(A) through (d)(4)(ii)(C) for flexible operation units where more than one manufactured product is subject to the generic MACT rule. Paragraph (d)(4)(iii) was changed to paragraph (d)(4)(ii)(C) in the final rule.

8.1.2 Coordination/Overlap With Other Rules

Comment: One commenter (A-97-17, IV-G-04) recommended that the coordination/overlap process equipment provisions of §63.1100(g) indicate which paragraphs of the referenced rules apply. The commenter explained that other regulations provide references to overlapping sections and that inclusion of such references would avoid necessitating that an owner or operator make a stringency determination. The commenter recommended that the EPA prepare tables that clearly define overlaps. The commenter suggested that the Office of Enforcement and Compliance Assurance might be able to assist the Office of Air Quality Planning and Standards in making such determinations.

Response: The EPA has not proposed that an owner or operator make a stringency determination between two overlapping rules for storage vessels, equipment leaks, or process vents. As proposed, the EPA is specifying that an owner or operator needs to comply with one or the other of the overlapping provisions for purposes of compliance with the generic MACT rule.

The EPA has further clarified specific emission point affected source overlaps for differing Federal regulations in the final rule, as appropriate. The format used parallels that of the HON and Polymer Resins I and IV NESHAPs. The EPA did not use a table format as suggested by the commenter (A-97-17, IV-G-04) because the level of detail that would need to be included in such a table would be more confusing than clarifying.

Comment: One commenter stated that, under the generic MACT rule, owners and operators of polycarbonate production sources have the choice to follow 40 CFR part 63 subpart TT or 40 CFR part 63 subpart UU. The commenter explained that polycarbonate production sources are currently subject to subpart I which references the requirements of subpart H. Section 63.1100(g)(4)(ii) discusses the overlap of 40 CFR part 63 subpart UU and 40 CFR part 63 subpart H (the HON) but not the overlap of 40 CFR part 63 subpart TT and 40 CFR part 63

subpart H. The commenter explained that, as proposed, an owner or operator subject to 40 CFR part 63 subpart I (40 CFR part 63 subpart H) and 40 CFR part 63 subpart TT would have to comply with both standards. The commenter requested that the EPA add a clarification that once the generic MACT rule is promulgated, polycarbonate sources are no longer subject to 40 CFR part 63 subpart I. The following Polymers and Resins 1 NESHAP standard was suggested:

> After the compliance dates specified in this section, an affected source subject to this subpart that is also subject to the provisions of 40 CFR part 63, subpart I, is required to comply only with the provisions of this subpart.

Response: It was not the EPA's intent for a source that is already required to comply with 40 CFR part 63 subpart H or 40 CFR part 63 subpart I to have the option under the generic MACT rule to comply with subpart TT in lieu of 40 CFR part 63 subpart H or 40 CFR part 63 subpart I. The intent of allowing this option was so that a source that is currently complying with the LDAR requirements that parallel subpart TT or subpart UU would not be required to change their LDAR system. However, the EPA does agree, and has amended the promulgated rule to reflect, that affected sources that are subject to the equipment leak provisions of 40 CFR part 63 subpart I or 40 CFR part 63 subpart H, and the equipment leak provisions of 40 CFR part 63 subpart TT under 40 CFR part 63 subpart YY are in compliance with 40 CFR part 63 subpart YY if they comply with the equipment leak provisions of 40 CFR part 63, subpart I or 40 CFR part 63 subpart H or the equipment leak provisions of 40 CFR part 63 subpart TT.

8.2 DEFINITIONS

8.2.1 General Provisions and the Act

Comment: One commenter (IV-D-22) requested that the EPA reference the definitions of 40 CFR part 63 subpart A and the Clean Air Act (the Act) in 40 CFR part 63 subpart YY, §63.1101.

Response: The applicability section of the proposed rule cross-references the definition section of the part 63 General Provisions. Nonetheless, the EPA has revised the definitions section of the final rule to include a reference to the definitions of 40 CFR part 63 subpart A (part 63 General Provisions) and the Act. The EPA has made this revision for clarity and consistency with other part 63 standards.

8.2.2 Closed Vent System

Comment: One commenter (A-97-17, IV-G-04) recommended that the EPA use the closed vent system definition in the Synthetic Organic Chemical and Manufacturing Industry (SOCMI) Consolidated Air Rule (CAR). The commenter acknowledged that the definition in the generic MACT rule is the same as in the CAR with the exception that the CAR added that, for transfer racks, the closed vent system begins at, and includes, the first block valve on the downstream side of the loading arm or hose used to convey displaced vapors.

Response: The EPA agrees with the commenter's recommendation and has modified the definition of closed vent system in the final rule to parallel the closed vent system definition proposed in the CAR.

8.2.3 Equipment

Comment: One commenter (A-97-17, IV-G-04) stated that the definition of "equipment" should be revised by adding the following language after "instrumentation system":

> in organic hazardous air pollutant service as defined in §63.1103 for the applicable manufacturing CMPU.

Response: The EPA has included the commenter's suggested language addition to the definition of "equipment" in the final rule except that the term "CMPU" has been replaced with language that parallels the CMPU concept under the generic MACT rule (40 CFR part 63 subpart YY). The EPA believes that this change, though unnecessary, clarifies equipment applicability.

8.2.4 Flexible Operations

Comment: One commenter (A-97-17, IV-G-04) requested that the EPA change the wording of the definition for "flexible operations" to allow for reconfiguration of the process by adding or bypassing unit operation equipment (reactor, distillation unit, extractor). The commenter explained that the suggested change would not allow an owner or operator to add new equipment but would allow an owner or operator to rearrange existing equipment.

Response: The proposed definition for "flexible operations" allows the manufacture of "different chemical products periodically by alternating raw materials or operating conditions." The proposed definition under the generic MACT rule (40 CFR part 63 subpart YY), specifically, by allowing "different operating conditions," does not disallow for reconfiguration of the process by adding or bypassing unit operation equipment. Therefore, the EPA has not made the commenter's suggested change.

8.2.5 Subsequent Startup

Comment: One commenter (A-97-17, IV-G-04) stated that the definition for "initial startup" refers to "subsequent startup, as defined in this section." The commenter stated that a definition for "subsequent startup" is not included in the proposed 40 CFR part 63 subpart YY.

Response: The EPA has added definitions of "startup" and "subsequent startup" in the final generic MACT rule (40 CFR part 63 subpart YY).

8.2.6 Process Vent

Comment: One commenter (A-97-17, IV-G-04) stated that "process vent" is defined as a continuous gas stream and that a vent is a piece of equipment that can be from a batch operation. The commenter (A-97-17, IV-G-04) suggested that the definition be revised to a definition of "process vent stream."

Response: The EPA agrees that, as proposed, the definition for process vent needs clarification that a process vent is a piece of equipment that handles both continuous and

batch gas streams. The EPA has modified the definition of process vent in the final rule to clarify the EPA's intent.

Comment: One commenter (A-97-17, IV-D-08) requested that the EPA be consistent in the use of "HAP" and "organic HAP" in the regulation. The commenter stated that "organic HAP" should be used in most cases. Another commenter stated that the EPA should use organic HAP or OHAP in §63.1103(d)(1)(i)(A) and (D) to avoid confusion regarding what is to be regulated. This commenter noted that the EPA has not made clear if they intend to regulate the emissions to regulate non-organic HAP.

Response: The EPA agrees with the commenter and has assessed the use of HAP and organic HAP throughout the rulemaking package and has made changes, as appropriate in the final rule.

Comment: One commenter (A-97-17, IV-D-08) requested that storage tanks be expressly excluded from the definition of "process vents." The commenter also stated that "process vents" should exclude low organic HAP streams. The commenter supplied an alternative "process vent" definition addressing both comments.

Response: The EPA agrees with the commenter that storage vessels should be expressly excluded from the definition of "process vents," therefore, the EPA has revised the final rule to distinguish process vents and storage vessels.

8.2.7 Process Unit Shutdown

Comment: One commenter (A-97-17, IV-C-04) suggested that there should be an allowance for a scheduled work practice of short duration included in the definition of "process unit shutdown." The commenter (A-97-17, IV-G-04) contended that it may be necessary to schedule short shutdowns to make minor repairs or adjustments to a piece of process equipment. The commenter (A-97-17, IV-G-04) stated that this option is allowed in other MACT standards (e.g., for storage vessels). The commenter (A-97-17, IV-G-04) maintained that it is often safer and more environmentally beneficial to perform maintenance on

control and recovery devices without shutting down the entire process, because many continuous processes can require days to start-up and shutdown. The commenter (A-97-17, IV-G-04) provided 3 examples where they claimed that the emissions from a shutdown and subsequent start-up of the process would be greater than if the control devices had been serviced while the processing continued.

Response: The EPA considered the commenter's (A-97-17, IV-G-04) suggested change that there be an allowance for scheduled work practice of short duration in the definition of "process unit shutdown," and decided to make no change in the final rule. The EPA has provided allowances for routine maintenance of control devices in some rules, but only for very unusual situations. (In these cases, a time limit was specified). The storage vessel control device situation mentioned by the commenter is a good example. In general, the EPA expects routine maintenance on control devices to occur at the same time process equipment is shutdown for maintenance, or that control system configurations are planned to provide for routine maintenance. Storage vessels are unusual because emissions occur as long as they contain liquids. There is no reason to expect the storage vessels to be empty during periods when other process equipment is shutdown for maintenance. It is difficult to know without more facts, but some of the examples described by the commenter could potentially be malfunctions that should be covered in a startup, shutdown, and malfunction plan.

8.2.8 Recovery Device

Comment: One commenter (A-97-17, IV-G-04) stated that the proposed definition for "recovery device" has a duplicate use of the term "reuse." The commenter also pointed out that there seems to be an extraneous sentence relating to "recapture device."

Response: The EPA agrees that there is a duplicate use of the term "reuse" in the proposed rule that was unintended and

has deleted one of the terms in the final rule. However, the sentence that the commenter believed was extraneous regarding the monitoring, recordkeeping and reporting requirements is an intentional clarification. Recapture devices are control devices, except for the purposes of monitoring, recordkeeping and reporting requirements. For purposes of monitoring, recordkeeping and reporting requirements, recapture devices are considered recovery devices.

8.2.9 Transfer Rack

Comment: One commenter (A-97-17, IV-G-04) commented that the definition for "transfer rack" should not include the loading of marine vessels since this would be regulated under the Marine Vessel MACT standard.

Response: The EPA agrees with the commenter that loading of marine vessels will be regulated under the Marine Vessel MACT standard. Therefore, the EPA has excluded the loading of marine vessels from the definition of "transfer rack" in the final rule.

8.2.10 Add Definitions

Comment: One commenter (A-97-17, IV-G-04) requested that the EPA add definitions for the following terms:

- compliance equipment,
- excess emissions,
- fuel gas,
- fuel gas system,
- impurity,
- product,
- shutdown,
- research and development facility,
- startup, shutdown, and malfunction plan,
- excursion, and
- excused excursion.

The commenter (A-97-17, IV-G-04) explained that these terms are used in 40 CFR part 63 subpart YY but are not defined. The commenter (A-97-17, IV-G-04) suggested that definitions from 40

CFR part 63 subpart A, the HON, and the CAR be used. The commenter (A-97-17, IV-G-04) noted that they were unable to find definitions for the terms "excursion" and "excused excursion" in 40 CFR Part 63 subpart A, D, F, or H.

Response: The EPA acknowledges that inclusion of most of the suggested definitions or clarification of their meaning within the text of the final generic MACT rule would serve to better clarify the intent of the rule. Many of the definitions included in the final rule were adopted from 40 CFR part 63 subpart A, the HON, and the CAR. Therefore, the EPA has included the suggested definitions, or included clarifications (i.e., for excursion, and excused excursion) of their meaning in the final rule. Regulatory text clarifications of an excursion include instances when the source is outside of the monitoring parameter range or when there is insufficient monitoring data to determine compliance. Excused excursions are excursions that result from a startup, shutdown or malfunction and are included in an owner or operator's approved SSM plan.

The EPA has not added a definition for "compliance equipment" because this term is meant to include, as appropriate, both emissions control equipment used to meet an emission limit requirement and monitoring equipment used to demonstrate that a required emission limit is met. The EPA believes that the use of "compliance equipment" within the regulatory text of the rule is adequate to explain the intent of its use.

The EPA has not added a definition for "startup, shutdown, and malfunction plan" in the final rule because the EPA believes requirements for this plan adequately define what the plan is. Additionally, the final rule includes definitions for the terms "startup," "shutdown," and "malfunction."

8.3 COMPLIANCE SCHEDULE

Comment: One commenter (A-97-17, IV-G-04) suggested that §63.1102(a)(iv) be re-written for clarity or eliminated. The

commenter explained that the Act indicates that section 112(f) standards be effective on promulgation. The commenter stated that, as proposed, it is unclear whether the EPA meant to allow constructed or reconstructed sources a different compliance period than those sources that were not constructed or reconstructed.

Response: The EPA agrees with the commenter that §63.1102(a)(iv) should be re-written for clarity or eliminated. Upon evaluation, the EPA decided that it was unnecessary and it was deleted.

Commenter: One commenter (A-97-17, IV-D-01) supported the proposal that 3 years be provided from the effective date of the rule for existing sources to meet the compliance requirements.

Response: The EPA appreciates the commenter's support (A-97-17, IV-D-01) and has maintained the 3-year compliance date in the promulgated rule.

8.4 SOURCE CATEGORY-SPECIFIC APPLICABILITY, DEFINITIONS, AND REQUIREMENTS

8.4.1 Acrylic and Modacrylic Fiber Production

Comment: According to commenter IV-G-1, add-on controls for existing spinning lines at solution polymerization processes are not warranted for a variety of reasons. These include the fact that add-on enclosures and control devices are not technologically feasible for existing spinning lines and the pollution prevention measures applicable to other processes are not capable of achieving the required emission reductions at existing solution polymerization processes. The commenter provided numerous reasons why both enclosures and conventional add-on controls are not warranted and technically feasible at existing solution polymerization AMF spinning lines. For example, the commenter cited the technical complications resulting from low volatility of the non-HAP solvent present and the low concentration of AN in the exhaust stream in support of their contention. The commenter also pointed out

that the spinning line applicability cut-off (i.e., 100 ppmw in the spin dope) used in the proposed rule was not appropriate for solution spinning operations and provided technical analysis in support of this view. In addition, the commenter stated that given the technical limitations related to control of HAP emissions at existing solution polymerization spinning lines, that EPA significantly under estimated the cost of controlling these units.

Response: The EPA has considered the comments and the technical information and data submitted in support of the comments and as revised the final regulation to take into account the technical limitations associated with control of existing solution polymerization spinning lines. The EPA's rationale for these revisions are discussed in the preamble to the final rule. Based on the changes to the final rule (i.e., no control for existing AMF solution polymerization spinning lines), the associated comments regarding cut-off levels, measurement methods, enclosure specifications, emission reductions, health and safety risks, and costs are no longer relevant and therefore are not discussed in this document.

8.4.2 Hydrogen Fluoride Production

Comment: One commenter (Docket No. A-97-17, Comment No. IV-D-04) submitted that "hydrogen fluoride" and "hydrogen fluoride production" should be defined more precisely in §63.1103(c)(2). According to the commenter, the term hydrogen fluoride (HF) properly defines anhydrous HF, but is sometimes used to describe aqueous solutions of HF. The commenter believes that EPA intended to regulate only anhydrous HF, particularly considering the difference in vapor pressure of anhydrous HF and aqueous solutions of HF (the commenter stated that the vapor pressure of HF drops below 0.3 kilopascals at 20 °C when its strength drops below 99.6 percent). The commenter further stated that HF vapor pressures decline rapidly with the addition of minor amounts of water, thus, little value is gained by the inclusion HF other than anhydrous, since the

vapor pressures of HF solutions result in no significant emissions. The commenter suggested definitions for "hydrogen fluoride" and "hydrogen fluoride production" that would limit the rule's applicability to anhydrous HF.

Response: The EPA's intent is to regulate HF emissions from the production of both anhydrous and aqueous HF. The EPA disagrees that the vapor pressures of aqueous solutions of HF are "insignificant." Information gathered from site visits to HF producers during the development of presumptive MACT indicated that the commercial grade of aqueous HF that is currently produced contains 70 percent HF. The vapor pressure of aqueous HF (70%) at 25 °C is 20 kilopascals (Docket No. A-96-54, Item No. II-A-4) and it is noted in this document that an HF vapor cloud may form under some conditions from a release of an aqueous solution of HF. Therefore, the definition of HF is not being added as requested by the commenter, nor is HF production limited to production of anhydrous HF.

Comment: One commenter (A-97-17, IV-D-05) observed that for the four source categories subject to the proposed rule, the EPA specified no weight percent cutoff for HF for the applicability of a leak detection and repair (LDAR) program, unlike those for the other GMACT categories where weight percent cutoffs are specified. The commenter submitted that not establishing a threshold below 10 weight percent HAP concentrations would affect process and waste lines of insignificant concentration and impose undue costs, principally for monitoring, for the relatively small benefits obtained. The commenter recommended that the EPA set a threshold level of 10 weight percent HF to trigger the application of LDAR to equipment leaks in HF service.

Response: Although the equipment leak requirements of the HF production MACT apply to any equipment that contains or contacts HF, the applicability of the HF production MACT is to emission points associated with a HF production process unit located at a major source as defined in section 112(a) of the

Act. Therefore, the equipment leak requirements apply to process equipment associated with the HF production process, which will contain and contact HF vapors and HF liquids containing high concentrations of HF. Wastewater treatment systems, which contain dilute HF solutions, are not included in the emission points covered by the standard [refer to Table 1 to §63.1100. - Source Category MACT Applicability at 63 FR 55264 (Oct. 14, 1998)]. Furthermore, the State air emission permits of the currently operating HF production facilities do not specify concentration cutoffs defining the applicability of equipment leak LDAR requirements. The EPA anticipates little, if any equipment covered by the rule would fit the commenter's description.

Comment: One commenter (A-97-17, IV-D-04) requested that in §63.1103 Table 4 Item 1, venting from storage vessels should be clarified to apply only to normal operations. The commenter submitted that it should be explicitly stated that "venting" refers to the displacement emissions created by normal filling or emptying activities and not other activities such as emergency or upset conditions that are best covered under startup, shutdown, and malfunction requirements.

Response: The EPA agrees that the control requirements for venting from storage vessels were only intended to apply to normal operations and should be clarified. The requirements for a storage vessel in §63.1103 Table 4 Item 1 have been revised to read as follows, "reduce emissions of hydrogen fluoride by venting displacement emissions created by normal filling or emptying activities through a closed-vent system to a recovery system or wet scrubber that is designed and operated to achieve a 99 weight-percent removal efficiency." Emissions created by emergency or upset conditions (e.g., from a pressure release) must be addressed by procedures in the facility startup, shutdown, and malfunction plan as specified in §63.1111.

Comment: One commenter (A-97-17, IV-D-04) suggested that the requirement of §63.1103, Table 4, Item 3 be removed in its entirety and that emergency venting from kiln seals be handled under startup, shutdown, and malfunction plans. The commenter noted that the kilns normally operate under vacuum and that emissions from kiln seals occur very infrequently, and only under process upset conditions. The commenter further noted that the kiln seals are designed to withstand positive pressure events of up to 2 inches of water column and that operating controls and systems installed in the plant have practically eliminated the positive pressure events that would result in emissions from the kiln seals. The commenter described the emission capture and scrubbing system (with approximately 90 weight percent removal efficiency) that has been installed on the kiln seals to control emergency situations outside of routine operations and the plan to immediately shut down the kilns at the onset of a significant positive pressure event.

Response: The EPA agrees with the commenter that kiln seal emissions are associated only with process upset conditions, and therefore, more appropriately should be handled under the facility startup, shutdown and malfunction plan. Consequently, kiln seals have been removed from the list of emission points included in the hydrogen fluoride production source category affected source at §63.1103(c)(1)(i) and correspondingly from §63.1103, Table 4. A statement has been added to the reference in §63.1103(c)(3) to §63.1111 (Startup, Shutdown, and Malfunction) requiring that control of hydrogen fluoride emissions from kiln seals during upset conditions must be addressed in the startup, shutdown, and malfunction plan.

Comment: One commenter (A-97-17, IV-D-04) submitted that with respect to §63.1103, Table 4, Item 5, walk-throughs should be conducted on a "per shift" frequency. The commenter noted that unlike VOC leaks, HF process leaks are readily detectable by smell and sight so that there is little need to perform frequent detailed inspections. The commenter stated that the

inspection frequency discussed and proposed in presumptive MACT was "once per shift," which also is noted on page 55193 of the preamble to this proposed rule. The commenter's facility works 12 hour shifts, therefore the commenter requested that the "once per shift" requirement be reinstated in place of the 8 hour requirement. The commenter also noted that most leaks are detected and repaired from routine walk throughs by operating personnel. The commenter has conducted periodic component-by-component inspections that consistently indicate leak rates less than 0.2 percent, showing that walk throughs are effective in maintaining low leak rates. Therefore, the commenter suggested that the term "inspection" in Item 5 be changed to walk through or similar term, since inspection connotes viewing closely and is more frequently associated with a component-by-component examination. Finally, the commenter noted that §63.1004(d) defines sensory monitoring methods as "visual, audible, olfactory, or any other detection method", whereas Table 4 requires "visual and olfactory detection inspections" and requests that consistent terminology be used.

Response: The EPA agrees that the intent of the leak detection requirement is for a walk-through inspection to be conducted once per shift. Also, as is noted in the PMACT document (Docket No. A-96-54, Item No. II-E-3), the walk-through inspection should not be a comprehensive component-by-component inspection. To clarify EPA's intent, the PMACT terminology for the required leak detection and repair program has been incorporated into the final equipment leak requirements at §63.1103, Table 4, Item 4, and the cross-references to the requirements of §§63.1004(d) and 63.1005 of subpart TT have been removed. To insure consistency and clarity of the terminology used, definitions needed to describe the equipment leak detection and repair program have been added to §63.1103(c)(2), including a definition for sensory monitoring as follows: "sensory monitoring means the detection of a potential leak to the atmosphere by walk-through visual,

audible, or olfactory monitoring. Comprehensive component-by-component inspection is not required." The revised §63.1103, Table 4, Item 4 provisions for equipment include the requirement that the owner or operator perform sensory monitoring at least once every shift.

Comment: One commenter (A-97-17, IV-D-04) suggested that although it is industry practice to use wet scrubbers for HF removal, other technologies may exist which provide equivalent performance. The commenter believes that restricting control technology to wet scrubbers prohibits installation of innovative or alternative technology. The commenter recommended that in §63.1103, Table 4, Items 1, 2, and 4, the phrase "wet scrubber that achieves a 99 weight-percent removal efficiency" be amended to include the following language: "or other system that achieves equivalent control".

Response: The regulation, at §63.1103(c)(3), already provides for alternative means of emission limitations under §63.1113. There is no need to restate that provision each time wet scrubbers are identified in the table.

Comment: One commenter (A-97-17, IV-D-04) pointed out that §63.1103, Table 4, Item 5 refers to §63.1101 for the definition of equipment requiring a leak detection program. The commenter believes that it is EPA's intent to apply the equipment leak regulations to systems that are a part of normal operations and not systems which handle infrequently occurring or highly improbable emissions, such as, emergency systems downstream of pressure relief devices. According to the commenter, it would be a poor use of resources to monitor and inspect equipment that never or rarely contain HF.

Response: The EPA inadvertently failed to reference the exemptions to the requirements of 40 CFR part 63, subpart TT for equipment leaks, which are codified in §63.1000(c) and include an exemption for equipment in service less than 300 hours per calendar. This exemption is intended to limit application of the equipment leak requirements to systems that

are a part of normal operations. Section 63.1000(c) also provides an exemption for equipment in vacuum service. The final rule incorporates the exemptions of §63.1000(c) by stating in §63.1103, Table 4, Item 4 that equipment is subject to the leak detection and repair requirements if "it is in hydrogen fluoride service and operates ≥ 300 hours per year and is not in vacuum service." Equipment that is excluded from sensory monitoring because it operates less than 300 hours per year or is in vacuum service must be identified by list, location, or other method and a record kept of the equipment identity.

Comment: One commenter (A-97-17, IV-D-04) questioned the inspection requirements for closed-vent systems. The commenter noted that §63.983(b) requires initial and annual inspection of closed-vent systems and suggested that little additional benefit is provided in light of the "per shift" walk -throughs that provide virtually constant detection considering the olfactory properties of HF and the visual detection techniques for HF leaks. The commenter also believes that the method required by §63.983(c) for closed-vent system inspection is incorrect, i.e., sensory monitoring methods should be required for HF systems rather than the Method 21 inspection required by §63.983(c)(1).

Response: The inspection requirements for closed-vent systems were inadvertently incorporated by referencing the requirements of 40 CFR part 63 subpart SS in the proposed rule. The definition of equipment, which includes any control devices or closed-vent systems used to comply with this subpart has been added to §63.1103(c)(2) and the appropriate inspection requirements for equipment in hydrogen fluoride service have been added to §63.1103, Table 4, Item 4 of the final rule, eliminating the redundant inspection frequency and the requirement for Method 21 inspection for closed-vent systems.

Comment: One commenter (A-97-17, IV-D-04) expressed the opinion that HF scrubbers should not be regulated as "halogen

scrubbers" under §63.994(c). The commenter submitted that scrubbers removing fluorides and chlorides function differently, have different critical control parameters, would logically have different periodic monitoring requirements, and thus should be regulated separately. The commenter believes that the monitoring requirements for halogen scrubbers appear to be directed at scrubbers which may be present in organic manufacturing processes. The commenter offered two examples of monitoring requirements established by §63.994(c) that are not applicable to HF scrubbers, i.e., the pH and the inlet flow monitoring requirements. Regarding pH monitoring, the commenter claimed that in his facility, water is recycled for many uses including scrubber medium for process and other scrubbers. In the course of the various uses in the plant, the water assumes a low pH, yet still has excellent absorbing capacity for HF. The commenter noted that there are no noticeable pH changes across the scrubbers. Accordingly, the use of a pH monitoring device to monitor the pH of scrubber effluent would provide no benefit in a HF production facility. The commenter contrasted the fact that HF is successfully removed in a water scrubber due to its great affinity to water to the case of scrubbing HCl, where free alkali is required to chemically precipitate the chloride to affect removal. With respect to monitoring inlet flow rate, the commenter stated that vents in HF production facilities typically maintain very low flow rates and that reverse flow may sometimes be observed in some vents. The commenter added that the sensing element of any flow monitoring device would have to be constructed of exotic materials to withstand the aggressive nature of the in-process streams and that reliable operation would probably be difficult to maintain. The commenter believes that the most effective and reliable indicator of removal efficiency is scrubber liquor inlet flow and notes that the plant's current air operating permits stipulate minimum required flows and monitoring thereof. The commenter requested that the EPA

reference the specific applicable sections of 40 CFR subpart SS or simply describe separately the requirements for HF scrubbers or alternate removal devices.

The commenter also submitted that application of the §63.994(c) monitoring requirements and the referenced recordkeeping requirements of §63.998(b) to kiln seal scrubbers is even more burdensome. The commenter stated that although these scrubbers "operate" continuously, they are not "in service" except during upset conditions, which occur very infrequently, if ever. The commenter stated that EPA recognizes that equipment in service infrequently should be excluded in subpart TT and requests that similar language be added to exclude kiln seal scrubbers from the monitoring and recordkeeping requirements of subpart SS.

Response: The EPA agrees that the requirements for halogen scrubbers in subpart SS that were referenced in the proposal are directed at scrubbers which may be present in organic manufacturing processes and are inappropriate for HF scrubbers. Because hydrogen fluoride is very soluble in water, it is easily removed from a vent stream by water scrubbing. The key parameter in determining the HF removal efficiency of a scrubber for this process is the flow rate of water to the scrubber. Consequently, the cross reference to the requirements of 40 CFR part 63, subpart SS has been removed and the requirements for HF scrubbers identified in the PMACT document (Docket No. A-96-54, Item No. II-E-3) have been incorporated into §63.1103, Table 4, Item 1. The revised language of Table 4, Item 1 requires that a wet scrubber to which emissions of hydrogen fluoride are vented be designed and operated to achieve a 99 weight-percent removal efficiency. Continuous monitoring of only the scrubber liquid inlet flow rate is required to ensure that operation of the scrubber is maintained within design specifications. The owner or operator must determine the minimum scrubber liquid flow rate that will ensure a 99 weight percent removal efficiency. In addition to

the general requirements for monitoring, reporting, and recordkeeping contained in subpart YY, the general monitoring requirements of §63.996 apply, and monitoring data must be handled as specified in §63.998(b) and records specified in §63.998(c) and (d)(3) maintained. Reports must be submitted as required in §63.999(b), as applicable.

Regarding the proposed monitoring and recordkeeping requirements for kiln seal scrubbers, as was explained in a previous response, kiln seals have been removed as an affected emission point, therefore there are no monitoring and recordkeeping requirements for kiln seals, except as specified in the startup, shutdown, and malfunction plan required by §63.1111. It is noted that the plan must address minimization of kiln seal emissions, and record and report such occurrences as described in §63.1111.

8.4.3 Polycarbonate Production

Comment: One commenter (A-97-17, IV-G-04) stated that the EPA has not justified that control requirements are needed for storage vessels having a capacity of less than 8 cubic meters (2,113 gallons). The commenter noted that the EPA does not offer any rationale why controls beyond those required by existing NESHAP are required for these size tanks, and requests that control requirements for these tanks be consistent with the HON. The commenter later noted that there seemed to be contradictions between the discussion in the preamble and the regulatory text found in Tables 5 and 6 of §63.1103. The commenter supplied alternative text to address their concerns.

Response: The EPA agrees that most existing NESHAP have not required controls on small tanks (capacity less than 75 cubic meters [20,000 gallons]), mainly because it is not usually cost-effective to do so. However, some small tanks in the polycarbonate industry are controlled. Before proposal the Generic MACT standard, the EPA developed Presumptive MACT for polycarbonate production. Since some small tanks were controlled, the EPA calculated a floor for such tanks for

purposes of Presumptive MACT. The proposed standard for existing small polycarbonate tanks was based on this floor. This presumptive floor was difficult to calculate because there are few small tanks. For this reason, the EPA did not use the presumptive floor in the final rule, but considered the impacts of controlling small tanks. In the New Source Performance Standards (NSPS) for volatile organic liquids (40 CFR 60, Subpart Kb), and in the HON, environmental and cost impacts were analyzed to determine whether to require control of small tanks. Based on those impacts, the NSPS has no control requirements for tanks smaller than 75 cubic meters, nor does the HON for existing small tanks. For this reason, the final subpart YY has no control requirements for existing small tanks at polycarbonate facilities.

As discussed above, there is no clear basis upon which sources are controlling small tanks, making a new source floor determination ambiguous. Therefore, the EPA has decided in the final rule to address small tanks as they were in the HON.

Comment: One commenter (A-97-17, IV-D-08) stated that the definition of "affected source" in §63.1103(d)(1)(i) is overly broad and could be applied more broadly then intended. The commenter also stated that the definition of "affected source" in this section should reflect that phosgene production units are a part of the polycarbonate production category. The commenter submitted an alternative "affected source" definition to address these comments as well as some clarifications in the general readability of the definition.

Response: The EPA agrees, and the final rule more clearly describes phosgene production units in the definition of "affected source."

Comment: One commenter (A-97-17, IV-D-08) stated that the definition of "polycarbonates production" in §63.1103(d)(2) should consistently refer to the singular "polycarbonate" rather then the plural "polycarbonates." The commenter also noted that catalysts besides pyridine could be used in

polycarbonate manufacturing, and stated that the definition should reflect this. The commenter supplied alternative language for this definition incorporating these comments.

Response: The EPA agrees; therefore, the EPA has made the suggested changes in the final rulemaking package.

Comment: One commenter (A-97-17, IV-D-08) stated that the TRE index value cutoff for monitoring (table 5 of §63.1103) should be lowered from 4.0 to 3.5. The commenter stated that the EPA had estimated the commenter's TRE index values to be higher than 4.0 in the EPA's Presumptive MACT analysis. The commenter stated that they had new emissions data which results in TRE indices less than 4.0. The commenter states that their plants emit less than other plants on an emissions-per-production basis, and should not be subject to monitoring.

Response: An owner or operator of a process vent with a TRE index value between 2.7 and 4 is required to monitor parameter values to assure that they are operating in such a way that they will not become subject to control requirements, or to provide the information to indicate that the TRE index value vent has gone below 2.7. The TRE index "cushion" between 2.7 and 4 is smaller than the cushion of 3 in the HON. It is smaller because the EPA does not expect variations in the volume and mass flows of polycarbonate vent streams to be large enough to require the larger cushion. TRE index inputs from the new emission tests performed by the commenter result in indices that differ by as much as 1. The TRE index cutoff for monitoring in the final rule is 4.

Comment: One commenter (A-97-17, IV-D-08) suggested making several references to TRE index values generic in several sections of the regulation. The commenter stated that such modifications would accommodate future referencing subparts. The commenter suggested modifications to §§63.981, 63.993(c), 63.998(c)(3)(i), 63.1101, 63.1104(k)(1), and 63.1104(k)(2).

Response: The EPA has not made the commenter's suggested change at this time but will consider it with future proposals

if future categories are regulated under the generic MACT rule that apply a TRE index value applicability and compliance level.

Comment: One commenter (A-97-17, IV-D-08) stated that the distinction between halogenated and non-halogenated vent streams produces a negative impact. Specifically, when a facility lowers the halogen content of a stream below 0.45 kg/hr, the control requirement may be triggered. The commenter noted that this could create a disincentive to emissions reduction for halogenated compounds. The commenter suggested that the distinction between halogenated and non-halogenated be removed and that the proposed Table 8 coefficients for "halogenated" vent streams be used for all vent streams. The commenter alternatively suggested lowering the total halogen concentration cutoff from 0.45 kg/hr to a point where the negative effect no longer occurs.

Response: The EPA agrees there is an inherent discontinuity in the TRE equation caused by changing the equation coefficients when the halogen content of a vent stream is reduced below 0.45 kg/hr of halogen atoms. The EPA agrees that this could be a disincentive for owners and operators to reduce the halogen content of their streams because they may become subject to control requirements from the use of the equation coefficients for nonhalogenated streams. Lowering the cutoff that defines a halogenated stream to below 0.45 kg/hr of halogen atoms would merely shift the discontinuity. Although not all vent streams in the polycarbonate source category exceed 0.45 kg/hr of halogen atoms, nearly all vent streams in the polycarbonate source category contain halogenated solvents (typically methylene chloride).

The option of using only the halogenated coefficients in the TRE equation is viable and would remove the disincentive caused by the equation discontinuity. This option would not change the applicability (of emission control) status of the vent streams in the polycarbonate source category. The final

rule specifies that the halogenated coefficients be used in the calculation of TRE index values.

Comment: One commenter (A-97-17, IV-G-04) stated that the EPA should clarify if 20 ppm TOC is an acceptable level of control in the first row of Tables 5 and 6 of §63.1103.

Response: The 20 ppm option is included for process vents, but was included for storage vessels in error. The 20 ppm option is usually an option for process vents, where continuous compliance with a 98% performance standard may be difficult for streams with low concentrations. Since the rule requires 95% control for storage vessels, the 20 ppm option would be less stringent only when the concentration of the vapor stream is less than 400 ppm. It is unlikely that a vapor stream from a storage vessel with a saturated vapor space would be below this low level. The final rule does not include the 20 ppm option for storage vessels.

Comment: One commenter (A-97-17, IV-G-04) stated that Item 2 in Tables 5 and 6 of §63.1103 does not include options for flares, internal floating roofs, external floating roofs, and pressure vessels as acceptable controls. The commenter encourages the EPA to include these measures and questioned if the EPA omitted them unintentionally. The commenter suggested adding the following language: "Comply with the storage vessel control requirements of §63.1062(a)(3)-(a)(8) of 40 CFR Subpart WW of this part. If venting emissions through a closed vent system to a non-flare control device, reduce emissions of OHAP by 98 weight percent, or to an outlet concentration of 20 ppmv, whichever is less stringent."

Response: The EPA did unintentionally omit flares as a control option for storage vessels, but the floating roofs were intentionally omitted. Based on information available to the EPA, all storage vessels larger than 151 cubic meters (40,000 gallons) are controlled by combustion. The floor, therefore, did not allow using floating roofs, which are unlikely to achieve the same level of control. The provisions for pressure

vessels were removed. They did not apply to any of the vessels in the source categories proposed with the GMACT, but were included for future use by other source categories. The EPA may add such provisions in the future to Subpart WW if needed.

Comment: One commenter (A-97-17, IV-G-04) noted several editorial corrections in Tables 5 and 6 of §63.1103.

Response: The EPA has amended the tables in the final rule, therefore many of the suggested changes no longer apply.

8.5 PROCESS VENTS FROM CONTINUOUS UNIT OPERATIONS; APPLICABILITY DETERMINATION PROCEDURES AND METHODS

Comment: One commenter (A-97-17, IV-D-08) stated that the reference to combined streams in §63.1104(d)(1) is unclear regarding the operating conditions under which stream characteristics are determined for use in TRE index calculations.

Response: The EPA agrees. The final rule includes a definition of "combined vent stream." Combined vent streams are treated as vent streams from continuous unit operations, except that stream properties for combined vent streams are determined under maximum representative operating conditions. The final rule reflects this.

Comment: One commenter (A-97-17, IV-D-08) stated that the provisions whereby a source could seek a low-HAP concentration exclusion under §63.1104(e)(2)(vi) are overly burdensome and should be deleted. The commenter noted that: (1) measurements should be based on HAP not TOC; (2) methane and ethane should be excluded from the concentration cutoff calculations; and (3) the measured value should be compared to the applicability concentration - not one-half of the applicability concentration. The commenter supplied suggested text to address their comments.

Response: The final rule allows an owner or operator a choice between complying with a specified emission limit reduction or by meeting a 20 ppmv TOC concentration limit where such an allowance was intended by the EPA. If it is considered

by the commenter to be overly-burdensome, the commenter can meet the specified emission limit, as appropriate. The EPA has not deleted this exclusion allowance where such allowance has been determined to be an appropriate exclusion option.

Comment: One commenter (A-97-17, IV-D-08) noted that the low HAP concentration exclusion provisions of §63.1104 do not appear to be referenced by any of the tables in the proposed rule. The commenter questioned the validity of these exclusions.

Response: The EPA has eliminated the low HAP concentration exclusion from the final rule. This low HAP concentration exclusion was an error.

8.5.1 Repropose §63.1104

Comment: One commenter (A-97-17, IV-G-04) suggested that the EPA repropose §63.1104 because of cross-reference errors that made it difficult for them to fully determine the impact and compliance requirements of this section on their facility.

Response: The EPA assessed the cross-reference errors identified by the commenter and determined that the errors did not warrant reproposal of §63.1104. There was one misplaced, one wrong, and two missing cross-references. The missing and wrong cross-reference errors were cross-referencing requirements that were specified in the sentences that had the errors (e.g., "record the TOC or HAP concentration as specified in paragraph."). The misplaced cross-reference error led to a decision to clarify the paragraph and omit the parts that were unnecessary and led to confusion. Cross-reference errors are addressed in section 8.6.

8.5.2 Batch Unit Operations

Comment: One commenter (A-97-17, IV-G-04) stated that the title of §63.1104(a) and the description of the purpose of the paragraph should show that it is referring to a stream that has both batch and continuous process vent emissions. The commenter requested that the EPA rename the paragraph and propose to correctly show that requirements to determine the

maximum operating conditions must be based on the continuous operation plus those where a batch unit also vents to the continuous vent.

Two commenters (A-97-17, IV-G-04; A-97-17, IV-D-01) had comments on the reference to "combined stream." One commenter (A-97-17, IV-G-04) suggested that "combined stream" be defined as a stream where maximum operation conditions must be based on both continuous unit operations and where a batch unit operation vents to a continuous unit operation process vent. The other commenter (A-97-17, IV-D-01) stated that the basis for the use of the phrase "combined stream" is unclear and needs to be clarified. The commenter (A-97-17, IV-D-01) suggested language for a definition of "combined vent stream."

One commenter (A-97-17, IV-D-01) suggested language to clarify "peak emission episodes" and "emission profiles" under §63.1104(d).

Response: The EPA has eliminated the process vents from batch unit operation provisions from the final rule because there are no longer any process vents solely from batch unit operations that will be subject to the generic MACT rule. However, a definition for "combined vent stream" has been added to the final rule because there are process vents from both batch and continuous unit operations that will be subject to this rule. Furthermore, the EPA has clarified and streamlined the combined vent stream requirements in the final rule as requested by the commenter.

The EPA will include provisions for process vents from batch unit operations in future proposals, as necessary. Comments received on the proposed provisions for process batch unit operations under the generic MACT rule will be considered if the EPA proposes such provisions in future proposals.

8.5.3 Test Method 26 or 26A

Comment: One commenter (A-97-17, IV-G-04) stated that §63.1104(i)(1)(iii) is not in agreement with the preamble or

other applicable sections because it directs an owner or operator to measure the concentration of organic compounds containing halogens or hydrogen halides as measured by Method 18 of part 60, appendix A rather than Method 26 or 26A of part 60, appendix A. In order to parallel §63.1105(c)(1)(iii) and the preamble, the commenter suggested that the paragraph be rewritten as follows:

> Concentration of organic compounds containing halogens or hydrogen halides as measured by Method 26 or 26A of 40 CFR part 60, appendix A.

Response: Method 18 of 40 CFR part 60 appendix A applies to the analysis of gaseous organics, and Methods 26 or 26A applies to the analysis of gaseous hydrogen chloride. Therefore, the commenter's suggested modification of §63.1104(i)(1)(iii) is consistent with the EPA's intent and has been adopted in the promulgated rule.

8.5.4 Low HAP Concentration Exclusion

Comment: One commenter (A-97-17, IV-D-01) stated that the low HAP concentration exclusion of §63.1104(e)(2)(vi) limits the ability of a source to qualify for a low HAP concentration exclusion and requested that it be deleted. The commenter (A-97-17, IV-D-01) specified 3 reasons that disfavored a source seeking to use the exclusion. The first reason was that TOC is a broader class of HAP, and nonHAPs will be counted as HAPs. The second reason was that including methane and ethane in the TOC determination raises the TOC concentration making it more difficult to meet the applicability cutoff. The third reason was that the "real" applicability concentration is not the value listed in the applicability tables, but is 50 percent of the listed value.

Response: The EPA agrees and has deleted this option in the promulgated rule.

8.5.5 Process Changes

Comment: Two commenters (A-97-17, IV-G-04; A-97-17, IV-D-01) requested that §63.1104(m) be edited to indicate that

process changes are to be reported within 60 days of the performance test or the applicability determination or in the next Periodic Report, not in the Initial Compliance Status Report (ICSR or Notification of Compliance Status (NOCS)). The commenters explained that there is little value in reporting changes made before the NOCS since compliance status is established by the NOCS.

Response: The EPA agrees that it is unnecessary to report process changes made before the Notification of Compliance Status is submitted. Therefore, the promulgated rule has been modified to indicate that process changes are to be reported within 60 days of a performance test or applicability determination or in the next Periodic Report.

8.5.6 Opt-in Language

Comment: One commenter (A-97-17, IV-D-01) requested that the EPA add appropriate wording to indicate that a source may "opt-in" to the rule and not do "all of" testing if the facility knows that their source is subject to control based on process knowledge and demonstrates appropriate control the affected stream. The commenter pointed to example opt-in language in §63.1104(a) where the source does not have to calculate a TRE index value if the source is already sending the vents to a flare or reducing the organic HAP by the appropriate amount or to a TOC concentration limit.

Response: The EPA has included the language in §63.1104(a) stating that an owner or operator does not have to calculate a TRE index value if the source is already routing process vent emissions to a flare meeting the requirements specified under 40 CFR part 63 subpart YY or reducing the organic HAP or the TOC concentration limit by the amount required under 40 CFR part 63 subpart YY. The EPA does not want to require a source to do applicability testing and calculations if their process knowledge is sufficient to determine that they are subject to control. The EPA has clarified in the promulgated rule that an owner or operator

that opts to meet the most stringent control requirements of 40 CFR part 63 for their affected source emission point does not have to do the required control assessment testing.

8.6 CROSS-REFERENCE, FORMAT AND GRAMMATICAL COMMENTS

The EPA received many editorial comments on the proposed regulation. These comments primarily addressed typographical errors, minor editorial corrections, editorial changes designed to clarify provisions of the rule, and cross-referencing errors. The EPA appreciates the effort made by commenters to identify these errors and bring them to the EPA's attention, and many changes have been made to the rule as a result of these comments.

Extensive comments were also made on the applicability tables associated with §63.1103. Due to printing errors, many provisions in these tables did not appear correctly in the proposal, and required significant revision in the final rule. Other comments had the intent of clarifying what were perceived to be unclear provisions, or ensuring internal consistency of provisions. These comments are discussed in greater detail below.

Because of substantial changes made to subpart YY, many comments received were no longer relevant. Specifically, requirements for wastewater and batch unit operations were deleted from the final regulation, as were requirements for small storage vessels, and consequently, comments associated with these provisions did not apply.

Comment: One commenter (A-97-16, IV-D-01) stated that the proposed rule inconsistently referred to "polycarbonate" or "polycarbonates" production. In Table 1 of §63.1100, the term "polycarbonate" is used, but many other references in subpart YY are to "polycarbonates." The commenter requested that all references in subpart YY be standardized to "polycarbonate" production in order to avoid confusion.

Response: The EPA has revised the final rule to refer consistently to "polycarbonate" rather than "polycarbonates."

Comment: One commenter (A-97-17, IV-D-08) stated that §63.1100(d)(4)(iii) should be revised to specify that "information," rather than "material" be submitted to demonstrate the appropriateness of parameter monitoring levels.

Response: In the final rule, §63.1100(d)(4)(iii) was changed to §63.1100(d)(4)(ii)(C). The EPA made revised the rule to use the word information rather than material in §63.1100(d)(4)(ii)(C)(4), as requested by the commenter, which is consistent with the terminology used in §63.1100(d)(4)(ii)(C)(1).

Comment: One commenter (A-97-17, IV-D-08) recommended that paragraphs 63.1100(e) and (f) be restructured to specify that procedures shall be followed until storage vessel or recovery operation equipment ownership is determined. The suggested revised sentence is: "To determine the process unit to which a storage vessel shall belong, the owner or operator shall sequentially follow the procedures specified in paragraphs (e)(1) through (e)(8) [or (f)(1) through (f)(7)] of this section, stopping as soon as the determination is made."

Response: The EPA agrees with the commenter's suggestion and has revised the regulation accordingly.

Comment: One commenter (A-97-17, IV-D-08) suggested that §63.1100(e)(8)(ii) be revised to refer specifically to the "criteria of §63.1100(e)(8)(i)," instead of to the "requirements of this subpart." The commenter stated that this clarified the provision in question, and conformed to a parallel provision in §63.1100(e)(8)(iii).

Response: The commenter is correct, and the final regulation was revised to make this change.

Comment: One commenter (A-97-17, IV-D-08) stated that §63.1100(f)(3) should be revised to delete the phrase "located on the same plant site as the recovery operation equipment" because it is redundant and unnecessary language. The commenter contended that this revision would make the provision consistent with the parallel provision in §63.1100(f)(2).

Response: The commenter is correct, and the regulation was revised to make this change.

Comment: One commenter (A-97-17, IV-D-08) suggested extensive revisions to §63.1100(g), modeling the recommended changes on the proposed language in §63.1100(g)(4), which refers simply to requirements "in this subpart," rather than providing a more detailed reference to other regulations with which subpart YY may overlap. Specifically, the commenter stated that paragraphs (g)(1) through (3) should refer to the storage vessel requirements, process vent requirements, and transfer rack requirements, respectively, of this subpart, instead of listing the detailed reference to subparts WW and SS. The commenter contends that this is appropriate, because subparts WW and SS are referenced in the storage vessel, process vent, and transfer rack requirements of subpart YY, and the proposed language is therefore unnecessarily redundant. The commenter agrees that the specific references to subparts TT and UU should be listed, as this allows Control Level 1 and Control Level 2 requirements to be distinguished from each other. Furthermore, the commenter stated that if compliance with either subpart YY or the analogous requirements of the HON cited in these paragraphs suffices for compliance with subpart YY, then this should also suffice for compliance with the HON.

Other changes suggested by the commenter to these paragraphs include replacing the word "provisions" with "requirements" in §63.1100(g)(1) through (g)(5), and replacing "both rules" in §63.1100(g)(5) with "both such requirements." Other editorial changes were also recommended for these paragraphs.

Response: The EPA agrees with the suggestion that the simpler reference to the requirements of this subpart, rather than a detailed reference to subpart WW or SS, is appropriate, and the regulation was revised accordingly. However, the EPA does not agree with the commenter's contention that compliance with either the requirements of subpart YY or the analogous

requirements of the HON should constitute compliance with both. Instead, the regulation continues to say, as proposed, that compliance with either constitutes compliance with subpart YY. This is because it is not appropriate for subpart YY to establish what constitutes compliance with the requirements of the HON. The EPA also replaced the word "provisions" with "requirements," as requested by the commenter.

Comment: One commenter (A-97-17, IV-D-08) noted that the definition of "initial start-up" states that "initial startup does not include "subsequent startup (as defined in this section)." However, the commenter stated that since neither startup nor subsequent startup are defined in this section, the reference is confusing and requires clarification.

Response: The commenter is correct, and the EPA has added definitions of "startup" and "subsequent startup" to the regulation.

Comment: One commenter (A-97-17, IV-D-08) recommended that the definition of "process unit" should be revised to delete the list of equipment included in parentheses. The commenter stated that since "equipment" is a defined term, it is redundant to include this descriptive information in the definition of process unit.

Response: The EPA agrees with the commenter and the regulation has been revised accordingly.

Comment: One commenter (A-97-17, IV-D-08) stated that the definition of "process unit shutdown" should be revised for clarity by adding the phrase "practice or procedure" as follows: "...a work practice or operational procedure that stops production from a process unit, or part of a process unit, during which practice or procedure it is technically feasible to clear process material from the process unit..."

Response: The EPA agrees with the commenter and the regulation has been revised accordingly.

Comment: One commenter (A-97-17, IV-D-08) recommended that subparagraph (2) in the definition of "process unit

shutdown" be revised to break the paragraph's two criteria into two sections, identified as (A) and (B), as follows: "(2) An unscheduled work practice or operational procedure that would (A) stop production from a process unit, or part of a process unit, for a shorter period of time than would be required to clear the process unit, or part of the process unit, of materials and start up the unit, and (B) result in greater emissions than delaying repair of leaking components until the next scheduled process unit shutdown."

Response: The EPA agrees with the commenter and the regulation has been revised accordingly.

Comment: One commenter (A-97-17, IV-D-08) suggested revisions to the definition of "process wastewater" to clarify the definition and to make it more consistent with the definition in the HON. The suggested changes include the addition of the phrase "wastewater stream," because, as the commenter pointed out, it is used later in subpart YY synonymously with process wastewater (§63.1100(g)(5)(i) and (ii) and Table 5 to §63.1103, row 7). The commenter also recommended that "wastewater" be changed to "water" to clarify that wastewater is water first, not organics. Finally, the commenter recommended that the phrase "and is to be discarded" be added to clarify and emphasize that the water in question is waste.

Response: The EPA is deferring action and soliciting additional comment on the wastewater provisions to be required under the generic MACT rule. Therefore, this definition does not appear in the generic MACT as of May 15,1999.

Comment: One commenter (A-97-17, IV-D-08) stated that subparagraph (5) of the definition of "storage vessel or tank" should be revised to use the term "vessels storing wastewater" instead of "wastewater storage tanks." The commenter claimed that this revision is consistent with the format of the preceding subparagraphs, and also avoids using the term to be defined in its definition.

Response: The EPA agrees with the commenter and the regulation has been revised accordingly.

Comment: One commenter (A-97-16, IV-D-01) stated that "polycarbonate production area source" in §63.1102(a)(2)(ii) should be changed to "polycarbonate production minor source" in order to more accurately describe the regulatory status of such sources.

Response: The EPA does not agree with the commenter's contention that the sources in question are better described as "minor" instead of "area," which is the term for describing sources that are not major sources under section 112 of the Act. However, the EPA has changed the term "minor" to "nonmajor" to meet the commenter's concern.

Comment: A commenter (A-97-19, IV-D-01) stated that in Table 1 to §63.1103, row 3, in the "And if..." column, the mathematical operator should be changed from "≤" to "<". The same commenter also stated that in row 6 of Table 1, in the "If you own or operate..." column, the phrase should be revised to read "a wastewater treatment system unit" in order to be consistent with the defined term.

Response: The EPA agrees with the commenter's suggestion with respect to the mathematical operator, and this change was made to the regulation. The commenter's other suggested change is no longer necessary or relevant, because wastewater provisions were eliminated from the regulation.

Comment: A commenter (A-97-18, IV-D-01) stated that in Table 2 to §63.1103, row 4, in the "If you own or operate..." column, the phrase should be revised to read "a wastewater treatment system unit" in order to be consistent with the defined term. The same commenter noted that in row 4 of Table 2, in the "And if..." column, "HAP" should be changed to "acrylonitrile."

Response: Because wastewater provisions were deleted from the regulation, the commenter's suggested changes were no longer relevant.

Comment: A commenter (A-97-16, IV-D-01) stated that §§63.1103(d)(1)(i)(A) and (D) should be revised to specify "organic HAP" instead of simply "HAP," in order to be consistent with other provisions in the rule.

Response: The EPA agrees with the commenter's suggestion, and the regulation has been revised accordingly.

Comment: One commenter (A-97-16, IV-D-01) stated that Table 5 to §63.1103, row 1, in the "If you own or operate..." column should be revised to read "A storage vessel with: 8 cubic meters ≤ capacity < 75 cubic meters.

Response: The commenter's suggested change is not relevant because requirements for existing storage vessels with less than 75 cubic meters capacity were eliminated from the final regulation.

Comment: One commenter (A-97-16, IV-D-01) stated that Table 5 to §63.1103, row 1 (upper portion), in the "And if..." column should be revised to read as follows: "41.3 kilopascals < the maximum true vapor pressure of organic HAP < 76.6 kilopascals." The same commenter said that Table 5 to §63.1103, row 1 (lower portion), in the "And if..." column should be revised to read as follows: "27.6 kilopascals < the maximum true vapor pressure of organic HAP < 76.6 kilopascals." The commenter claimed that these changes are necessary in order to ensure that these categories do not overlap with the category in row 2, lower portion.

Response: In response to other comments received on subpart YY and as stated in a previous response, the EPA eliminated requirements for existing small storage vessels from the final regulation. This change resulted in different changes from those suggested by the commenter's statement. In addition, the 41.3 kilopascal cutoff no longer applies. Table 5 has, however, been revised in the final rule to assure that the applicability categories do not overlap inappropriately.

Comment: One commenter (A-97-16, IV-D-01) stated that Table 5 to §63.1103, row 2 (upper portion), in the "If you own

or operate..." column should be revised as follows: "a storage vessel with capacity > 151 cubic meters. The same commenter believes that Table 5, row 2 (lower portion), in the "If you own or operate..." column should be revised as follows: "a storage vessel with capacity ≥ 8 cubic meters." The commenter claimed that this revision makes the comparison clearer.

Response: The "If you own or operate" column was revised to indicate that it applies to storage vessels with a capacity greater than or equal to 151 cubic meters. The second change suggested by the commenter was not relevant because, in response to another comment, requirements for small storage vessels (i.e. <75 cubic meters for existing sources, and < 38 cubic meters for new sources) were deleted from the regulation.

Comment: One commenter (A-97-16, IV-D-01) stated that in Table 5 to §63.1103, row 3 (upper portion), in the "And if..." column, the mathematical operator between TRE and 2.7 should be <, instead of ≤, in order to be consistent with the "And if..." column in row 4. The commenter pointed out that a TRE value less than 2.7 requires control, whereas a TRE index value of 2.7 does not require control.

Response: As discussed above, because of broader changes made to the requirements of the regulation, Table 5 was revised considerably. The commenter's recommendations regarding mathematical operators were incorporated where appropriate into these revisions; however this specific comment was no longer relevant.

Comment: One commenter (A-97-16, IV-D-01) stated that in Table 5 to §63.1103, row 3 (upper portion), in the "Then you must..." column, the following text should be inserted after the word "flare" in the upper requirement: "meeting the requirements of 40 CFR subpart SS (national emission standards for closed vent systems, control devices, recovery devices, and routing to a fuel gas system or process) §63.987 of this part." The commenter said that this change would conform to the format of previous requirements in Table 5.

Response: The EPA agrees with the commenter's suggestion that the reference to subpart SS should be included specifically in the table and has revised the rule accordingly. However, changes in the specific control requirements have resulted in changes to the specific cross-reference in subpart SS that is relevant, so §63.987 is not referenced here.

Comment: One commenter (A-97-16, IV-D-01) stated that in Table 5 to §63.1103, row 3 (upper portion), in the "Then you must..." column, the final requirement, to "achieve and maintain a TRE index value greater than 2.7," should be deleted. The commenter states that if the TRE ≥ 2.7, a row 4 applies.

Response: Again, as discussed in other responses to comments, broader changes made to Table 5 and the control requirements for polycarbonate sources mean that the commenter's suggestion is no longer appropriate.

Comment: One commenter (A-97-16, IV-D-01) stated that in Table 5 to §63.1103, row 3 (lower portion), in the "And if..." column, the mathematical operator "<" should be inserted between TRE and 2.7.

Response: Again, as discussed in other responses to comments, broader changes made to Table 5 and the control requirements for polycarbonate sources mean that the commenter's suggestion is no longer appropriate. The appropriate mathematical operator is less than or equal to. If a source achieves and maintains a TRE above 2.7, no further control is required.

Comment: One commenter (A-97-16, IV-D-01) stated that Table 5 to §63.1103, row 3 (lower portion), in the "Then you must..." column should be revised to refer to "a process vent" instead of "process vents" and to replace "by venting emissions" with "then vent the control device." The commenter said that these changes are consistent with other parts of the table, and clearer.

Response: The EPA agrees with the commenter, and the regulation has been revised by incorporating the suggested changes.

Comment: One commenter (A-97-16, IV-D-01) stated that Table 5 to §63.1103, row 4, in the "Then you must..." column, should be revised to add a reference to the provisions of §63.1104(n), by adding the following text: "and, comply with the provisions of §63.1104(n) of this subpart, as applicable." The commenter claimed that this change clarifies the rule, and the commenter also noted that while the proposed rule does not have a §63.1104(n), the commenter suggested in another comment that §63.1104(m)(2)(iv) be renumbered as §63.1104(n).

Response: As discussed in other responses to comments, broader changes made to Table 5 and the control requirements for polycarbonate sources mean that the commenter's suggestion is no longer appropriate.

Comment: One commenter (A-97-16, IV-D-01) stated that in Table 5 to §63.1103, rows 5 and 6, the word "HAP" after "11,800 kilogram" should be deleted as it is redundant.

Response: Because requirements for batch unit operations were eliminated from the final regulation, in response to another comment received in subpart YY, the commenter's suggestion is not relevant.

Comment: One commenter (A-97-16, IV-D-01) stated that Table 5 to §63.1103, row 6, in the "Then you must..." column should be revised to specify "organic" HAP and to replace "by venting emissions" with "then vent the control device."

Response: Because requirements for batch unit operations were eliminated from the final regulation, in response to another comment received in subpart YY, the commenter's suggestion is not relevant.

Comment: One commenter (A-97-16, IV-D-01) stated that the requirement in Table 5 to §63.1103, row 6, in the "Then you must..." column is confusing as proposed. The commenter claimed that it is not clear whether it is intended to be one

requirement or two alternative requirements. The commenter thought that, based on the context, on §63.1105, and on the parallel provision in Table 6, row 5, that this provision should be revised to clarify that two alternative requirements exist, and to conform to the format in row 3. The commenter suggested this could be achieved by deleting the phrase "whichever is less stringent." The commenter further noted that if the cited phrase is in fact integral to the meaning of the requirement, then further clarification is necessary, as the meaning is completely unclear.

Response: Because requirements for batch unit operations were eliminated from the final regulation, the commenter's suggestion is no longer relevant.

Comment: One commenter (A-97-16, IV-D-01) stated that in Table 5 to §63.1103, row 6, the "Then you must..." column, "process vents" should be replaced with "a process vent."

Response: Because requirements for batch unit operations were eliminated from the final regulation, in response to another comment received in subpart YY, the commenter's suggestion is not relevant.

Comment: One commenter (A-97-16, IV-D-01) stated that in Table 5 to §63.1103, rows 7 and 8, in the "And if..." column, the word "organic" should be inserted before "HAP, since organic HAP is the regulated species.

Response: The EPA agrees with the commenter's suggestion for row 8, and has revised the regulation accordingly. The parallel change for row 7 is no longer applicable because wastewater provisions were eliminated from the regulation.

Comment: One commenter (A-97-16, IV-D-01) stated that in Table 5 to §63.1103, footnote "b," the last sentence should be revised to use the word "calculated" instead of "done."

Response: The EPA agrees with the commenter, and the rule has been revised accordingly.

Comment: One commenter (A-97-16, IV-D-01) stated that in Table 5 to §63.1103, footnote "d," "is" should be changed to "are."

Response: The commenter's suggestion became irrelevant, because this footnote was changed, since batch unit operation requirements were eliminated from the final rule.

Comment: One commenter (A-97-16, IV-D-01) stated that Table 5 to §63.1103, footnote "e," should be revised to read as follows: "The cutoff flow rate, average flow rate, and annual average flow rate are each determined according to the procedures specified in §63.1105(d) and (e)."

Response: The commenter's suggestion became irrelevant, because this footnote was changed, since batch unit operation requirements were eliminated from the final rule.

Comment: One commenter (A-97-16, IV-D-01) stated that Table 5 to §63.1103, footnote "f," should be revised to replace "The determination of halogenated emissions from batch unit operations" with "The aggregated mass emissions rate of halogen atoms contained in organic compounds" in order to be more clear.

Response: The commenter's suggestion became irrelevant, because this footnote was changed, since batch unit operation requirements were eliminated from the final rule.

Comment: One commenter (A-97-16, IV-D-01) stated that in Table 5 to §63.1103, footnote "i," "organic" should be inserted before the word "HAP."

Response: The EPA agrees with the commenter's recommendation, and the regulation has been revised accordingly.

Comment: One commenter (A-97-16, IV-D-01) stated that Table 6 to §63.1103, row 1 in the "And if..." column should be revised to read: "2.1 kilopascals ≤ the maximum true vapor pressure of organic HAP < 76.6 kilopascals. The commenter claimed that this change is necessary in order that this

category does not overlap with the category in row 2, lower portion.

Response: The commenter's recommended change is not appropriate, because the EPA changed the vapor pressure thresholds in the final rule.

Comment: One commenter (A-97-16, IV-D-01) stated that Table 6 to §63.1103, row 2 (upper portion), in the "If you own or operate..." column, should be revised to read: "a storage vessel with capacity > 151 cubic meters." The commenter claimed that this revision makes the comparison clearer.

Response: The EPA retained the order of comparisons as proposed in order to be consistent throughout all of the rows of each of the applicability tables.

Comment: One commenter (A-97-16, IV-D-01) stated that Table 6 to §63.1103, row 2 (upper portion), in the "And if..." column should be revised to read: "the maximum true vapor pressure of organic HAP ≥ 5.2 kilopascals." The commenter stated that this revision clarifies the provision.

Response: The EPA agrees with the commenter's recommendation, and the regulation has been revised accordingly.

Comment: One commenter (A-97-16, IV-D-01) stated that Table 6 to §63.1103, row 2 (upper portion), in the "If you own or operate..." column, "a storage vessel with capacity ≥ 38 cubic meters." The commenter claimed that this revision makes the comparison clearer.

Response: The EPA retained the order of comparisons as proposed in order to be consistent throughout all of the rows of each of the applicability tables.

Comment: One commenter (A-97-16, IV-D-01) stated that Table 6 to §63.1103, row 2 (upper portion), in the "And if..." column should be revised to read: "the maximum true vapor pressure of organic HAP ≥ 76.6 kilopascals." The commenter stated that this revision clarifies the provision.

Response: The EPA agrees with the commenter's recommendation, and the regulation has been revised accordingly.

Comment: One commenter (A-97-16, IV-D-01) stated that in Table 6 to §63.1103, row 3 (upper portion), the "And if..." column, the mathematical operator between TRE and 9.6 should be <, rather than ≤, because if a new plant achieves a TRE index value of 9.6, no control is required.

Response: The EPA does not agree with the commenter's recommendation, and the regulation has not been revised as suggested. Instead, if a TRE index above 9.6 is achieved and maintained, no further control is required.

Comment: One commenter (A-97-16, IV-D-01) stated that in Table 6 to §63.1103, row 3 (upper portion), the "Then you must..." column, the following text should be inserted after the word "flare" in the upper requirement: "meeting the requirements of 40 CFR subpart SS (national emission standards for closed vent systems, control devices, recovery devices, and routing to a fuel gas system or process) §63.987 of this part." The commenter said that this change would conform to the format of previous requirements in Tables 5 and 6.

Response: As with the similar comment on Table 5, the EPA agrees with the commenter's suggestion that the reference to subpart SS should be included specifically in the table and has revised the rule accordingly. However, changes in the specific control requirements have resulted in changes to the specific cross-reference in subpart SS that is relevant, so §63.987 is not referenced here.

Comment: One commenter (A-97-16, IV-D-01) stated that in Table 6 to §63.1103, row 3 (upper portion), the "Then you must..." column, the requirement to "achieve and maintain a TRE index value greater than 9.6" should be deleted, since if the TRE index value is greater than 9.6, then no control is necessary.

Response: The EPA does not agree with the commenter's recommendation, as the requirement to achieve and maintain a TRE index value greater than 9.6 is an alternative to other control requirements. However, if such a TRE index value is not maintained, then other control requirements would apply.

Comment: One commenter (A-97-16, IV-D-01) stated that in Table 6 to §63.1103, row 3 (lower portion), the "And if..." column, the mathematical operator "<" should be inserted between TRE and 9.6.

Response: The appropriate mathematical operator for the row identified by the commenter is less than or equal to, rather than simply less than, and the final rule reflects this.

Comment: One commenter (A-97-16, IV-D-01) stated that Table 6 to §63.1103, row 3 (lower portion), should be revised to refer to "a process vent" instead of "process vents" and to replace "by venting emissions" with "then vent the control device." The commenter said that these changes are consistent with other parts of the table, and clearer.

Response: The EPA agrees with the commenter's recommendation, and the regulation has been revised accordingly.

Comment: One commenter (A-97-16, IV-D-01) stated that in Table 6 to §63.1103, row 5, the word "HAP" after "11,800 kilogram" should be deleted as it is redundant.

Response: The commenter's recommended change is not relevant because the EPA eliminated requirements for batch unit operations from the regulation.

Comment: One commenter (A-97-16, IV-D-01) stated that Table 6 to §63.1103, row 5, in the "Then you must..." column, should be revised to refer to "a process vent" instead of "process vents" and to replace "by venting emissions" with "then vent the control device." The commenter said that these changes are consistent with other parts of the table, and clearer.

Response: The commenter's recommended change is not relevant because the EPA eliminated requirements for batch unit operations from the regulation.

Comment: One commenter (A-97-16, IV-D-01) stated that Table 6 to §63.1103, row 5, in the "Then you must..." column, should be revised to refer to "a process vent" instead of "process vents."

Response: The commenter's recommended change is not relevant because the EPA eliminated requirements for batch unit operations from the regulation.

Comment: One commenter (A-97-16, IV-D-01) stated that in Table 6 to §63.1103, there is no row number 6, and therefore row number 7 should be renumbered as 6, and row 7 renumbered as row 6.

Response: The EPA has reserved and renumbered paragraphs where appropriate to correct errors such as that mentioned by the commenter, and to eliminate cross-referencing confusion.

Comment: One commenter (A-97-16, IV-D-01) stated that in Table 6 to §63.1103, row 7 (should be 6), in the "If you own or operate..." column, the phrase should be revised to read "a wastewater treatment system unit" in order to be consistent with the defined term.

Response: The commenter's recommended change is not relevant because the EPA eliminated wastewater requirements from the regulation.

Comment: One commenter (A-97-16, IV-D-01) stated that in Table 6 to §63.1103, row 7 (should be 6) and row 8 (should be 7), the word "organic" should be inserted before the word "HAP."

Response: The commenter's recommended change is not relevant because the EPA eliminated wastewater requirements from the regulation.

Comment: One commenter (A-97-16, IV-D-01) stated that in Table 6 to §63.1103, footnote "b," the word "done" should be replaced with the word "calculated."

Response: The EPA agrees with the commenter, and the regulation was revised accordingly.

Comment: One commenter (A-97-16, IV-D-01) stated that in Table 6 to §63.1103, footnote "e," should be revised to read as follows: "The cutoff flow rate, average flow rate, and annual average flow rate are each determined according to the procedures specified in §63.1105(d) and (e)."

Response: The commenter's recommended change is not relevant because the EPA eliminated requirements for batch unit operations from the regulation.

Comment: One commenter (A-97-16, IV-D-01) stated that Table 6 to §63.1103, footnote "f," should be revised to replace "The determination of halogenated emissions from batch unit operations" with "The aggregated mass emissions rate of halogen atoms contained in organic compounds" in order to be more clear.

Response: The commenter's recommended change is not relevant because the EPA eliminated requirements for process vents from batch unit operations from the regulation.

Comment: One commenter (A-97-16, IV-D-01) stated that Table 6 to §63.1103, references footnote "i," in row 8, but no text for the footnote appears at the bottom of Table 6. The commenter contended, therefore, that the text for this footnote should be added, and that it should be identical to that of footnote "i" in Table 5 to §63.1103.

Response: The commenter is correct, and this footnote has been added to Table 6. However, because of other changes made to these tables, it is now footnote e.

Comment: One commenter (A-97-17, IV-D-08) claimed that "(0.33 foot)" in §63.1104(b)(1) should be deleted because it is confusing to include an English measure that could be interpreted as a regulatory equivalent, despite §63.1108(c). For the same reason, the same commenter stated that "(0.99 pound per hour)" in §63.1104(b)(2) should be deleted.

Response: The EPA does not agree with the commenter's contention that more confusion than benefit results from the inclusion of English units of measure in the regulation, and therefore the commenter's suggested change has not been made. The EPA believes that the inclusion of English units is helpful to some owners and operators.

Comment: One commenter (A-97-17, IV-D-08) stated that §63.1104(d)(1) should be revised to insert the following phrase at the beginning of the paragraph: "For a process vent stream that consists of at least one process vent from a batch process manifolded with at least one process vent from a continuous process (which combination is deemed a process vent from a continuous unit operation as described in footnote "c" in Tables 5 and 6)." The commenter claimed that this revision clarifies that this provision is only applicable when a process vent from a batch unit operation is manifolded with a process vent from a continuous unit operation; otherwise, the standard in §63.1104(c) applies.

Response: The EPA agrees with the commenter, and has revised the rule accordingly, except for addition of parenthetical phrase, as this is unnecessary.

Comment: One commenter (A-97-17, IV-D-08) stated that the references in §63.1104(j) seem to have been inadvertently omitted, and that this paragraph should refer to §63.1104(k) and (l).

Response: The EPA agrees that the appropriate references were inadvertently omitted. Cross-references to §63.1104(l)(1) or (m)(2) were added to the regulation.

Comment: One commenter (A-97-17, IV-D-08) inquired why the footnotes in Table 8, "AAAAMJ/scm" and "AAAASCM/min," have the letter "A" repeated 4 times. The commenter assumed that this was inadvertent, but requested clarification to be certain.

Response: These were typographical errors which have been corrected.

Comment: One commenter (A-97-17, IV-D-08) stated that the abbreviation "scmm" is used in §63.1104(k), and that it should first be defined as follows: "...with the 0.011 standard cubic meters per minute (scmm) flow rate..."

Response: The EPA agrees with the commenter's suggestion, and the regulation has been revised accordingly.

Comment: One commenter (A-97-17, IV-D-08) noted that §63.1104(m)(1) references paragraph (m)(3), but no such paragraph exists. The commenter further stated that if this was intended to refer to proposed §63.1104(m)(2)(iv), the commenter also recommended that this paragraph be renumbered to §63.1104(n).

Response: The EPA has revised the regulation to cross-reference (l)(1) through (l)(3) in §63.1104(m)(1).

Comment: One commenter (A-97-17, IV-D-08) stated that §63.1108(b)(1) and (b)(2) should be revised to include a reference to the description of excused excursions that appears in §63.998(b)(5)(ii)(E).

Response: The EPA agrees with the commenter's suggestion, and the regulation has been revised accordingly.

Comment: One commenter (A-97-17, IV-D-08) stated that the phrase "a monitored parameter is outside its established range or monitoring data cannot be collected" should be deleted from §63.1108(b)(2)(i), since it is redundant.

Response: The EPA agrees with the commenter's suggestion, and the regulation has been revised accordingly.

Comment: One commenter (A-97-17, IV-D-08) stated that the sentences in §63.1108(c)(4) that describe the use of English units in the regulation should be deleted, because the references to English units are confusing and unnecessary.

Response: As stated earlier, the EPA does not agree with the commenter's contention that more confusion than benefit results from the inclusion of English units of measure in the regulation, and therefore the commenter's suggested change has

not been made. The EPA believes that the inclusion of English units is helpful to some owners and operators.

Comment: One commenter (A-97-17, IV-D-08) stated that §63.1110(b)(1) should be revised by adding the following sentence at the end as a clarification: "This paragraph does not apply to an affected source in existence on the effective date of this rule.

Response: The EPA agrees with the commenter's suggestion, and the regulation has been revised accordingly.

Comment: One commenter (A-97-17, IV-D-08) stated that throughout the regulation, the phrase "calendar day" should be replaced with "day," as "day" is defined in §63.1101 as a calendar day.

Response: The EPA agrees with the commenter's suggestion, and the regulation has been revised accordingly.

Comment: Two commenters (A-97-17, IV-G-04; A-97-17, IV-D-01) identified a missing citation in the last sentence of §63.1104(e). This sentence, as proposed, follows:

> record the TOC or HAP concentration as specified in paragraph.

Response: The EPA has included the missing citation in the last sentence of §63.1104(e) in the promulgated rule as follows:

> record the TOC or HAP concentration as specified in paragraph (1)(3).

Comment: One commenter (A-97-17, IV-G-04) stated that §63.1104(e)(2)(i) needs the word "is" in the statement "in the process vent."

Response: The EPA agrees with the commenter that the inclusion of the word "is" is needed in §63.1104(e)(2)(i). This section has been modified in the promulgated rule as follows:

> 50% of total organic HAP or TOC, by volume, is in the process vent.

Comment: One commenter (A-97-17, IV-G-04) stated that because of the layout of §63.1104(h) in the published proposal,

it is not clear which equations are being referenced. The commenter requested that wherever an equation is used to fulfill a requirement of the rule, the equation number be included as a reference.

Response: The EPA agrees with the commenter. Therefore, the EPA has included equation reference numbers in the promulgated rule whenever an equation is referenced.

Comment: One commenter (A-97-17, IV-G-04) stated the proposed text in §63.1104(j) is missing at least one citation. This sentence, as proposed, follows:

> ...shall maintain records specified in paragraph (l)(1) or (m)(2), as applicable.

Response: The EPA modified §63.1104(j) of the promulgated rule by adding 2 references. The modified sentence follows:

> ...shall maintain records specified in paragraph (l)(1) or (m)(2), as applicable.

Comment: Two commenters (A-97-17, IV-G-04; A-97-17, IV-D-01) stated that §63.1104(m) refers to paragraph (m)(3). The commenters (A-97-17, IV-G-04; A-97-17, IV-D-01) stated that there was no paragraph (m)(3). The commenters (A-97-17, IV-G-04; A-97-17, IV-D-01) requested that the reference to (m)(3) be removed or replaced with the correct reference.

Response: Paragraph (m) specifies applicability determination reporting requirements. The intended cross-references were to specify that the applicability determination recordkeeping requirements be reported in an owner or operator's NOCS report. The EPA modified §63.1104(m) by replacing the references to paragraph "(m)(2) or (m)(3)" with "(l)(1) through (l)(3)," which cross-references the applicability determination recordkeeping requirements that are to be reported in the NOCS.

Comment: Two commenters (A-97-17, IV-G-04; A-97-17, IV-D-01) stated that the reporting requirements of §63.1104(m)(2)(iv) are not clear. One commenter (A-97-17, IV-D-01) stated that the content of §63.1104(m)(2)(iv) appears

unrelated and inconsistent with the rest of paragraph (m) and suggested that it be a separate paragraph (i.e., paragraph (n)). The commenter (A-97-17, IV-D-01) also contended that §63.1104(m)(2)(iv) appears to require the use and monitoring of pollution prevention measures for continuous process vents whose TRE index value is maintained in the TRE index value monitoring range without the use of a recovery device. The commenter (A-97-17, IV-D-01) stated that the imposition of this pollution prevention requirement represents a large extension over existing law, and nowhere in part 63 is pollution prevention required. The commenter (A-97-17, IV-D-01) requested that §63.1104(m)(2)(iv) be modified.

Response: Upon assessment of §63.1104(m)(2)(iv), the EPA decided that §63.1104(m)(2)(iv) was unnecessary and that the pollution prevention requirements should be eliminated. The intent of the proposed provisions was to define pollution prevention within the context of the rule. However, since this has led to greater confusion, the EPA has agreed with, and adopted the commenter's (A-97-17, IV-D-01) requested modifications and renumbering of §63.1104(m)(2)(iv) in the final rule. The proposed §63.1104(m)(2)(iv) has been replaced by the following paragraph in the promulgated rule:

> (n) Parameter monitoring of certain process vents. An owner or operator that maintains a TRE index value (if applicable) in the applicable TRE index value monitoring range as specified in an applicable table presented in §63.1103 of this subpart without using a recovery device shall report a description of the parameter(s) to be monitored to ensure the process vent is operated in conformance with its design or process and achieves and maintains the TRE index value above the specified level, and an explanation of the criteria used to select parameter(s). An owner or operator that maintains a TRE index value (if applicable) in the applicable TRE index monitoring range as specified in an applicable table presented in §63.1103 of this subpart by using a recovery device shall comply with the requirements of §63.993(c) of subpart SS.

8.7 COMPLIANCE WITH STANDARDS AND OPERATION AND MAINTENANCE REQUIREMENTS

8.7.1 Shutdown of Continuous Monitoring System

Comment: One commenter (A-97-17, IV-G-04) suggested that the owner or operator of an affected source be allowed to re-evaluate the shutdown of the continuous parameter monitoring system (CPMS) after the event to determine if the shutdown was necessary. The commenter explained that an owner or operator would include a description of the event and the shutdown would be added to the startup, shutdown, and malfunction plan (SSMP). If it is determined that the shutdown was not necessary, the incident would be described in the next Periodic Report.

The commenter explained that, as proposed, an owner or operator is required to get approval from the Administrator to shutdown a CPMS if they believe that a particular start-up, shutdown, or malfunction would damage a CPMS. The following concerns were specified on the proposed rule:

- There is no procedure specified on how to obtain approval or when such documentation is due.
- There is no indication that the Administrator will respond within a reasonable time frame.
- It is almost impossible to predict which start-up, shutdown, or malfunction will damage the CPMS.
- If a CPMS is damaged during a startup, shutdown, or malfunction it may not be repaired soon enough to demonstrate compliance after the event.
- If the CPMS is shut off during a startup, shutdown, or malfunction, it may be used to demonstrate compliance after the event but the owner or operator will have violated this provision.

Response: The EPA has considered the commenter's concerns regarding the proposed requirement under the generic MACT rule for an owner or operator to get approval from the Administrator to shutdown a CPMS if they believe that a particular start-up, shutdown, or malfunction would damage a CPMS. Upon consideration of the commenter's concerns, the EPA has deleted the requirement for an owner or operator to get approval from

the Administrator specifically to shutdown a CPMS from the final rule. The 40 CFR part 63 subpart YY (the generic MACT rule) start-up, shutdown, and malfunction plan provisions parallel the intent and requirements of the part 63 General Provisions which address the submittal and approval of, and revisions to, the start-up, shutdown, and malfunction plan.

8.7.2 Excursion/Violation

Comment: One commenter (A-97-17, IV-D-01) stated that an excursion that results from a not reasonably foreseeable malfunction should not be considered a violation where the owner takes reasonable steps to minimize excess emissions. The commenter (A-97-17, IV-D-01) explained that, as proposed, if an excursion occurs as a result of a process malfunction that is not reasonably foreseeable and not in an owner or operator's Startup, Shutdown, and Malfunction Plan, it would be a violation.

Response: The EPA agrees with the commenter. Section 63.1108(a)(1) and (b)(2) of the proposed rule indicates that the standards and monitoring parameter ranges do not generally apply during a malfunction. The EPA requires a program of corrective action for malfunctions and describes procedures for operating and maintaining the affected source at such times. The EPA expects that corrective actions are taken during unforeseeable malfunction events. The EPA does not view the failure to foresee a specific malfunction as constituting a violation as long as it meets the EPA's definition of a "malfunction." To clarify the EPA's intent, a definition of "malfunction" has been added to the final rule.

8.7.3 Credible Evidence

Comment: One commenter (A-97-17, IV-D-01) requested that the EPA modify §63.1108(b). The commenter provided their proposed revisions to the proposed §63.1108(b). The commenter (A-97-17, IV-D-01) explained that, as proposed, §63.1108(b)(1) and (b)(5) allow the Administrator to establish noncompliance with required operating conditions using information other than

specified parameter monitoring data. The proposed language suggests that an owner or operator cannot rely on continuous monitoring data to demonstrate compliance.

The commenter (A-97-17, IV-D-01) also explained that §63.1108(b)(4) is either duplicative of, or inconsistent with, emission point-specific applicability determination requirements specified in 40 CFR Part 63 Subpart YY.

Section 63.1108(b)(4) specifies generic applicability and compliance assessments along with a caveat that determinations do not need to be limited to what is specified. The commenter (A-97-17, IV-D-01) explained that they were concerned about the interaction of EPA's credible evidence regulations with §63.1108(b). Under the credible evidence regulations, the EPA has asserted that it can use other information other than information gathered during a performance test to show a violation of numerical limits. The commenter (A-97-17, IV-D-01) requested that the EPA state in §63.1108(b) that the conditions of the performance test are the conditions under which compliance is to be determined and that there would need to be a showing that any other data used to show noncompliance be directly correlated to the conditions of a performance test.

Response: The EPA has not made the commenter's suggested revisions. The suggested revisions are inappropriate because they restrict the ability of the EPA to use other information to determine compliance. The EPA may use any evidence that indicates that the emission standard is not being met on a continuous basis, that parameter values are not being maintained in the proper range, or that other requirements are not being met.

8.8 RECORDKEEPING REQUIREMENTS

8.8.1 On-Site Data Retention

Comment: One commenter (A-97-17, IV-D-01) stated that owners or operators of an affected source should not be required to maintain more than six months of data onsite. The commenter explained that inspectors rarely review more than the

previous six months of data. The commenter stated that this would be consistent with 40 CFR Part 63 Subpart F of the HON.

Response: The HON allowance was based on litigation and should not apply to non-HON sources. The EPA has addressed this issue under other rulemakings (i.e., the CAR). It was agreed under the CAR that records of the most recent 2 years must be retained on-site (or accessible to an inspector while on-site), while the remaining 3 years may be kept off-site for non-HON sources that use the CAR in the future. This agreement was reached with substantial input from the EPA Regions, the OAQPS, OECA, and the CMA.

8.8.2 Recordkeeping Summary Tables

Comment: One commenter (A-97-17, IV-G-04) requested that the EPA prepare a set of tables (e.g., as in the HON) defining all possible recordkeeping elements for the applicable rules. As proposed, an owner or operator must search through the equivalent of 5 subparts to find the information required to demonstrate compliance and they might be subject to enforcement if a piece of information is missed.

Response: The EPA agrees that a set of summary tables outlining the recordkeeping requirements for the applicable rules would be useful for an owner or operator trying to discern their requirements. The EPA plans to prepare summary tables outlining the recordkeeping requirements to assist owners and operators of affected sources in discerning their requirements. These tables will be made available on the EPA's TTN web site.

8.8.3 Report Retention

Comment: One commenter (A-97-17, IV-G-04) contended that requiring an owner or operator to retain copies of all notifications, reports, etc., for 5 years is unwarranted (§63.1109(a)). The commenter explained that the only reasons why EPA would need an owner or operator to retain a copy of a report that was submitted in full compliance with applicable requirements would be "just in case" the EPA loses their copy,

or that an inspector may want to review the facility's report at the site. The commenter stated that an inspector could review the reports before traveling to a site, or collect the reports and bring them along for the inspection. The commenter stated that these reasons would not be enough of a burden on the EPA to justify requiring retention of a copy of every report sent to the EPA, under the penalty of law.

Response: The EPA has not made the commenter's suggested change. The information contained in reports submitted to the EPA is important information for an inspector to have to determine compliance. The EPA acknowledges that reports should and are often reviewed and brought along by inspectors. However, the EPA believes that an inspector should have all records and reports that have been submitted to the EPA readily accessible. One of the reasons for this is that the EPA may decide they need to access a report that they did not bring as a result of their inspection.

8.9 REPORTING REQUIREMENTS

8.9.1 Notice of Initial Startup

Comment: One commenter (A-97-17, IV-D-01) requested that the EPA modify §63.11010(b) to clearly indicate that only new and reconstructed sources are required to submit a notice of initial startup.

Response: The EPA agrees with the commenter's clarification and has made the commenter's requested change in the promulgated rule.

8.9.2 Notification of Compliance Status

Comment: One commenter (A-97-17, IV-G-04) requested that the EPA change all references to an Initial Compliance Status Report (ICSR) to a Notification of Compliance Status (NOCS).

Response: The EPA agrees with the commenter that the EPA should use consistent terminology; therefore, the promulgated rule has been amended to change all references to an ICSR to a NOCS.

8.9.3 Periodic Report

Comment: One commenter (A-97-17, IV-D-01) stated that the first Periodic Report be due 8 months after the Notification of Compliance Status is due rather than 8 months after the source becomes subject to 40 CFR Part 63 Subpart YY. As proposed, the first several reports will not contain any information. The commenter explained that their suggested change would be consistent with the HON.

Response: The EPA agrees with the commenter that it does not make sense to require submittal of Periodic Reports prior to submittal of the Notification of Compliance Status report. The promulgated rule has been modified so that the first Periodic Report is due no later than 8 months after the Notification of Compliance Status report is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status is due.

8.9.4 Reporting Requirement Summary Tables

Comment: Two commenters (A-97-17, IV-G-04) requested that the EPA prepare a set of tables (e.g., as in the HON) defining all possible reporting elements for the applicable rules. As proposed, an owner or operator must search through the equivalent of 5 subparts to find the information required to demonstrate compliance and they might be subject to enforcement if a piece of information is missed.

Response: The EPA agrees that a set of summary tables outlining the reporting requirements for the applicable rules would be useful for an owner or operator trying to discern their requirements. The EPA plans to prepare summary tables outlining the reporting requirements to assist owners and operators of affected sources in discerning their requirements. These tables will be made available on the EPA's TTN web site.

8.9.5 Implementation Schedule

Comment: One commenter (A-97-17, IV-G-04) stated that it was not appropriate for the EPA to require that an owner or operator submit a proposed implementation schedule under the Initial Notification (§63.1110(c)(6)). The commenter explained

that as much as 2 years or more of the 3 year period from the promulgation date to the compliance date will be used making these decisions. The commenter suggested that if the EPA requires assurance that a facility will be in compliance on the date required, the EPA may change this paragraph to indicate that the source submit a statement that the source intends to be in compliance by the compliance date.

Response: The EPA evaluated the commenter's comment and agrees that it is unnecessary to require that an owner or operator submit a proposed implementation schedule under the Initial Notification. The requirements for an implementation schedule was mistakenly adopted from the CAR where subject sources are already complying with one of the underlying rules consolidated under that rulemaking and has the option to comply with the CAR. If the option of complying with the CAR is executed, a compliance implementation schedule is required. The EPA has deleted §63.1110(c)(6) from the promulgated rule.

8.9.6 Request for an Adjustment to Time Period or Postmark Deadline

Comment: One commenter (A-97-17, IV-G-04) requested that the §63.1110(h)(6) provision that provides that the Administrator notify the owner or operator in writing of approval or disapproval of a request for an adjustment to a time period or postmark deadline be modified to allow an owner or operator to assume approval if a request does not receive written disapproval within 15 days. The commenter explained that approvals are often not made within the specified 15 calendar days and many requests go unanswered.

Response: As proposed, the generic MACT rule is consistent with the part 63 General Provisions. The EPA acknowledges that it is desirable for the Administrator to approve or deny requests within the designated 15-day period. However, it is important that changes in schedule be made based on mutual agreement between the facilities and the States, because both parties must change their respective schedules for

handling the reports. Therefore, it is not appropriate to grant a blanket approval for all requests that go unanswered in that period of time. It is suggested that the facilities consider their experience with typical turn-around times on requests and factor that experience into their schedules when submitting requests.

8.10 STARTUP, SHUTDOWN, AND MALFUNCTION

Comment: One commenter (A-97-17, IV-G-04) recommended that the EPA remove the criteria under §63.1111(b)(1)(ii)(A) and (B)(i.e., requires that periodic Startup, Shutdown, and Malfunction (SSM) reports include the number of SSM events and the total duration of all periods of SSM for the reporting period). The commenter (A-97-17, IV-G-04) explained that §63.1111 only requires reporting if the total duration of a startup, shutdown, or malfunction exceeds specified durations and the specified criteria in paragraphs (b)(1)(ii)(A) or (B) of §63.1111 adds calculation burdens. The commenter (A-97-17, IV-G-04) indicated that it is often easier to report all SSM periods that caused excess emissions rather than determining the percentage of time a Continuous Parameter Monitoring System (CPMS) is not operating or malfunctioning, or the percentage of time in which SSM events caused excess emissions.

The commenter (A-97-17, IV-G-04) suggested that, if EPA retains the provisions in § 63.1111(b)(1)(ii)(A) and (B) of the Generic MACT rule, the EPA should clarify the SSM information that is to be included in the periodic SSM reports. Specifically, the commenter (IV-G-01) requested that the EPA clarify the following in the promulgated rule:

1. That a separate downtime percentage is required to be calculated for each individual CPMS and that only SSM event durations greater than 5 percent need to be reported.
2. The periods of CPMS inoperation or malfunction that should be included in the SSM report.

3. Whether an owner or operator is required to include or exclude periods of CPMS inoperation or malfunction when the actions taken by an owner or operator are consistent with procedures specified in the source's SSM plan. The commenter requested that only the periods of CPMS SSM plan be included.

4. How to calculate the percentage of SSM time during which excess emissions occur. The commenter (IV-G-01) suggested that the EPA should require the percentage be calculated on an emission point by emission point basis considering the operating time of each emission point.

5. The periods of SSM that should be included in the percentage calculation. The commenter (IV-G-01) suggested that the EPA only require that the periods of SSM for which actions are inconsistent with the SSM plan be included in the percentage calculation.

Response: A semi-annual Summary Report of the occurrences and durations of each SSM during which excess emissions occur is required by the Generic MACT rule (40 CFR part 63 subpart YY). The EPA considers the semi-annual Summary Report to be an important addition to the SSM provisions. The EPA believes that the Summary Report would inform the EPA as to the type and duration of SSMs.

Nevertheless, if the commenter believes that it is easier to report all SSM periods of SSM and the total duration of periods of SSM, rather than reporting the period of time a CPMS is malfunctioning or not operating, or the percentage of operating time in which SSM events occurred that caused excess emissions, this is allowed. Therefore, the EPA has clarified in the final rule that an owner or operator report may report all SSM periods in lieu of calculating percentages. However, the EPA does not believe that it is burdensome to calculate these numbers. All an owner or operator needs is the total duration of periods of SSM (for the reporting period), the total duration of CPMS operating time (for the reporting

period), the total duration of periods of CPMS nonoperation/malfunction, the total duration of period of SSM, and the total operating time duration.

The EPA also agrees that clarification of the information that must be included in the SSM Periodic Report would be useful for an owner or operator responsible for preparing such reports. Therefore, the EPA has specified what must be included in the SSM Periodic Report in the promulgated rule.

TECHNICAL REPORT DATA

(Please read Instructions on reverse before completing)

1. REPORT NO.	2.	3. RECIPIENT'S ACCESSION NO.
EPA-453/C-99-001		

4. TITLE AND SUBTITLE	5. REPORT DATE
National Emission Standards for Hazardous Air Pollutants (NESHAP): Generic MACT Background Information for Acetal Resins, Acrylic and Modacrylic Fiber, Hydrogen Fluoride, and Polycarbonate Production Final Rule	May 1999
	6. PERFORMING ORGANIZATION CODE
7. AUTHOR(S)	8. PERFORMING ORGANIZATION REPORT NO.
9. PERFORMING ORGANIZATION NAME AND ADDRESS Emission Standards Division (Mail Drop 13) Office of Air Quality Planning and Standards U.S. Environmental Protection Agency Research Triangle Park, NC 27711	10. PROGRAM ELEMENT NO.
	11. CONTRACT/GRANT NO. 68-D6-0008
12. SPONSORING AGENCY NAME AND ADDRESS Director Office of Air Quality Planning and Standards Office of Air and Radiation U.S. Environmental Protection Agency Research Triangle Park, NC 27711	13. TYPE OF REPORT AND PERIOD COVERED
	14. SPONSORING AGENCY CODE EPA/200/04
15. SUPPLEMENTARY NOTES	

16. ABSTRACT

This document contains a summary of public comments received on the NESHAP for Acetal Resins, Acrylic and Modacrylic Fiber, Hydrogen Fluoride, and Polycarbonate Production Source Categories (40 CFR 63, subparts SS, TT, UU, WW, and YY), which were proposed on October 14, 1998 (63 FR 55178). This document also provides the EPA's response to comments, and outlines the changes made to the regulation in response to public comments.

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Acetal Resins Production, Acrylic and Modacrylic Fiber Production, Air Pollution Control, Air Emissions Control, Closed Vent Systems, Environmental Protection, Equipment Leaks, Hazardous Air Pollutants, Hazardous Substances, Hydrogen Fluoride Production, Polycarbonate Production, Process Vents, Reporting and Recordkeeping Requirements, Storage Vessels, Transfer Racks	Hazardous air pollutants	

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