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NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) : PUBLICLY OWNED TREATMENT WORKS - BACKGROUND INFORMATION FOR FINAL STANDARDS

SUMMARY OF PUBLIC COMMENTS AND RESPONSES

Contains Data for Postscript Only.

EPA-453/R-99-xxx

National Emission Standards for Hazardous Air Pollutants (NESHAP): Publicly Owned Treatment Works

Background Information for
Final 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

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ENVIRONMENTAL PROTECTION AGENCY

National Emission Standards for Hazardous Air Pollutants
(NESHAP): Publicly Owned Treatment Works
Background Information for Promulgated Standards -
Summary of Public Comments and Responses

1. The standards regulate organic hazardous air pollutant (HAP) emissions from Publicly Owned Treatment Works (POTW). Publicly Owned Treatment Works include wastewater treatment units themselves, as well as intercepting sewers, outfall sewers, sewage collection systems, pumping, power, and other equipment. Any of these types of facilities which are publicly owned may be a POTW. Only those POTW treatment plants that are considered major sources under section 112(d) of the Clean Air Act (Act) will be regulated.

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4. Electronic copies of this document may be obtained from the EPA's OAR Technology Transfer Network web site (TTNWeb).

The TTNWeb is a collection of related web sites containing information about many areas of air pollution science, technology, regulation, measurement, and prevention. The TTNWeb is directly accessible from the Internet via the World Wide Web at the following address:

http://www.epa.gov/ttn

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ACRONYM AND ABBREVIATION LIST

ACRONYM	TERM
AMSA	Association of Metropolitan Sewerage Agencies
CFR	Code of Federal Regulations
FOTW	Federally Owned Treatment Works
GAC	Granulated Activated Carbon
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant(s)
HON	Hazardous Organic National Emission Standards for Hazardous Air Pollutants
MACT	Maximum Achievable Control Technology
NESHAP	National Emission Standards for Hazardous Air Pollutants
POTW	Publicly Owned Treatment Works
PTE	Potential To Emit
VOC	Volatile Organic Compounds

ABBREVIATION	UNIT OF MEASURE
mgd	million gallons per day
tpy	tons per year

1.0 SUMMARY

The EPA proposed National Emission Standards for Hazardous Air Pollutants (NESHAP) from Publicly Owned Treatment Works (POTW) in 40 CFR Part 63, subpart VVV on December 1, 1998. The purpose of this document is to present a summary of the public comments received on the proposed NESHAP and the responses developed by the EPA. This summary of comments and responses serves as the basis for revisions made to the standards between proposal and promulgation.

The EPA received 19 public comment letters on the proposed rule. The commenters represent the following affiliations: Federal governent (1), State government (2), local government (counties, cities, and sanitary districts) (10), trade associations (3), universities (1), and private citizens (2). This document incorporates all the comments in the docket. Table 1-1 presents a listing of all persons submitting written comments, their affiliation, and their docket number. No public hearing was requested therefore no comments were received from a public hearing.

TABLE 1-1. LIST OF COMMENTERS ON THE PROPOSED SUBPART VVV

Number[a]	Commenter, Addressee, Title or Description, etc.
IV-D-01	B. Mathur, Chief, Bureau of Air, Illinois Environmental Protection Agency, Springfield, IL
IV-D-02	T. Godar, Private Citizen, Woodbridge, VA
IV-D-03	G. M. Adams, Assistant Departmental Engineer, Office Engineering Department, County Sanitation Districts of Los Angeles County, Whittier, CA
IV-D-04	D. Brown, General Manager, Gulf Coast Waste Disposal Authority, Houston, TX
IV-D-05	J. D. Thornton, Section Manager, Major Facilities Planning, Policy and Planning Division, Minnesota Pollution Control Agency, St. Paul, MN
IV-D-06	R. C. Steidel, Environmental Manager, Hopewell Regional Wastewater Treatment Facility, The City of Hopewell, VA
IV-D-07	E. J. Campobenedetto, Deputy Director, Institute of Clean Air Companies, Washington, DC
IV-D-08	G. Garner, Executive Director, Louisville and Jefferson County Metropolitan Sewerage District, Louisville, KY
IV-D-09	T. A. Pfeifer, Industrial Waste Coordinator and R. A. Eich, Senior Industrial Waste Specialist, Metro Wastewater Reclamation District, Denver, CO
IV-D-10	J. A. Wilson, Director, Bureau of Sanitation, Department of Public Works, City of Los Angeles, CA
IV-D-11	K. Kirk, Executive Director, Association of Metropolitan Sewerage Agencies, Washington, DC

TABLE 1-1. LIST OF COMMENTERS ON THE PROPOSED SUBPART VVV

Number[a]	Commenter, Addressee, Title or Description, etc.
IV-D-12	R. E. Adamski, Deputy Commissioner, New York City Department of Environmental Protection, Director, Bureau of Wastewater Pollution Control, New York, NY
IV-D-13	G. A. Brinsko, Director, Pima County Wastewater Management Department, Tucson, AZ
IV-D-14	R. L. Corsi, Associate Professor, University of Texas at Austin, Austin, TX
IV-D-15	R. J. Flood, Manager, Environmental Compliance Section, Environmental Planning and Evaluation Department, Metropolitan Council Environmental Services, Minneapolis-St. Paul Metropolitan Area, MN
IV-D-16	T. X. White, Associate Vice President, Manufacturing and Quality Control, Scientific and Regulatory Affairs, Pharmaceutical Research and Manufacturers of America, Washington, DC
IV-D-17	E. L. Munsell, Deputy Assistant Secretary of the Navy (Environment and Safety), Department of the Navy, Washington, DC
IV-D-18	B. H. Litzsinger, Civil Engineer, Department of Environmental Compliance, Metropolitan St. Louis Sewer District, St. Louis, MO
IV-D-19	Private Citizen, E-mail Received From samm@homemail.com

[a] The docket number for this rulemaking is A-96-46.

2.0 SIGNIFICANT COMMENTS AND CHANGES SINCE PROPOSAL

In response to comments received on the proposed standards for the POTW source category, several changes have been made to the final rule. While several of these changes are clarifications designed to make the EPA's intent clearer, a number of them are significant changes to the requirements of the proposed standards.

A summary of the substantive comments and/or changes made since the proposal are described in the following sections. Additional information on the final rule is contained in the docket for this rule (Docket A-96-46).

3.0 MAJOR SOURCE DETERMINATION

3.1 MODELS AND DIRECT SOURCE TESTING

Comment: A number of comments were received on the EPA's reliance on the WATER8 model in cases of ambiguity when determining major source status. In general, the commenters believed that the WATER8 model overestimates hazardous air pollutant (HAP) emissions from POTW treatment processes, and that other currently available models provide a more accurate estimation of emissions. Commenter IV-D-03 believed that use of WATER8 is problematic, and reiterated the Association of Metropolitan Sewerage Agencies' (AMSA) concerns, as set forth in their letter to Bruce Jordan of the EPA on November 20, 1998. Commenter IV-D-06 stated that section 63.1595 of the proposed rule should be modified to delete the references to WATER8 and only use the term: "approved fate model". Commenter IV-D-08 disagrees that WATER8 be used exclusively to settle any ambiguity concerning the POTW's status as a major source of HAP emissions, and believes that other approved fate models such as TOXCHEM+ or BASTE should also be considered equal to WATER8. Commenter IV-D-10 believed that modeling and emission factors should be used only for conservative emissions estimates and that alternative air models such as BASTE and TOXCHEM+ should be allowed for conservative estimates. Commenter IV-D-11 recommended that POTW be allowed to use any of several methods to estimate HAP emissions, including peer reviewed models such as TOXCHEM+ and BASTE, and these models should not be limited for use as screening tools only. Commenter IV-D-11 believed the term

"ambiguity" as used in section 63.1595(b)(3) of the proposed rule has the net effect of requiring that WATER8 be used as the sole basis of a major source determination. Commenter IV-D-12 believed that the use of a conservative emissions model (WATER8) with very conservative wastewater analyses (Method 25D or 305) to estimate HAP emissions for the treatment plant is too conservative and unrealistic and recommended that TOXCHEM+ and BASTE be approved for use in estimating emissions for major source determination. Commenter IV-D-13 believed that the final POTW maximum achievable control technology (MACT) standard should allow the use of all appropriate, scientifically peer-reviewed models, to predict HAP emissions from POTW. Commenter IV-D-15 suggested expanding the list of models which can be used for estimating facility emissions to include other models which have already been approved by permitting authorities around the country and have been used for permitting and emission inventories. Commenter IV-D-18 believed that exclusive reliance on WATER8 is more restrictive than allowed elsewhere in Part 63 regulations (e.g., in Appendix C to Part 63, the BASTE model and TOXCHEM models are approved for use).

Commenters IV-D-03, IV-D-08, IV-D-10, IV-D-11, and IV-D-18 believed that direct testing more accurately estimates HAP emissions from POTW treatment processes and should be used as the method of choice for determining major source status rather than the use of WATER8 modeling.

Commenters IV-D-03 and IV-D-11 believed that the tiered approach for determining major source status, as discussed in section 63.1595(b) of the proposed rule, is confusing and suggested that it may be more clear to just list the options.

Commenters IV-D-03 and IV-D-11 questioned how the EPA plans to address concerns by some local governments about emissions models and testing used to determine area source status.

Commenter IV-D-11 believed that the only way to comply with the requirements in section 63.1595(c)(1) of the proposed rule that requires POTW to collect samples of the influent waste stream that represents the complete range of HAP concentrations during the entire averaging period, would be by continuous monitoring. The commenter believed continuous monitoring to be impossible, and requested that the word "complete" be deleted from the sentence.

Commenter IV-D-15 disagreed with the EPA specifying an analytical method (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication No. SW-846) for POTW that is not listed in 40 CFR 136 (contains the test methods required under the NPDES program) and suggested including the methods of 40 CFR 136 as acceptable methods for determination of the concentration of listed organics, rather than as additional information under section 63.1595(c)(2) of the proposed rule.

Response: The EPA continues to believe that the WATER8 model provides a reasonable estimation of emissions from wastewater treatment processes. The EPA also believes that due to Title V, Part 70 determinations, a POTW and its local air pollution regulatory authorities should have agreement on the methods by which the POTW estimates emissions from wastewater treatment operations. Therefore, the EPA has removed procedures for major source determination, and has referred to 40 CFR Part 63, subpart A - General Provisions for the definition of a major source.

The procedures that were removed from the regulation, along with additional guidance, will be included in a future document on estimating emissions from POTW. The EPA will continue to provide assistance on the use of the WATER8 model. Requests for guidance on emissions estimation for the purpose of major source determination will be addressed on an "as-needed" basis, and may

be obtained by consulting the person listed in the FOR FURTHER INFORMATION CONTACT section of the promulgated rule.

Comment: Commenter IV-D-16 believed that the proposed regulation should address the situation where an existing POTW may be a major source when the rule is promulgated, but would lose that status when a new NESHAP rule is issued for the industrial user(s) that is causing it to exceed the HAP emission thresholds. This issue should be specifically addressed by allowing a POTW to identify the major industrial contributors that are causing them to be a major source, and to determine if the contributors are to be regulated by an industrial MACT regulation that will become effective after promulgation of the POTW NESHAP. If the industrial contributors that are causing such POTW to be major sources are expected to reduce their HAP loadings to the extent that the POTW would no longer be a major source, the POTW should be exempted from Subpart VVV and exempted from obtaining a Title V permit. To obtain this exemption, the POTW would be required to obtain certifications from the industrial users contributing the HAP that they will be in compliance with their applicable MACT rule(s) by the applicable compliance deadline and estimating the reduction in HAP loadings sent to the POTW. The POTW would file with the State air pollution control agency and/or the EPA its own certification that it will be a minor source once its industrial contributors are in compliance with their MACT regulations.

Response: The EPA disagrees with the commenter. There are no assurances that the industrial loadings will be effectively reduced within a specific time frame in the future by the promulgation of additional NESHAP. In addition, the future MACT rules may allow the industry to treat their regulated wastewater at the POTW, and thus the POTW could be a major industrial POTW treatment plant as a result of accepting those waste streams for treatment.

3.2 TEST METHODS

Comment: Commenter IV-D-03, IV-D-11, IV-D-12, and IV-D-18 believed that use of the 600 and 8000 series methods are more appropriate than Method 305 and requested their use be acceptable without any corrections.

Response: The EPA has removed the language that provides guidance for estimating emissions from POTW treatment processes. Requests for guidance on emissions estimation will be addressed on an "as-needed" basis, and may be obtained by consulting the person listed in the FOR FURTHER INFORMATION CONTACT section of the regulation.

3.3 CO-LOCATION

Comment: Commenter IV-D-10 recommended that the overall emissions should be based on actual emissions from the wastewater treatment portion of the POTW, and should not include emissions from co-located sources (e.g., portable internal combustion engines). Commenter IV-D-12 and IV-D-17 believed that if a POTW treatment plant is not a major source, then it should not be considered a major source if it is co-located with another major source. Commenter IV-D-13 requested that the EPA provide a means for an area source of HAP emissions at a non-industrial POTW treatment plant to not be inappropriately impacted by a major source determination of unrelated HAP at the same site.

Commenter IV-D-12 noted that a POTW may be a major source as a result of emissions from sources other than wastewater treatment processes (e.g., internal combustion engines, boilers, sludge incinerators) at the facility even though emissions from wastewater treatment processes are substantially less than 25 tons per year (tpy). Thus if parts of the facility other than the wastewater treatment processes (e.g., internal combustion engines, secondary treatment, sludge handling processes) were reconstructed and exceed the 50% fixed capital cost threshold, the covering/venting/controlling requirement in the proposed

regulation would apply even though the headworks and primary clarifiers were not involved in the reconstruction project and were not significant sources of HAP emissions. The commenter believed that, in such cases, implementation of the MACT proposed in the regulation is not a logical and cost-effective solution. The commenter believed that this regulation should provide flexibility on MACT implementation where the major source determination was primarily based on HAP emissions from sources other than wastewater treatment processes. This is especially true when there will be forthcoming MACT standards for these sources.

Commenter IV-D-17 believed that the EPA intended the proposed rule to apply only to POTW treatment plants and ancillary sources the POTW treatment plant that are major sources, as stated in section 63.1580(a)(2) of the rule "Major source means the stationary sources at your POTW treatment plant emit..." This would limit the applicability of the proposed rule to only POTW treatment plants and ancillary sources that are themselves major sources, and would not cause the POTW treatment plant to be a major source due to co-location with another major source. However, in section 63.1595(a), the EPA states that if a POTW treatment plant is co-located with another major source of HAP emissions then the POTW treatment plant (and the other source) are subject to the rule. Further, under section 112 of the Clean Air Act as amended, in the definition of major source, if facility-wide HAP emissions exceed the thresholds, all sources located at the facility (i.e., contiguous area under common control) are considered and regulated as major sources of HAP. The commenter believed that the EPA should clarify the language in sections 63.1580(a)(2) and 63.1595(a) to ensure that the rule applies to POTW that are, in and of themselves, major sources.

Response: The EPA has removed procedures for major source determination, and has referred to 40 CFR Part 63, subpart A -

General Provisions for the definition of a major source. Requests for guidance on emissions estimation will be addressed on an "as-needed" basis, and may be made by consulting the person listed in the FOR FURTHER INFORMATION CONTACT section of the final rule.

3.4 SPECIFICATION OF METHODOLOGY

Comment: Commenter IV-D-11 opposed incorporating language specifying any methodology for major source determination; stated that this approach is inconsistent with previous NESHAP where the EPA has left this process up to the States; and requested that section 63.1595 of the proposed rule be deleted.

Response: The EPA has removed procedures for major source determination, and has referred to 40 CFR Part 63, subpart A - General Provisions for the definition of a major source.

3.5 POTENTIAL TO EMIT

Comment: Commenter IV-D-17 recommended that the EPA modify section 63.1595 of the proposed rule to clarify that potential to emit (PTE) is calculated based on actual emissions from wastewater operations plus PTE from ancillary sources at the plant.

Response: The EPA has removed procedures for major source determination, and has referred to 40 CFR Part 63, subpart A - General Provisions for the definition of a major source.

4.0 LEGAL ISSUES

4.1 HAMMER DATE

Comment: Commenter IV-D-03 believed that POTW are not subject to a "hammer" date and that more time should be made available to resolve outstanding technical issues. The hammer section, 112(j)(2) of the Act, references standards pursuant to 112(e)(1) and (3); POTW are referenced in 112(e)(5), which is a stand-alone section.

Response: The EPA disagrees with the commenter. In a Federal Register notice on May 14, 1999, Hazardous Air Pollutants: Regulations Governing Equivalent Emission Limitations by Permit, appearing in 64 FR 26311, the EPA delayed the section 112(j) permit application deadline for 7-year source categories listed in the regulatory schedule until December 15, 1999. The POTW source category was included in the notice.

4.2 COMPLIANCE DATES

Comment: Commenter IV-D-06 stated that existing industrial POTW treatment plants with wastewaters subject to either the Hazardous Organic NESHAP (compliance date of April 22, 1999) or the Pulp and Paper NESHAP (compliance date of April 16, 2001) will have less than three years to comply with the applicable requirements when the POTW NESHAP is final. The commenter proposes that the EPA modify section 63.1585(a) of the proposed rule to allow industrial POTW three years from the date of the final NESHAP to comply with industrial users NESHAP with a compliance date prior to three years from the promulgation date

of the POTW NESHAP. Existing industrial POTW must comply with industrial user NESHAP on the compliance date when it is three years or more after the final date of the POTW NESHAP.

Response: The EPA disagrees with the commenter. Regardless of the requirements in the POTW NESHAP, the requirements of the specific industrial NESHAP(s) (e.g., Hazardous Organic NESHAP) regulating the treatment of the wastewater must be met by the date(s) specified in the industrial NESHAP(s).

4.3 ALLOWANCE FOR USE OF ALTERNATIVE CONTROL METHODS

Comment: Commenter IV-D-17 believed that section 63.1596(b) of the proposed rule requiring the Administrator to amend the subpart for every alternative means of controlling HAP will cause unreasonable delays in the regulated community and discourage development of new technologies to control emissions from POTW. The commenter recommended the EPA modify section 63.1596(b) of the proposed rule to allow the Administrator to approve alternative control methods without amending the regulation.

Response: The EPA has included in the final rule an alternative performance standard in the form of an emission limitation. A POTW may use any combination of pretreatment, wastewater treatment plant modifications, and control devices to achieve this performance standard.

5.0 APPLICABILITY

5.1 FEDERALLY OWNED TREATMENT WORKS

Comment: Commenter IV-D-17 believed that including federally owned treatment works (FOTW) in the list of potentially regulated entities in the preamble of the proposed rule is not consistent with the definition of POTW treatment plant in section 63.1597 of the proposed rule. The definition states that "...a treatment works...is owned by a State or municipality..." FOTW are not owned by a State or municipality, are not, by definition, a POTW, and thus would not be subject to the proposed rule. The commenter recommended that the EPA revise the list of potentially regulated entities in the preamble of the proposed rule to eliminate the implication that FOTW are subject to this regulation.

Response: The EPA believes that FOTW and POTW are essentially the same in design, in operation, and in the types of wastewater that are treated. Regulations developed under the Clean Water Act require FOTW to meet the same requirements as POTW. In addition, the EPA believes that the inclusion of FOTW within the POTW source category is consistent with the intent of the Federal Facility Compliance Act of 1992. Therefore, the definition of POTW has been revised to clarify that FOTW are regulated by this rulemaking.

5.2 STATUTORY REQUIREMENTS

Comment: Commenter IV-D-07 believed that the proposed rule did not meet the requirements of section 112 of the Clean Air Act that requires "...standards to reflect the maximum degree of

reduction in HAP emissions." It did not reflect a strategy to meet maximum achievable control and basically disregarded the entire POTW source category comprised of about 15,600 facilities, many of which are located in or near densely populated urban areas. The commenter believed that any rule establishing MACT requirements for the POTW source category should also consider the requirements of, and the impact on, the overall Urban Air Toxics Strategy also currently under development.

Response: The EPA believes that the requirements of section 112 of the Clean Air Act were met. Based on "data available to the Administrator" the EPA determined the average of the best controlled sources, that average being no control. Further, the EPA recognizes that POTW are listed as a category for regulation under the Urban Air Toxics Strategy, and will be addressed under that authority.

5.3 HAZARDOUS AIR POLLUTANTS OF CONCERN

Comment: Commenters IV-D-10 and IV-D-11 stated that the 76 HAP of concern, listed in Table 1 of the proposed rule, should be determined on a case-by-case basis, and the EPA should defer to the local implementing agencies to establish the list of HAP of concern. In addition, Commenter IV-D-10 opposed the inclusion of naphthalene in the list of 76 HAP of concern and request that it be deleted. Commenter IV-D-18 believed that the list of 76 HAP of concern for POTW is excessive and contains many chemicals (e.g., PCBs, heptaclor) which do not contribute significantly to air emissions and believed that the AMSA list of 29 HAP of concern, identified in their analysis of the EPA's Presumptive MACT for POTW, dated June 8, 1995, should be the HAP of concern in the rule. Commenter IV-D-16 believed that regulation is potentially confusing for POTW that agree to accept pharmaceutical affected wastewater containing methanol for treatment as authorized by section 63.1256(a)(5) of the pharmaceutical production NESHAP. Because methanol is not

included in Table 1 of the proposed POTW MACT, the commenter believes that even if the POTW's potential to emit methanol is greater than 10 tpy, Subpart VVV would not apply to the plant at all. However, the description of an industrial POTW in the proposed rule, (section 63.1583(a)) states that "Your POTW treatment plant is an industrial POTW treatment plant if wastewater treatment at your POTW treatment plant enables an industrial user to comply with the treatment requirements of its own NESHAP." Thus, a POTW accepting an affected pharmaceutical wastewater to provide treatment of methanol could mistakenly believe that it was subject to Subpart VVV because the definition of an industrial POTW appears to be all-encompassing.

Response: The EPA believes that due to Title V, Part 70 determinations, a POTW and its local air pollution regulatory authorities should have agreement on the methods by which the POTW estimates emissions from wastewater treatment operations including identification of HAP of concern for a POTW. Therefore, the EPA has removed the list of HAP of concern from the rule.

Comment: Commenter IV-D-07 believed that in the final regulation, the EPA should consider the application of covers and vents by segmenting the various stages of treatment at the facility to evaluate the feasibility and cost effectiveness of HAP control on an individual process basis. The commenter believed that it is also possible that the final HAP control equipment could be designed to treat multiple streams coming from the various vents within the treatment facility.

Response: No supporting data or information were provided with the comments, therefore the EPA is unable to address the comments at this time.

Comment: Commenter IV-D-08 believed the proposed rule is not clear regarding what existing POTW's must do if they are determined to be a major source.

Response: The EPA believes that the requirements for existing major sources are clear. If a POTW is unclear of its responsibilities under this rule they should contact their regulatory authority for technical guidance, as described in the FOR FURTHER INFORMATION CONTACT section of the preamble to this rule.

Comment: Commenter IV-D-17 believed that since the EPA stated, in Note 2 to section 63.1580(a) of the proposed rule, that a POTW which treats mostly high-strength industrial wastewater can be a major source with a daily flow rate as low as 4.0 million gallons per day, then the EPA is thus suggesting that POTW with an average flow as low as 4.0 million gallons per day are not likely to have sufficient emissions to trigger major source status. The commenter suggested amending section 63.1580(a)(1) of the proposed rule to state "You own or operate a new or existing publicly owned treatment works (POTW) that has an average permitted capacity of more than 4.0 million gallons per day; and..."

Response: The EPA limited the applicability criteria in the final rule to POTW that are required to develop and implement a pretreatment program as defined by 40 CFR 403.8. This effectively eliminates all POTW with a total design flow greater than 5 million gallons per day (mgd), unless special circumstances, as defined in 40 CFR 403.8, require a POTW with a total design flow of 5 mgd or less to implement a pretreatment program.

Comment: Commenter IV-D-19 believed that the proposed POTW NESHAP, as written, would achieve no HAP emissions reduction, and that the EPA should re-evaluate the rulemaking process for the proposed POTW NESHAP. The commenter believed that if POTW emissions are insignificant, then no standards are needed, but if POTW emissions are significant enough to promulgate a standard,

then the standard should achieve a measurable HAP emissions reduction.

Response: The EPA believes that the rule, as written, will achieve emissions reductions from new and reconstructed sources. These emissions reductions may be achieved by pollution prevention, by the addition of control devices, or by the design and operation of a POTW to keep it under the major source criteria.

6.0 MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY FLOOR

6.1 NUMBER OF MAJOR SOURCES

Comment: Two Commenters, IV-D-03 and IV-D-11 questioned the EPA's conclusion that there are 6 major sources. The commenters requested deletion of the sentence stating that only 6 POTW facilities have been identified as potential major sources because they believe the statement is incorrect.

Response: The EPA based its determination of the 6 major sources on information available to the Administrator, engineering judgement, and methodologies described in the preamble of the proposed rule. The EPA acknowledged that there were uncertainties in the estimation of emissions from POTW, and thus the determination of major sources. In addition, the EPA has never disputed the likelihood of additional major sources. However, the EPA maintains that its determination was correct, given the information available.

6.2 MACT FLOOR

Comment: Commenter IV-D-19 believed that most POTW in metropolitan areas have covers and vent the undercover air through air pollution control systems that, although are in place for odor control, reduce HAP emissions, especially if operated correctly. The commenter believed these cover and odor control systems could be considered as a generally available control technology (GACT), applicable to POTW area sources as stipulated in subsection 112(d)(5) of the 1990 Clean Air Act Amendments, and questioned why the proposed MACT is less stringent than the GACT.

Response: Based on data available to the Administrator the EPA determined the average of the best controlled sources to be no control. The average was based on emissions control in place at the best performing facilities. Further, the EPA was unable to identify any information that indicated that covers vented at a high airflow to odor control devices (including granulated activated carbon adsorbers operated as odor control devices) were effective at HAP emissions reduction. On the contrary, all the information available to the Administrator indicated that such control devices were not effective at HAP emissions reduction. No additional information was provided by the commenter to indicate that such control devices are effective at HAP emissions reduction. Therefore, the EPA maintains that their determination of the MACT floor of no additional control for existing POTW treatment facilities was correct.

Comment: Commenters IV-D-08 and IV-D-17 believed that since there are "no control requirements for an existing non-industrial POTW treatment plant" (section 63.1587 of the proposed rule), then the EPA should exclude them from the proposed regulation. Commenter IV-D-01 supported the EPA's conclusion that control measures for existing non-industrial POTW are not appropriate.

Response: The EPA believes that it is necessary to include existing, non-industrial POTW treatment plants in the regulation. Existing POTW that reconstruct must comply with the control requirements for new and reconstructed sources.

7.0 BEST-CONTROLLED SOURCES

7.1 GENERAL PROVISIONS

Comment: Commenter IV-D-03 and IV-D-13 believed it is inappropriate to cause carbon adsorption systems used at POTW to be subject to sections 63.693 through 63.697, since the best-controlled facility in the proposed NESHAP on which the EPA based its MACT floor for new and reconstructed facilities can not comply with these standards (e.g., 95% recovery of total organic HAP, continuous monitoring, tight-fitting covers).

Response: The EPA has included in the final rule an alternative performance standard in the form of an emission limitation. A POTW may use any combination of pretreatment, wastewater treatment plant modifications, and control devices to achieve this performance standard.

7.2 EQUIVALENT BEST-CONTROLLED SOURCE

Comment: Commenter IV-D-04 believed that the emissions control system (biological) at its facility should be recognized as equivalent to the emission control system at the POTW the EPA has selected as the best-controlled non-industrial facility, and should be noted in the preamble and included in the description of the new source MACT floor.

Response: Based on the information submitted by the commenter, their facility provides treatment necessary to comply with the Hazardous Organic NESHAP for several industrial customers in the synthetic organic chemicals manufacturing industry. As such, the commenter's facility meets the definition of an industrial POTW, and would not be considered a non-

industrial POTW. Maximum achievable control technology floor determinations are made separately for each subcategory, and the EPA does not consider equivalency between subcategories. Thus the emissions control system at the commenter's industrial POTW treatment plant would not be considered as equivalent to the emission control system at the POTW the EPA has selected as the best-controlled non-industrial facility.

7.3 BASIS FOR NEW SOURCE CONTROLS

Comment: Commenters IV-D-08, IV-D-10, IV-D-11, and IV-D-12 believed that it is inappropriate for the one treatment plant in California that has installed controls to reduce benzene emissions to be used as the basis for the new or reconstructed source standard. They believed that the plant is unique in its operation, is financed by the refineries that discharge the benzene-containing wastewater, and is not representative of other plants in the industry. They further believed that GAC adsorption units as used at POTW are not effective at reducing HAP emissions and should never become the MACT floor for HAP control.

Response: The controls in place at the best-controlled facility are the MACT floor for new and reconstructed sources, regardless of the reason that the controls were installed. The controls at the one identified best-controlled facility are effective at HAP emissions reduction, as evidenced by the fact that they are monitored for benzene breakthrough, and changed out (or regenerated) when breakthrough occurs. Therefore, the EPA maintains that this facility is the best-controlled facility, and that new and reconstructed facilities must be covered and vented to an equivalent control device. In addition, the EPA has included in the final rule an alternative performance standard in the form of an emission limitation, and allows a POTW to use any combination of pretreatment, wastewater treatment plant

modifications, and control devices to achieve this performance standard.

8.0 INDUSTRIAL SOURCES

8.1 WRITTEN CERTIFICATION

Comment: Several commenters expressed a concern that it is important for the proposed rule to contain a requirement for industries intending to discharge wastewater, regulated under another NESHAP, to a POTW for treatment to provide a written certification of their intent to use the POTW to comply with the wastewater treatment requirements of their industrial NESHAP. This formal certified agreement would prevent regulated POTW treatment plants from being designated as industrial POTW without their knowledge. In addition, Commenter IV-D-05 suggested the EPA amend existing and future NESHAP with wastewater provisions to require the industry to notify the affected POTW of their plans to discharge to the POTW.

Response: Most NESHAP (e.g., the Hazardous Organic NESHAP) regulating wastewater emissions contain, or will contain, requirements that the industries notify the POTW if they intend to use them for compliance. The Benzene Waste Operations NESHAP, the first NESHAP to address off-site emissions, does not require notification. Though the EPA is aware of only one POTW providing off-site treatment of benzene wastes, if the EPA dedides to amend the Benzene Waste Operations NESHAP, the EPA will consider adding a notification requirement.

8.2 INDUSTRIAL POTW IDENTIFIED

Comment: In the preamble of the proposed rule, the first sentence of the fourth paragraph under section III states that "...the EPA is not at this time aware of any instance where an

industrial user uses a POTW treatment plant to comply with emission reductions required by any other NESHAP..." Commenter IV-D-04 identified their facility as an industrial POTW providing treatment necessary to comply with the Hazardous Organic NESHAP (HON) for several customers. The regulated wastewater is conveyed to the facility in a closed sewer system and the facility uses enhanced biological treatment to provide removal of HAP.

Response: No response necessary.

9.0 NEW AND RECONSTRUCTED SOURCES

Comment: Commenter IV-D-11 believed that the term "new source" as used in the definition of "reconstruction" in section 63.1597 of the proposed rule could be interpreted to mean a new process unit rather than an entire new plant. Thus, if a POTW reconstructs or replaces a process unit and the cost exceeds 50% of the cost to construct a new comparable process unit then the facility would be required to implement new source MACT. The commenter suggested that reconstruction be viewed from a facility-wide basis rather than an equipment or a process unit basis.

Response: The term "new source" is not defined in this rule, rather the rule references 63.1(a)(1) of the General Provisions to define terms not defined in this rule, including "new source." In 40 CFR 63 "new source" means "any affected source the construction or reconstruction of which is commenced after the Administrator first proposes a relevant emission standard under this part." The term "affected source" is defined in this rule as "the group of all equipment that comprise the POTW treatment plant." Thus by definition new source means the POTW treatment plant rather than an individual process unit.

10.0 REPORTING AND RECORDKEEPING REQUIREMENTS

Comment: Commenter IV-D-01 recommended that the EPA amend the NESHAP for POTW and corresponding provisions in regulations promulgated under the Clean Water Act (e.g., NPDES, Combined Sewer Overflow and Pretreatment programs) to allow existing major source POTW to incorporate their Title V reporting requirements with their reporting requirements pursuant to the Clean Water Act, leaving it up to the States to coordinate the necessary exchange of information internally.

Response: Though the comment appears to have merit, revisions to the Title V permit program are outside the scope of this rulemaking.

Comment: Commenter IV-D-03 requested clarification of whether the notification of compliance status, in section 63.1591(a) of the proposed rule, applies to all major source POTW, just to those whose major source status is determined by means other than WATER8, or just to those whose major source status is determined solely by WATER8.

Response: The notification of compliance status applies to all major sources of HAP emissions.

Comment: Commenter IV-D-08 believed that, although it is clear that a POTW must notify the State or the EPA that it is a major source, it is not clear how this information would be used.

Response: No response is necessary.

Comment: Commenter IV-D-10 believed that the statement in the preamble of the proposed rule "You do not have to apply for a title V permit..." is not universally correct. A facility may

be a title V facility because of criteria pollutant emissions.

Response: The referenced statement has been removed from the regulation.

11.0 ECONOMIC IMPACTS

11.1 RECORDKEEPING AND REPORTING

Comment: Commenters IV-D-01 and IV-D-03 believed that the cost of reporting and recordkeeping would exceed the EPA's estimate of 41 hours per year per facility.

Response: There are no reporting or recordkeeping requirements for existing non-industrial POTW treatment plants. Any reporting and recordkeeping requirements for industrial POTW treatment plants are those that are required by the industrial NESHAP, thus this rule requires no additional reporting and recordkeeping requirements. Based on information available to the Administrator, it is likely that no new or reconstructed POTW treatment plants will meet the definition of major source, thus, it is likely that there will be no reporting or recordkeeping requirements for new or reconstructed sources. Further, the commenters did not provide any additional information that supports their claim that the cost of reporting and recordkeeping would exceed 41 hours per year per facility. Thus the EPA believes that its reporting and recordkeeping cost estimates are correct.

11.2 COSTS OF CONTROL

Comment: Commenter IV-D-03 stated that the benzene control program at the facility in the proposed NESHAP on which the EPA based its MACT floor for new and reconstructed facilities costs $750,000 per year shared among multiple refineries. Costs per ton of benzene controlled range between 1.2 and 1.5 million

dollars per ton removed. Commenter IV-D-03 is concerned that the MACT analysis for non-industrial new or reconstructed POTW never considered the cost of control using GAC, potentially in excess of 1 million dollars per ton HAP removed. Commenter IV-D-10 stated that investigations regarding more cost-effective alternative control options must address the benefits and costs of the potential MACT standards being considered for the wastewater collection system, including review and consideration of consumer products. Commenter IV-D-10 stated that to install and operate GAC for the purpose of reducing HAP emissions would cause the technology to be cost-prohibitive for reducing HAP.

Response: The EPA is bound by section 112(d)(3) of the Clean Air Act that states "The maximum degree of reduction in emissions that is deemed achievable for new sources in a category or subcategory shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source, as determined by the Administrator." In addition, the EPA has provided an alternative control means in the final rule that allows the POTW to use any means available to achieve the required emissions reduction.

11.3 RECONSTRUCTION REQUIREMENTS

Comment: Commenter IV-D-12 believed that the aggregate reconstruction requirements for one of its POTW may well exceed the $100 million threshold for triggering the requirements of the Unfunded Mandates Act. The commenter's consultants have preliminarily estimated the cost of reconstruction of one of its POTW to be in tens of millions of dollars if the plant is required to implement the proposed MACT requirement.

Response: The commenter did not provide sufficient supporting data to substantiate their claim that the cost of reconstruction as a result of the requirements of this rule would exceed the threshold for triggering the requirements of the

unfunded mandates. The EPA continues to believe the Unfunded Mandates Act do not apply to this action.

Comment: Commenter IV-D-12 stated that it is likely that reconstructions (exceeding the EPA's 50% capital cost threshold) of several of the commenter's POTW will occur over the next 5 years. The commenter is planning a major upgrade to one of its plants that may likely fall under this category. Moreover, it has been the commenter's experience, over the last 30 years, that every 15-20 years major reconstruction of POTW has been necessary to keep up with population, community, and industrial demands as well as federal Clean Water Act requirements. The statement that industrial user fees would likely cover the costs of the air pollution controls presumes that the major source of the HAP are from industrial users. In New York City, the majority of HAP is not the result of industrial sources. Thus, at least with respect to New York City, the commenter believed that charging a small number of industrial users who are not the primary source of HAP millions of dollars to recover the cost of the MACT is not a reasonable proposal.

Response: The EPA has removed the language that refers to user fees from the regulation.

12.0 MAJOR SOURCE DECLASSIFICATION AND EXEMPTION

12.1 DECLASSIFICATION

Comment: Commenter IV-D-11 stated that there are no provisions in the proposed rule that would allow a POTW to seek declassification as a major source if its HAP emissions potential fell below the major source threshold. The commenter believed that the potential to be declassified as a major source would be a powerful incentive to reduce HAP emissions. Commenter IV-D-11 recommended that the final rule provide a mechanism for a major source to apply for declassification as a major source once the facility's emissions fall below the major source criteria.

Response: The criteria for major source determination is very clear in 40 CFR 63, subpart A - General Provisions. If a POTW that is a major source falls below the major source threshold, then it is, by definition, no longer a major source.

12.2 EXEMPTION FOR INDUSTRIAL WASTEWATER SOURCES

Comment: Commenter IV-D-04 requested that the EPA include a provision that will exempt a POTW from the POTW MACT standards if the POTW's industrial users are achieving the applicable MACT standards at their plants and the contributions from these controlled sources are the reason that the POTW is a major source. The commenter noted that Part 63 Subpart DD (Off-site Waste and Recovery Operations NESHAP) incorporates provisions for these facilities that are identical to those the commenter is requesting for the POTW MACT rule. The commenter requested that not only should similar language be included in the POTW MACT, but that it should be extended to include other applicable MACT

rules with wastewater provisions including Part 63 Subparts S, CC, DD, JJJ, and GGG. The commenter requested that the exemption should be more generic than what is currently in Subpart DD because of the forthcoming miscellaneous organic chemicals NESHAP and other similar rules so that it does not have to be amended in the future.

Response: The EPA disagrees. If a POTW has HAP emissions sufficient to cause it to be a major source, regardless of the origin of the HAP that are emitted, then it must meet the requirements of this rule.

12.3 REQUESTED EXEMPTION FOR SOME INDUSTRIAL POTW

Comment: Section 63.1584(b) of the proposed rule states that "The emission points and control requirements for a new or reconstructed industrial POTW treatment plant...are...specified in the appropriate NESHAP(s) for the industrial user(s), or in section 63.1587 of the proposed rule, whichever is more stringent." Commenter IV-D-04 requested that the POTW MACT regulation include provisions for control options for new or reconstructed industrial POTW that either have no primary treatment units or that bypass such units (e.g., by piping directly to the activated sludge units in closed sewers) with industrial wastewater regulated by another NESHAP, rather than require cover and control of primary treatment units which do not receive or treat the HAP-containing wastes and therefore are not the potential major source emission sources at the facility. The commenter proposed an addition to the POTW MACT that would exempt a POTW from the cover and control requirements of section 63.1587 of the proposed rule "if the wastewaters that are the cause for the POTW being a major source of HAP are sent directly to biological treatment."

Response: The EPA has included in the regulation alternatives to the requirements for new industrial POTW treatment plants. These alternatives allow a POTW to comply by

demonstrating, for all units up to the secondary influent pumping station, or the secondary treatment units, that the overall fraction emitted does not exceed 0.014. The POTW may use any combination of pretreatment, wastewater treatment plant modifications and control devices to achieve this performance standard. One wastewater treatment plant modification could be to bypass the primary treatment units so that the HAP-bearing wastewater is introduced directly into the secondary treatment units.

13.0 CLARIFICATIONS AND DEFINITIONS

13.1 CLARIFICATIONS

Comment: The preamble of the proposed rule states that "...volatilization of HAP may occur in the wastewater collection system prior to reaching the POTW treatment plant." Commenter IV-D-03 advised that, in addition to volatilization of HAP in the wastewater collection system, biodegradation and adsorption of organics onto solid particles in sewage also occurs, albeit to a lesser degree due to the lower biota concentrations.

Response: The referenced language has been removed from the preamble to the regulation.

Comment: Commenter IV-D-02 believed that in section 63.1595(a)(1) of the proposed rule the parenthetical statement "e.g., a sewage sludge incinerator" incorrectly implies that all sewage sludge incinerators are major sources of HAP.

Response: The referenced statement has been removed from the regulation.

Comment: Commenters IV-D-03 and IV-D-11 stated that the word "waste" in sections 63.1587(a) and (b) of the proposed rule should be changed to "wastewater".

Response: The term "waste" has been removed from the referenced sections.

Comment: Commenter IV-D-03 stated that in addition to processes that remove nutrients such as nitrogen and phosphorous, as stated in the description of POTW in the preamble of the proposed rule, "advanced treatment" can also refer to enhanced solids removal.

Response: The referenced language has been removed from the regulation.

Comment: Commenter IV-D-10 stated that rather than "The HAP emitted by POTW originate in wastewater streams discharged by industrial, commercial, and other facilities to the POTW for treatment," as stated in the preamble of the proposed rule, the statement "The primary function of a POTW is to treat suspended solids, BOD, etc. in wastewater. Any beneficial removal of HAP is incidental." should be used.

Response: The EPA disagrees with the commenter. The referenced language in the preamble describes the origins of HAP that may eventually be emitted from POTW, not the function of a POTW.

Comment: Commenter IV-D-02 stated that "POTW" should not be followed by the words "treatment plant", as it is redundant. Conversely, Commenter IV-D-03 believed that the definitions contained in section 63.1597 of the proposed rule for POTW Treatment Plant and POTW are clear, and indicated that the focus of the proposed regulation was on emissions from the confines of the sewage treatment plant.

Response: The EPA disagrees with the belief that the term "POTW treatment plant" is inappropriate. The term was specifically crafted to provide a distinction between a specific set of wastewater treatment processes at a POTW and the entire POTW. The terms "POTW" and "POTW treatment plant" are clearly defined in the regulation.

Comment: Commenters IV-D-03 and IV-D-11 stated that the term "separator wall" in section 63.1587(a) of the proposed rule has no meaning in the wastewater industry.

Response: The regulation now uses the term "supporting wall" rather than "separator wall."

Comment: Commenter IV-D-05 suggested eliminating the term "secondary influent pumping station" and replacing it with the

term "through primary treatment" which may be a more generally understandable equivalent description.

Response: The regulation now reads “for all units up to the secondary influent pumping station, or the secondary treatment units.”

Comment: Commenter IV-D-11 requested that the EPA clarify its intentions on whether the headworks of a new plant would have to be similar to the best-controlled plant, identified in the proposed rule, in order to incorporate covering of bar screens, wet wells, etc.

Response: The EPA did not define headworks in the proposed rule. The regulation specifies that the "emission points are treatment units that include, but are not limited to, influent waste stream conveyance channels, bar screens, grit chambers, grinders, pump stations, aerated feeder channels, primary clarifiers, primary effluent channels, and primary screening channels." It is the EPA's intention that the preliminary waste water treatment and handling processes (typically grit chambers, bar screens, wet wells, etc.) are covered and controlled in the same manner as the best-controlled plant. The EPA does not believe any further clarification is necessary in the regulation.

13.2 DEFINITIONS

Comment: Commenter IV-D-01 recommended that pass-through be redefined in the regulations promulgated pursuant to the Clean Water Act, particularly in the Pretreatment program, to include air emissions as well as impacts on POTW and effluent.

Response: The General Pretreatment Regulations for Existing and New Sources of Pollution (40 CFR 403) define the term "Pass Through" to mean "a discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a

violation)." The EPA does not believe it is necessary to redefine the term.

Comment: Commenter IV-D-02 believed the term "Industrial POTW" should be replaced with the term "a POTW which treats waste for an industry which would be subject to a Part 63 Standard is also subject to that (the Part 63) standard."

Response: The EPA disagrees with the commenter and believes that the term "Industrial POTW" as defined in the regulation sufficiently and accurately describes an industrial POTW.

14.0 NEW AND RECONSTRUCTED SOURCES

Comment: Commenter IV-D-19 believed that it is unlikely that any new POTW would be large enough to trigger the major source thresholds or that any expansion of existing POTW would trigger the reconstruction threshold, since POTW typically start small and then expand gradually as the population in their service area grows. The commenter believed that the standard for a new source should be applicable to any addition of new trains/tanks in the existing major POTW and should include some numerical performance requirements.

Response: The definition of reconstruction is consistent with the 40 CFR 63 Subpart A General Provisions. In addition, section 63.693, which applies to new and reconstructed sources, requires specific numerical performance requirements for control devices at new and reconstructed sources. The EPA has also added an alternative, performance-based, numerical standard by which a POTW may demonstrate compliance with the standards.

Comment: Commenter IV-D-07 agrees with the EPA's finding that the granulated activated carbon (GAC) adsorption units currently in use at POTW for odor control are ineffective at HAP emissions reduction, and that they could be properly designed and operated to serve a multiple function of both odor and HAP control. Further, commenter IV-D-07 believed that within the air pollution control industry, the technology exists to collect, concentrate, and oxidize HAP emissions from POTW facilities, and that the EPA acknowledged this in the preamble of the proposed

rule by stating that properly designed and operated GAC are effective at HAP emissions reduction.

Response: No response necessary.

Comment: Commenter IV-D-19 believed that the proposed standard would not result in any HAP emissions reduction from new or reconstructed facilities because it only required them to install some covers and control system and does not impose any performance requirements.

Response: The regulation requires that control devices used to control HAP emissions from new or reconstructed non-industrial POTW treatment plant comply with section 63.693, which places performance requirements on the control device.

Comment: Commenter IV-D-18 stated that, with regard to the MACT and covering of the primary clarifiers, their modeling determined that the primary clarifiers represented a small percentage of the total emissions. At their facilities where trickling filters are present, those units are the highest single source of emissions. Due to the high cost and minimal effectiveness associated with covering primary clarifiers, the commenter stated that the EPA should make provisions to control HAP emissions from areas which are most effective and most economical.

Response: The commenter did not provide sufficient data for the EPA to address the comment. During the MACT floor determination, no controls were identified at trickling filters at major source POTW.

Comment: Commenter IV-D-08 believed the treatment method should depend specifically on whether a plant is dealing with a single HAP or a combination of HAP, because the effectiveness of treatment or control technologies (e.g., activated sludge diffusion, biofilters, ozone scrubbers, pretreatment at the source, or GAC) will depend on the physical/chemical characteristics of the specific HAP. Commenter IV-D-10 requested

that the EPA continue to investigate the factors which result in substantial differences between facilities, such as discharge profiles, benefits of existing environmental regulations (i.e., air quality controls, pretreatment programs, water quality regulations, etc.), treatment capacity, etc., in establishing a MACT floor.

Response: The MACT floor was based on information available to the Administrator at the time of this rulemaking. The information was provided by the primary organization representing the POTW industry (AMSA). The commenter provided no data to suggest the MACT floor would be different.

Comment: Commenter IV-D-12 believed that the use of granulated activated carbon adsorption devices to achieve a 95% control efficiency for the low concentrations of organic compounds will not be cost-effective and technologically feasible. If GAC adsorption control devices are required as a MACT floor for new and reconstructed POTW, the commenter recommended that the EPA allow, as an alternative to the 95% total HAP removal requirements, a site-specific operation-based standard and/or a technologically achievable total HAP emissions standard.

Response: The EPA has included in the regulation an alternative performance standard in the form of an emission limitation. A POTW may use any combination of pretreatment, wastewater treatment plant modifications, and control devices to achieve this performance standard.

Comment: Commenters IV-D-03 and IV-D-11 stated the requirement for minimal ventilation (e.g., at or near zero) at new and reconstructed POTW treatment plants, as stated in section 63.1587(c) of the proposed rule, was contrary to the way many POTW are designed and operated. Routine maintenance requires frequent personnel entry and, if the units were not highly ventilated, entry by personnel would constitute a confined space

entry. The commenters believed that section 63.1587(c) of the proposed rule should be removed or changed to read: "If a treatment unit is not equipped with a closed-vent system and control device, it must be designed to operate with minimal ventilation of the air space under the cover to reduce air emissions while still providing adequate ventilation to comply with other regulatory requirements that govern ventilation of the process and provide safe access to the process for plant personnel."

Response: The referenced language has been removed from the regulation.

Comment: Commenter IV-D-12 believed that the definition of a reconstructed source is not clear and that the rule should specify what constitutes the beginning of construction. The definition does not establish a time frame in which the 50% replacement cost must occur (e.g., 0-5 years after promulgation of the rule) and the criteria to be used to evaluate technical and economic feasibility. Also, if the reconstruction consists of various phases and tasks over several years, how is the 50% replacement cost determined? Are different phases of construction on different emission sources considered separate reconstruction projects subject to the 50% replacement cost determination? The commenter believed that the time frame and feasibility must be clearly defined so that a POTW can determine whether MACT is applicable for present and future upgrades at its POTW treatment plants.

Response: Reconstruction is clearly defined in 40 CFR 63 General Provisions which are incorporated by reference in the regulation.

15.0 INDUSTRIAL PUBLICLY-OWNED TREATMENT WORKS

Comment: Commenter IV-D-11 stated that section 63.1584 of the proposed rule states that the emission points and control requirements for an existing industrial POTW treatment plant are those specified in the appropriate NESHAP(s) for the industrial user, and questioned what happens if the emissions points which are defined in the specific NESHAP are not comparable to the emission points in the POTW treatment plant, and recommended that the issue be clarified by the EPA.

Response: The EPA believes that the emission points and control requirements specified in industrial NESHAP allowing off-site treatment of wastewater will be conducive to comparison to treatment processes at POTW. In the event they are not, the local regulatory agency will have the authority to determine the appropriate emissions points and control requirements.

16.0 SOLICITATION OF COMMENTS

Comment: Commenter IV-D-01 noted that the definition of POTW does not include the collection system where the collection system is a combined system, and recommended that some language qualifying that the exclusion applies only where the definition includes the collection system.

Response: The definition of POTW does not exclude combined collection systems.

Comment: Commenter IV-D-03 submitted information on the design of sewers. The commenter also believed that if the EPA considers including collection systems in the final regulation, then the EPA should be aware that in many cases the POTW and the associated collection systems may not be owned by the same political entity. Commenter IV-D-03 also believed that the selective absorption of the volatile organic compounds (VOC) into the oils and greases that are an integral part of sewage and the resulting attenuation of VOC emissions are significant and should be subject to further evaluation. Commenter IV-D-06 provided information on industry trends to reduce or eliminate HAP emissions and Commenters IV-D-06 and IV-D-09 provided information on industry trends in industrial HAP discharges via wastewater. Commenter IV-D-10 believed that it is premature for the EPA to propose MACT standards for wastewater collection systems due to a lack of HAP emissions data and evaluation of the feasibility and cost-effectiveness of controlling HAP emissions from collection systems. The commenter believed that the EPA must investigate the benefits of regional environmental regulations, such as

aggressive pretreatment programs or the California South Coast Air Basis's transition to water-based solvents as an air quality control measure, on reducing HAP emissions from wastewater collection systems. The commenter urged the EPA to work with AMSA to assess the technical feasibility and cost-effectiveness of available control technologies. Commenter IV-D-11 believed that it is premature for the EPA to propose MACT emissions standards for wastewater collection systems due to a lack of HAP emissions data and evaluation of the practicality of such standards. Commenter IV-D-11 stated that source control is the best method for reducing HAP emissions from sewers. Commenter IV-D-11 also made the following points concerning pretreatment: (1) since the proposed MACT for existing sources is no control, pretreatment should not be considered as a control for existing sources but could be used as a control option in lieu of covers at new sources; (2) pretreatment is a pollution prevention measure, and as such, is a higher order control technology than add-on control devices; (3) the estimated efficacy and cost of pretreatment can vary significantly among facilities due to facility-specific conditions; and (4) many facilities' pretreatment programs are advanced and very effective, thus there may be little or no potential for further emissions reduction. Commenter IV-D-14 agreed with the EPA that HAP emissions from wastewater collection systems could be significant, and that for certain POTW, pretreatment could reduce HAP emissions from both the collection system and the POTW treatment plant. Commenters IV-D-12 and IV-D-18, although unable to provide sufficient data to demonstrate the effectiveness of pretreatment as an alternative control for HAP emissions supported the pretreatment concept and believed that it could be an additional means of control to reduce HAP emissions from POTW. In addition, Commenter IV-D-08 believed that pretreatment or pollution prevention at the source are the preferred methods for reducing

HAP emissions from POTW treatment plants. Commenter IV-D-14 believed there is more evidence regarding HAP emissions from sewers than is reflected in the proposed rule package, and that the evidence indicates that large fractions of volatile HAP are emitted from wastewater upstream of treatment plants. Commenter IV-D-14 provided a list of publications generated by his research team to support any future assessment of municipal sewers as sources of HAP emissions.

Several commenters provided information on pretreatment, as requested in the proposal. Commenter IV-D-09, IV-D-11, and IV-D-15 supplied quantitative data and/or qualitative information on their pretreatment programs. This information included historical HAP influent monitoring data; details of pretreatment programs that were successful at reducing HAP loadings to POTW; actual costs of implementing and operating effective pretreatment programs; data on observed trends in industrial HAP discharges via wastewater; and estimated costs of controlling HAP emissions through pretreatment. This information generally indicated that pretreatment programs were effective at reducing HAP loading to, and presumably HAP emissions from, POTW. In addition, Commenter IV-D-03 expressed interest in designing, with the EPA's cooperation, a pilot study to gauge the effectiveness of additional pretreatment so that measurable parameters can be obtained.

Response: Sufficient information is not currently available to the Administrator to require MACT controls on HAP emissions from collection systems. The information supplied by the commenters has been placed in the docket, and will be considered at such time as the EPA decides to develop regulations for collection systems.

Comment: Commenter IV-D-05 recommended that the EPA adopt pretreatment limits to reduce HAP emissions at POTW and believed that by using the existing pretreatment program of the Clean

Water Act the EPA could direct its efforts upstream at the original source of the HAP and more effectively reduce HAP emissions from POTW. Commenter IV-D-05 urged the EPA to add this objective to the current list of objectives found in the General Pretreatment Regulations (40 CFR 403). Commenter IV-D-09 stated that the responsibility for HAP emissions should remain with the industrial discharger by NESHAP requiring zero or minimal discharge of HAP to the sanitary sewer system, and not regulated by the industrial pretreatment programs at POTW.

Response: Sufficient information is not currently available to the Administrator to require pretreatment as a HAP emissions control method for POTW. Information submitted in response to solicitation in the POTW proposal has not provided sufficient data to allow promulgation of a rule requiring pretreatment as a control method.

Comment: Commenter IV-D-07 believed that, although the EPA stated in the preamble to the proposed regulation that AMSA recommended pretreatment as the preferred method for reducing HAP emissions from POTW, the EPA should develop cost analysis information to create guidelines for determining the economic viability of add-on control technology vs. pretreatment for facilities within this source category.

Response: The EPA is not requiring pretreatment to control HAP emissions from POTW treatment plants, rather it is mentioned as an example of a possible alternative control methodology. The EPA does not develop cost analyses for all possible control alternatives.

Comment: Commenter IV-D-10 provided general examples of pretreatment programs that they have instituted and, although the overall effectiveness of these programs in reducing HAP loading to POTW has not been evaluated, they believe such programs are effective at HAP emissions reduction. The commenter believed that the benefits associated with existing programs such as these

should be recognized and accommodated by any MACT standard proposed for collection systems. Further, commenter IV-D-10 (1) recommended that the EPA investigate HAP source reduction programs at the consumer level, such as educating the public about consumer products which contain HAP and reducing their uses; (2) requested that the regulation of VOC content of products discharged into the collection system be considered as an alternative control strategy to establishing a MACT standard for wastewater collection systems; and (3) recommended that the EPA consult with the California Air Resources Board which has promulgated regulations for consumer products.

Response: Under the alternative performance standard, new or reconstructed POTW can reduce emissions using source reduction.

Comment: Commenter IV-D-19 believed pretreatment of industrial wastewater to minimize HAP prior to discharging to the sewer would be the most sensible and effective measure for controlling toxic emissions from both sewer collection systems and POTW treatment plants. However the commenter did not believe that the industry would provide sufficient data on pretreatment, and that the EPA should request all POTW to report their existing pretreatment limitations on industrial dischargers of any of 118 HAP. The commenter believed that, from these data, the EPA could establish the MACT floor and emissions standards for the POTW pretreatment program.

Response: The EPA agrees with the commenter that pretreatment would be an effective means for controlling HAP emissions from both collection systems and POTW treatment plants. The EPA has reviewed all available data and was unable to determine a MACT floor based on pretreatment permit limitations. If sufficient data characterizing HAP emissions reduction as a result of pretreatment programs become available, the EPA will review the data and amend the rule as necessary and appropriate.

17.0 MISCELLANEOUS COMMENTS

Comment: Commenter IV-D-02 liked the "plain language" format of the proposed rule.

Response: No response necessary.

Comment: Commenter IV-D-10 recommended that the rule use the units "lb/yr" or "ton/yr" rather than "megagrams/year".

Response: The EPA is required to use metric units.

TECHNICAL REPORT DATA

(Please read Instructions on reverse before completing)

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16. ABSTRACT

This document contains a summary of public comments received on the NESHAP for Publicly Owned Treatment Works (40 CFR 63, subpart VVV). This document also provides the EPA's response to comments, and outlines the changes made to the regulation in response to comments received.

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Environmental Protection, Air Pollution Control, Air Emissions Control, Federally Owned Treatment Works, Hazardous Air Pollutants, Hazardous Substances, Industrial Publicly Owned Treatment Works, Publicly Owned Treatment Works, Reporting and Recordkeeping Requirements	Hazardous air pollutants	

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