

**National Emission Standards for Hazardous Air Pollutants:  
Site Remediation  
(40 CFR 63 subpart GGGGG)**

**Response to Public Comments on Proposed Amendments**

U.S. Environmental Protection Agency  
Office of Air Quality and Standards  
Sector Policies and Programs Division  
Research Triangle Park, NC 27711

September 29, 2006

## TABLE OF CONTENTS

1.0 INTRODUCTION .....	1-1
2.0 RESPONSE TO COMMENTS ON PROPOSED AMENDMENTS .....	2-1
2.1 Rule Applicability .....	2-1
2.1.1 Rule Definitions .....	2-1
2.1.2 Major Source Applicability Determination .....	2-2
2.1.3 Applicability Determination for Remediation Sites at Oil and Natural Gas Facilities Subject to Clean Air Act Section 112(n)(4) .....	2-2
2.1.4 Annual 1 Mg Site Remediation Applicability Exemption .....	2-3
2.2 Short-Term Site Remediation Exemption (30-day) .....	2-5
2.3 Air Emission Control Requirements .....	2-9
2.3.1 Point of Determination of Remediation Material VOHAP Concentration ..	2-9
2.3.2 Requirements for Remediation Material Management Units .....	2-10
2.4.3 Requirements for Equipment Leaks .....	2-10
2.3.4 Requirements for Process Vents .....	2-11
2.4 Compliance Requirements .....	2-11
2.4.1 Requirements for Remediation Material Sent Offsite .....	2-11
2.4.2 Startup, Shutdown, and Malfunction Plan (SSMP) Requirements .....	2-11
2.5 Other Comments .....	2-12
2.5.1 Including Methyl Ethyl Ketone as a HAP in Subpart GGGGG Table 1 ...	2-12
2.5.2 Rule Editorial Corrections .....	2-12

## 1.0 INTRODUCTION

Site remediation typically consists of clean-up activities to remove pollutants from soils, sediments, and groundwater. The U.S. Environmental Protection Agency (EPA) promulgated National Emission Standards for Hazardous Air Pollutants (NESHAP) to control organic hazardous air pollutant (HAP) emissions from site remediation activities under 40 CFR 63 subpart GGGGG (68 FR 58172, October 8, 2003). On May 1, 2006, EPA proposed amendments to the rule (71 FR 25531). A 60-day period was provided to accept public comments on the proposed amendments to subpart GGGGG. The EPA received comments from a total of 12 commenters regarding the proposed amendments.

Table 1 lists the names of the commenters, their affiliations, and the comment docket number for each set of the comment received regarding the proposed amendments. Copies of each of the comments submitted to EPA are available in the public docket for the rulemaking (Docket ID No. EPA-HQ-OAR-2002-0021) either electronically through [www.regulations.gov](http://www.regulations.gov) or in hard copy at the EPA Air & Radiation Docket Office in Washington DC (EPA/DC, EPA West, Room B102, 1301 Constitution Ave., NW, Washington, DC). The following section presents responses to the substantive public comments on proposed amendments by topic category.

**Table 1. Public Commenters on Rule Proposal (71 FR 25531)**

Public Docket EPA-HQ-OAR-2002-0021 Docket Entry No.	Commenter Name, Affiliation, Address, and Date
0035	Jason E. Farmer Project Manager Earth Tech (no address provided) May 10, 2006
0036	Unidentified commenter
0037	Mike Waller Environmental Engineer Ashworth Leininger Group 199 East Thousand Oaks Blvd. Thousand Oaks, CA 91360 June 28, 2006
0038	Rich Raiders Environmental and Sustainable Development Department Arkema, Inc. 900 First Avenue King of Prussia, PA 19406 June 28, 2006
0039	Matthew Todd Regulatory Analyst American Petroleum Institute 1220 L Street NW Washington, DC 20005-4070 June 30, 2006
0040	W. H. Lane (no address provided) June 30, 2006
0041	Leslie Sur Ritts Counsel to NRDA/CAP National Environmental Development Association's Clean Air Project (NEDA/CAP) 555 13th Street NW Washington, DC 20004 June 30, 2006
0042	David O. Plunkett Technical Specialist Operations Regulatory Management The Dow Chemical Company 2301 N. Brazosport Blvd., Bldg. B-101 Freeport, TX 77541 June 30, 2006

Public Docket EPA-HQ-OAR-2002-0021 Docket Entry No.	Commenter Name, Affiliation, Address, and Date
0043	Leslie A. Hulse Assistant General Counsel American Chemistry Council 1300 Wilson Blvd. Arlington, VA 22209 June 30, 2006
0044	Mary Crocket Deputy Director Alaska Oil and Gas Association 121 W. Fireweed Lane, Suite 207 Anchorage, AK 99503-2035 June 30, 2006
0045	Janet Bounds Senior Environmental Scientist Union Oil Company of California P.O. Box 196247 Anchorage, AK 99519-6247 June 30, 2006
0046	Frederick G. Fedri Corporate HES Air Quality Specialist Occidental Chemical Corporation 5505 LBJ Freeway, Suite 2200 P.O. Box 809050 Dallas, TX 75380-9050 June 30, 2006
0047	Kerry Kelly Director, Federal Public Affairs WM Waste Management, Inc 701 Pennsylvania Ave., NW, Suite 590 Washington, DC 20004 July 25, 2006

## 2.0 RESPONSE TO COMMENTS ON PROPOSED AMENDMENTS

### 2.1 Rule Applicability

#### 2.1.1 Rule Definitions

**Comment:** Several commenters (0039, 0044) stated that the subpart GGGGG definition of “site remediation” is not clear whether emergency responses to spills and the contemporaneous mitigation activities to inhibit environmental impact of spills are “site remediations” and, consequently, subject to requirements under the rule. The commenters stated that including activities such as the containment, recovery and disposition of free product and initial efforts to remove soil to stop further migration of the pollutant need to be conducted expediently as “site remediations” will put severe disincentives on sources trying to actively respond to emergency situations in a timely manner. It is infeasible for emergency response activities to incorporate all of the control measures required by the rule, since such response activities are usually characterized by rapid deployment of equipment and personnel, and use of equipment to store recovered product that may not be amenable to vapor containment. One of the commenters (0039) stated that emergency response and contemporaneous spill clean-up activities that are conducted under a federal regulatory regime (such as OPA removal action or other similar authorities) or equivalent state authority are not site remediations. Another commenter (0044) recommended modifying the definition of “site remediation” to exclude source control, contaminant, product recovery, or other activities performed during emergency spill responses. The term “emergency spill response” could be defined as any activity that occurs as a result of material or product release prior to assessing a site for the extent of contamination in preparation for a site remediation.

**Response:** Comment does not pertain to the amendments proposed for subpart GGGGG.

**Comment:** One commenter (0041) stated that the subpart GGGGG definition of a “remediation material” it is not clear whether waste material generated from the cleanup of process leaks in contained areas such as buildings or containment dikes is included under this definition. The commenter stated that manufacturing operations often experience small drips and leaks of material such as fuel oil or process liquids from pumps and connectors. Many of these leaks occur in areas that are contained, such as inside a building or within a concrete containment dike, and therefore do not present any risk of contaminating environmental media. Equipment operators or maintenance staff generally clean up these leaks immediately upon occurrence or soon after as part of their normal daily manufacturing and maintenance activities. In many cases, cleanup of these small spills is often necessary in order to repair the leaking equipment. The commenter requested that materials generated from such cleanup activities should be exempt from the rule as “waste or residue generated by routine equipment maintenance activities.” The reasons presented by the commenter for the exemption are: 1) the administrative burden of having to track and quantify numerous small, process-related cleanups outweighs the very small potential reduction in HAP emissions that might arise from including these materials in the rule’s definition of “remediation materials”; 2) application of the rule to these materials is not consistent with EPA’s intent for the rule to address emissions from

remediation of contaminated media and also from remediation of materials that pose a reasonable potential threat to contaminating environmental media; and 3) it is not practical to assume these activities could be addressed by the 30-day exemption. The commenter recommended that the definition of “remedial materials” be modified to clarify that the definition does not include wastes generated by cleanup of small, process-related leaks and spills from process equipment or manufacturing operations.

**Response:** Comment does not pertain to the amendments proposed for subpart GGGGG.

### ***2.1.2 Major Source Applicability Determination***

**Comment:** One commenter (0039) requested clarification on determination of major source applicability for subpart GGGGG at a facility where the contaminated area and remediation activities are owned and operated by a third party other than the facility owner or operator. The commenter asked if the third party calculates HAP emissions for its operations separate from the facility’s HAP emissions. The commenter referenced a letter submitted to EPA on June 14, 2004 requesting clarification on this issue.

**Response:** Comment does not pertain to the amendments proposed for subpart GGGGG. Requests for a determination of the applicability of subpart GGGGG to site-specific situations should be submitted to the appropriate EPA or State authority.

**Comment:** One commenter (0044) stated that an areas source that becomes a HAP major source due to site remediation activity should only be subject to subpart GGGGG and not subject to any other MACT standard. The commenter stated that completion of the remediation within the 3-year compliance period allowed for existing sources could return the facility’s HAP emission levels below the major source threshold levels.

**Response:** Comment does not pertain to the amendments proposed for subpart GGGGG.

### ***2.1.3 Applicability Determination for Remediation Sites at Oil and Natural Gas Facilities Subject to Clean Air Act Section 112(n)(4)***

**Comment:** Several commenters (0038, 0039, 0042, 0043, 0044, 0045) supported the proposed amendment to subpart GGGGG that would limit emission aggregation for the major source determination at “production field facilities” only to “glycol dehydration units”, “storage vessels with flash emission potential”, as defined in 40 CFR 63 subpart HH and site remediation activities. To provide clarity on this provision, one of the commenters (0044) requested that EPA amend 40 CFR 63 subpart HH to add site remediation emissions to the other listed categories of emissions listed in §63.761.

**Response:** In the existing Oil and Natural Gas Production NESHAP (40 CFR 63 subpart HH), we comply with the statutory directives under Clean Air Act (CAA) section 112(n)(4) by limiting the emission points that are aggregated for the major source status determination of a production field facility to only the glycol dehydration units and storage vessels with flash emission potential, as defined in the rule (see 40 CFR 63.761). Consistent with our approach used for subpart HH, the final amendments to subpart GGGGG specify that for a major source status determination of a production field facility only the HAP emissions from the glycol dehydration units and storage vessels with the potential for flash emissions, as defined in subpart HH, are to be aggregated with the HAP emissions from the site remediation activities at the

facility. However, for the purpose of determining the applicability of the existing subpart HH to a production field facility, the sources to be aggregated for the major source status determination are still only the glycol dehydration units and storage vessels with flash emission potential. The final amendments to subpart GGGGG do not change the emission points used for a major source status determination under subpart HH. Therefore, subpart HH should not be amended to add site remediation emissions to the other emission points already listed in §63.761.

**Comment:** Several commenters (0039, 0044, 0045) stated that to meet the statutory directives under CAA section 112(n)(4) a similar applicability determination provision proposed for facilities subject to the Oil and Natural Gas Production NESHAP should be provided for facilities subject to the Natural Gas Transmission and Storage Facilities NESHAP. Consistent with the major source definition in this rule, emission aggregation for major source status determination used to determine applicability of natural gas transmission and storage facilities to subpart GGGGG should be limited to pipeline compressor and pump stations.

**Response:** We agree that to meet the statutory directives in CAA section 112(n)(4) a similar applicability provision should be provided in subpart GGGGG for natural gas transmission and storage facilities consistent with the major source definition in the Natural Gas Transmission and Storage Facilities NESHAP (40 CFR 63 subpart HHH). Therefore, the final amendments to subpart GGGGG specify that for natural gas transmission and storage facilities, HAP emissions are to be aggregated for a major source status determination according to the definition of major source as defined in subpart HHH (see 40 CFR 63.1271).

**Comment:** One commenter (0045) stated that the same applicability exemption provided for production field facilities should be provided for oil and gas exploration activities to be consistent with statutory directives under CAA section 112(n)(4).

**Response:** Subpart GGGGG is not applicable to oil exploration activities. The rule applies only to those site remediations co-located at a facility with one or more other stationary sources that emit HAP and meet an affected source definition specified for a source category that is regulated by another subpart in 40 CFR part 63. There is no separate NESHAP in 40 CFR part 63 for oil exploration activities. Consequently, there is no need for the addition of special language to subpart GGGGG for oil exploration activities related to the directives of CAA section 112(n)(4).

#### ***2.1.4 Annual 1 Mg Site Remediation Applicability Exemption***

**Comment:** Several commenters (0035, 0039, 0040, 0041) requested clarification whether remediation materials from site remediations at a facility specifically exempted under other provisions of subpart GGGGG are counted towards the annual 1 megagram (Mg) exemption provided under §63.7881(c). Exempted site remediation activities cited by the commenters include remediation research and development facilities, equipment operated less than 300 hours per year, short duration site remediations completed within 30 days, remediation material with less than 500 ppmw VOHAP concentrations, remediation activities controlled to comply with other subparts in 40 CFR parts 61 or 63, RCRA regulations, or CERCLA regulations. One commenter (0040) requested EPA confirm that a facility may designate up to 1 Mg/yr of organic HAP content exempt from the standards under subpart GGGGG, even though other site remediations activities that are either controlled by the rule or qualify for other exemptions result

in the facility wide total organic HAP content greater than 1 Mg/yr. One of the commenters (0039) requested that a descriptive phrase such as "subject to control under this subpart" be included in the exemption and suggested specific rule language.

**Response:** The annual 1 Mg exemption provided in §63.7881(c) is an applicability exemption that exempts the site remediation activities conducted at a facility from all of the requirements of subpart GGGGG (except for certain recordkeeping requirements). The exemption may be used at a facility if the total quantity of the HAP that is contained in the remediation material excavated, extracted, pumped, or otherwise removed during all of the site remediations conducted at the facility is less than 1 Mg annually.

The exemptions in §63.7881(b) exempt site remediations from being subject to subpart GGGGG that are subject to certain other EPA or State regulatory programs or are conducted at certain types of sites. Remediation activities meeting the exemption criteria under §63.7881(b)(2) and (3) are not counted towards the 1 Mg exemption total. The remaining paragraphs under 63.7881(b) pertain to overall facility classification so the 1 Mg issue is not relevant. It is not appropriate to exclude any other remediation material that is exempted under Subpart GGGGG from the 1 Mg determination because those exemptions (e.g., 500 parts per million by weight (ppmw) VOHAP exemption, equipment operating less than 300 hours annually) do not exempt site remediations from being subject to subpart GGGGG, but rather exempt a site remediation activity from being designated as an affected source under the rule, or exempt an affected source from having to implement the rule's applicable air emission control requirements.

The final amendments clarify the subpart GGGGG language with respect to how the annual 1 Mg exemption is to be applied to a facility that meets the applicability conditions in §63.7881(a). (If a facility does not meet the applicability conditions in §63.7881(a), it is not subject to subpart GGGGG regardless of any site remediation activity that is conducted at the facility.) The final amendments language for the exemption does not change how the 1 Mg limit is applied nor change the documentation requirements for the exemption, but adds clarifying language stating that the 1 Mg limit applies on a facility-wide, annual basis and that there is no restriction to the number of site remediations that can be conducted under the exemption.

**Comment:** Several commenters (0039, 0041) requested that the proposed rule language be modified to clarify that a site remediation is exempt from the requirements of subpart GGGGG if the total HAP remediated during the calendar year prior to the date of the remediation activity is less than 1 Mg/yr. The commenters state that this approach will avoid retroactive application of the rule requirements, and will provide a definite basis for determining applicability of the exemption. Because the total quantity of the HAP that is contained in the remediation material from the exempted site remediations is determined on a cumulative basis for the calendar year, site remediation activities performed under 1 Mg threshold early in a calendar year would be subject to control under subpart GGGGG should the 1 Mg threshold limit be exceeded later in the year. Remediation activities which have been completed should not be subject to enforcement of the subpart GGGGG requirements retroactively (e.g., investigation of earlier handling of remediated material sent offsite for treatment before the 1 Mg limit was exceeded). This assurance is needed so that future remediation activity can take place in a timely manner, not just to meet a calendar year threshold. Accordingly, the commenters recommended that EPA should clarify in the final amendments that site remediations at the facility become

subject to the subpart GGGGG requirements after the 1 Mg limit is exceeded for the calendar year.

**Response:** The annual 1 Mg exemption is intended to be used at those facilities for which the owners or operators know that for all of the on-going site remediations being conducted, or for a planned site remediation to be conducted at a given facility, the total quantity of the organic HAP that is contained in the remediation material excavated, extracted, pumped, or otherwise removed during all of the site remediations conducted at the facility will remain below 1 Mg on an annual basis. The exemption is available to those owners and operators of facilities where a site remediation does not qualify for one of the applicability exemptions provided in §63.7881(b), but the potential for total organic HAP emissions from the site remediation activities is low. The annual 1 Mg exemption is not intended to be used to delay application of organic air emission controls to the site remediation activities at a facility until the day when the total quantity of the HAP in the remediation material removed from site remediation reaches a 1 Mg threshold limit. An owner or operator should not rely on using the annual 1 Mg exemption for complying with subpart GGGGG if there is uncertainty about the total organic HAP content in the remediation material to be removed during the site remediation conducted at the facility or whether additional site remediations to clean up organic contaminated media will need to be performed at the facility during the year.

To clarify our intended application of the annual 1 Mg exemption, the regulatory language for the final amendments was revised to use the term “annual” in place of the term “calendar year” that was used for the proposed regulatory language.

**Comment:** Several commenters (0038, 0042, 0043) stated that a facility owner or operator wanting to use the annual 1 Mg exemption may be required to amend its Title V operating permit to include the recordkeeping requirements for the exemption into their permits to comply with the provision. This would be an unnecessary burden on both the facility owner and the permit reviewing regulatory authority. The commenters requested that §63.7881(c) be modified so that a facility does not have to resubmit or amend its Title V operating permit if the only provisions of subpart GGGGG applicable to the facility is the recordkeeping requirement in §63.7881(c). To the extent necessary, a similar amendment should be made in Table 3 to subpart GGGGG. The commenters noted that EPA addressed a similar Title V issue in §63.7936(c) of the rule where it determined that an off-site treatment/disposal facility accepting remediation material from a remediation subject to subpart GGGGG does not, by itself, require the facility to obtain a Title V permit.

**Response:** The inclusion of the recordkeeping requirement associated with the annual 1 Mg exemption is not intended to trigger a Title V permit revision for the owner or operator of a facility that qualifies for the exemption. To address this situation, we have added to the final amendments an explicit provision stating that a Title V permit does not have to be reopened or revised solely to include the recordkeeping requirement required for the annual 1 Mg exemption. However, the recordkeeping requirement must be included in the facility’s Title V permit the next time the permit is renewed, reopened, or revised for another reason.

## **2.2 Short-Term Site Remediation Exemption (30-day)**

**Comment:** Several commenters (0038, 0039, 0041, 0042, 0043, 0046) requested that EPA reconsider requiring all off-site processing and treatment activities be completed within the

30-day period specified in the short-term site remediation exemption as proposed under §63.7884(b)(1). In general, the commenters requested that a site remediation qualifies for the exemption provided all of the remedial material is shipped to an appropriate treatment or disposal facility within the 30-day period. Arguments presented by the commenters to support their position include: 1) generators transferring the remediation material offsite do not have control over the treatment/disposal schedule of the receiving treatment, storage, and disposal facility (TSDF); 2) requiring the offsite transfer, treatment and disposal to be completed in 30 days significantly limits the number of cleanups able to use this exemption and will be a strong disincentive for facilities to voluntarily initiate cleanups, 3) generators may be forced to pay a “very high premium” to the TSDF operator in order for the remedial material to be treated within the 30-day period; and 4) the completion of treatment activities at off-site processing and treatment facilities are appropriately addressed in §63.7936 of the rule and by other regulations, such as Off-Site Waste and Recovery Operations (OSWRO) NESHAP (40 CFR 63 subpart DD) and other federal, State and local regulations controlling volatile organic compounds (VOC).

One commenter (0038) stated that facilities should be able to certify compliance with subpart GGGGG if all waste materials from a short-term remediation activity arrive at the final disposal facility in enough time for a typical TSDF to process the materials. The commenter recommended that EPA modify the proposed language to allow facilities to use the short-term exemption if all remediation site activities are completed within 30 days of the start of the remediation, including completion of appropriate waste manifest documents or nonhazardous waste shipping documentation. The ultimate disposal activities should be completed as soon as practicable under RCRA regulations. The commenter stated that the proposed amendment conflicts with established RCRA disposal requirements and this violates the RCRA-Clean Air Act harmonization provision under CAA Section 112(n)(7). Two other commenters (0042, 0043) requested that the final rule be amended to indicate the generator of a remediation material has met their obligation to qualify for the exemption if the material has been shipped offsite to a TSDF within the 30 day period. Completion of the shipment documents (e.g., manifest) transferring the remediation material to a TSDF by, or on, day 30 should indicate that the person undertaking the short-term remediation has complied with the 30-day period requirements.

One commenter (0041) requested that rather than make the facility owner responsible for the actions of the off-site disposal facility, EPA should finalize a rule that provides that if remediation material transferred to an off-site facility is not treated or disposed of within the 30-day period, the owner of the off-site facility must manage the waste in accordance with the rule following the end of the 30-day period. This would provide the off-site facility an incentive to minimize emissions by completing quickly those activities within its control while also avoiding making the original facility owner responsible for the inactions of an unrelated entity. In addition, this approach would provide a clearly defined date that owners could plan around. Finally, this approach would pose little or no risk of significant HAP emissions because the small amounts of remediation materials generated by most short-term remediations are usually transported in enclosed containers such as drums meeting U.S. Department of Transportation (DOT) requirements.

**Response:** The 30-day site remediation exemption provided under §63.7884 (b) is not a general applicability exemption that exempts the site remediation from being subject to subpart GGGGG. Rather, under this exemption, site remediations at a facility with affected sources subject to regulation under subpart GGGGG that can be completed within 30-days are exempted from having to meet the air emission control requirements specified in the rule. Subpart

GGGGG is amended to clarify the rule language with respect to our intent for application of the 30-day site remediation exemption, including those situations when the remediation material is transferred off-site. The final amendment language explicitly defines the beginning and end of the 30-day period for the purpose of qualifying for the exemption.

The first day of the exemption period is defined as the day on which the facility owner or operator initiates any action that removes, destroys, degrades, transforms, immobilizes, or otherwise manages the remediation materials. Certain activities that are performed to prepare for the actual cleanup of the contaminated media are not counted as part of the 30-day period, provided that these activities are completed before the actual site cleanup begins: characterizing the type and extent of the contamination by collecting and analyzing samples; obtaining permits from Federal, State, or local authorities to conduct the site remediation; scheduling workers and necessary equipment; and arranging for contractor or third party assistance in performing the site remediation.

The last day of the exemption period is defined as the day on which all of the remediation materials generated by the cleanup have been treated or disposed of in a manner such that the organic HAP in the material no longer have a reasonable potential for volatilizing and being released to the atmosphere. The exemption does not apply to a site remediation where the only activities completed during the 30-day period are excavating, pumping, or otherwise removing the remediation material from the contaminated area, and then storing this material on-site (e.g., in waste piles, tanks, or containers) to be treated or disposed at some later date after the end of the 30-day period. In this case, the processes and equipment used for site remediation need to meet the applicable air emission control requirement in subpart GGGGG (unless the site remediation qualifies for another exemption allowed under the rule).

It is our intention that this exemption be used for those short-term site remediations for which all of the remediation materials generated by the cleanup are treated or disposed within the 30-day period to meet the requirement that the organic HAP constituents in the materials no longer have a reasonable potential for volatilizing and subsequent release to the atmosphere. However, we recognize that in some situations where the remediation materials are shipped off-site for treatment or disposal, special circumstances beyond the direct control of the facility owner or operator may not allow the final treatment or disposal of the remediation material sent to the off-site location to be completed within the 30-day period required to qualify for the exemption. To address these situations, the final amendments include a provision allowing the facility owner or operator to qualify for the exemption provided that all of the remediation material generated by the cleanup is transferred off-site within the 30-day period according to the existing requirements specified in §63.7936 of subpart GGGGG for remediation material transferred to another party or shipped to another facility. These requirements apply to the off-site transfer of all remediation materials subject to regulation under subpart GGGGG (including those units required to use air emission controls) that have an average total average volatile organic HAP (VOHAP) concentration equal to or greater than 10 ppmw. In addition, the date that the 30-day exemption period ends must be documented such that the off-site facility knows the deadline after which the requirements of subpart GGGGG apply for remediation material received.

**Comment:** One commenter (0037) stated that facilities preparing to cleanup contaminated soil routinely rent soil vapor extraction/combustion systems to characterize the extent of contamination and feasibility of soil remediation using a vapor extraction method.

These pilot studies may take up to several days at a single extraction well location. As many potential extraction wells can exist at a given facility, pilot studies may continue intermittently greater than the 30 day period allowed to qualify for the exemption. Therefore, pilot study activities should not be considered a remediation activity; rather, pilot studies should be considered “characterization” prior to remediation. The commenter requested that §63.7884(b) include an exemption for “pilot study” activities at various locations at a facility as long as the total time period at a single location (single sample well or defined remediation area) does not exceed 30 days.

**Response:** The 30-day site remediation exemption is intended to be used for those short-term site remediations for which all of the remediation materials generated by the cleanup can receive final treatment or disposal within the 30-day period. The existing rule does not count as part of the 30-day exemption period activities to characterize the type and extent of the contamination by collecting and analyzing samples; activities to obtain permits from Federal, State, or local authorities to conduct the site remediation; activities to schedule workers and necessary equipment; and activities to arrange for contractor or third party assistance in performing the site remediation. The exclusion of these specified activities from not being counted as part of the 30-day exemption period are appropriate and sufficient to characterize the extent of the site contamination and prepare for the type of site remediations that we intend the 30-day site remediation exemption to be applied. We do not intend the exemption to be used for those site remediations requiring on-site pilot studies to select the treatment methods, map the contaminated area boundaries, or otherwise prepare for subsequent full-scale cleanup activities.

**Comment:** One commenter (0037) stated that the requirement under §63.7884 (b)(2) seems to imply that site remediations, where only the treatment and/or disposal of the remediation material exceeds 30 days, need only comply with the §63.7936 requirements. The commenter recommended that the provision should read “If a remediation material is to be shipped or otherwise transferred to an offsite facility where the final treatment or disposal of the material cannot be completed within the 30-day period, then management of the remediation material must comply with all applicable provisions of this subpart.”

**Response:** The 30-day exemption under §63.7884 (b) only exempts site remediations at a facility with affected sources subject to regulation under subpart GGGGG and can be completed within 30-days from having to meet the air emission control requirements specified in the rule. It does not exempt these site remediations from having to comply with other applicable provisions in the rule. Section 63.7936 of subpart GGGGG specifies the requirements for all remediation material generated by a site remediation activity subject to subpart GGGGG and transferred from the facility where the site remediation is conducted to another party or shipped to another facility. These requirements provide the owner or operator of the affected facility from which the remediation material is transferred with several compliance alternatives. Remediation material generated by a site remediation qualifying for the 30-day site remediation exemption that is transferred off-site for treatment or disposal must be transferred to a facility in compliance with the §63.7936 requirements.

**Comment:** One commenter (0047) stated that in cases when owners and operators using the 30-day site remediation exemption ship the remediation material off-site for final disposal, the owner or operator of the off-site facility receiving the material would not know when the 30-day period begins. While the waste generator is required to prepare and maintain at the facility,

written documentation of the remediation with the listed initiation and completion dates, there does not appear to be any requirement for the waste generator to notify the receiving facility of the initiation date of the 30-day period allowable for the exemption. Because of the short time frame allowed in the exemption for performing the remediation and completing the disposal, the receiving facility would also need to know this information to ensure that disposal could be completed by the 30th day. The commenter suggests that the final rule formalize a mechanism whereby the generator provides the receiving notification of the start of the 30-day period by requiring that this information be recorded on the remediation material shipping paper(s).

**Response:** We agree that it is important that the owner or operator receiving the remediation material be informed of the specific exemption period for the site remediation (i.e., the initiation date and corresponding 30-day completion date) to allow the final treatment or disposal of the remediation material to be completed as promptly as possible to meet the intent of the exemption. Therefore, the final amendments add to the 30-day exemption a requirement to include in the appropriate waste manifest documents or other applicable shipping documentation, in addition to the notifications and certifications required under §63.7936, a statement that the shipped material was generated by a site remediation subject to requirements under §63.7884 (b). The statement must include the date on which the facility owner or operator initiated the site remediation activities generating the shipped remediation materials, as specified in paragraph §63.7884 (b)(1)(i), and the date 30 calendar days following this initiation date.

## **2.3 Air Emission Control Requirements**

### ***2.3.1 Point of Determination of Remediation Material VOHAP Concentration***

**Comment:** Several commenters (0037, 0039, 0042, 0043) supported using the point of determination language EPA originally proposed for the rule (67 FR 49408) to replace requirement in the final rule that the point of determination for measuring the VOHAP concentration for the remediation material be the “point-of-extraction.” Placing the point of determination for the average total VOHAP concentration of the remediation material at a point prior to, or within, a remediation material management unit simplifies the determination procedure and allows flexibility in the treatment and management processes.

**Response:** Subpart GGGGG applies the air emission control requirements for remediation material management units (i.e., tanks, surface impoundments, containers, oil/water separators, organic/water separators and transfer systems) to those units that manage remediation material with an average VOHAP concentration equal to or greater than 500 ppmw. The final amendments revise the applicable regulatory language in subpart GGGGG referring to the point at which the facility owner or operator determines the average VOHAP concentration of a remediation material. These final amendments implement our original intended VOHAP determination procedure by reinstating the regulatory language and terminology we originally proposed for rule, and removing the term “point-of-extraction” from the rule.

Under the amended Subpart GGGGG, the facility owner or operator is required to determine the average total VOHAP concentration of the remediation material at a point prior to, or within, a remediation material management unit. Thus, once the VOHAP concentration for a remediation material has been determined to be less than 500 ppmw, all remediation material management units downstream from the point of determination that manage this material are no longer required to meet the air emission control requirements in subpart GGGGG unless a

remediation process is used that concentrates all, or part of, the remediation material being managed in the unit such that the VOHAP concentration of the material increases to 500 ppmw or more.

### ***2.3.2 Requirements for Remediation Material Management Units***

**Comment:** One commenter (0037) stated that under the proposed amendments to §63.7886(b)(2), once determination of VOHAP concentration has been made, all remediation material management units downstream of the determination point may use this determined concentration level unless “a remediation process is used to concentrates all, or part of, the remediation material being managed in the unit such that the VOHAP concentration of the material could increase (e.g., free-product separation).” The commenter stated that the term “free-product separation” used for the proposed rule language seems to imply that recovered free product from a remediation material management unit, such as a corrugated plate interceptor (CPI) separator used to treat extracted contaminated groundwater at a site, would be considered a remediation material rather than a product/commodity. Consequently, all downstream units processing this recovered free product (e.g., refinery/chemical manufacturing processes) would be subject to subpart GGGGG. As free product consists mainly of hydrocarbon material, the reference to free product separation in the proposed rule language is not consistent with the rule definition of “remediation material”. Under §63.7957, remediation material is defined as a material that “...is made up primarily of media...” The commenter recommended modifying the wording under §63.7886(b)(2) to reflect that free products or other materials from free-product separation that *do not* consist mostly of “media” *are not* subject to the requirements of this rule.

**Response:** The final amendments clarify that any free product returned to a manufacturing process from a remediation material management unit is no longer subject to the air emission control requirements in subpart GGGGG.

### ***2.3.3 Requirements for Equipment Leaks***

**Comment:** Several commenters (0038, 0042, 0043) support EPA’s proposed addition of a compliance option in §63.7887(b) allowing affected sources to use leak detection and repair (LDAR) programs that comply with any other applicable standard under 40 CFR parts 61 or 63. This provision will ensure that owners and operators routing remediation streams to existing control devices subject to other NESHAP will not be burdened with overlapping LDAR requirements.

**Response:** The final amendments add a compliance option to the subpart GGGGG air emission control requirements for those affected equipment leak sources already using air emission controls or work practices to comply with another subpart under 40 CFR part 61 or 63. Under this option, the affected source is in compliance with subpart GGGGG if the HAP emissions from the equipment leak affected source are controlled in compliance with the standards specified in the other subpart in part 61 or 63 that is applicable to the source. The final amendments extend the same compliance option that subpart GGGGG already allows for affected process vent and remediation material management unit sources to affected equipment leak sources.

### ***2.3.4 Requirements for Process Vents***

**Comment:** One commenter (0037) stated that §63.7890(b) allows process vents to be controlled to a level not to exceed certain mass emissions rates or to a minimum of  $\geq 95\%$  control. At some facilities where remediation activities to clean up large quantities of material are performed, the mass emissions limits are not feasible to maintain. Additionally, vendors are not able to guarantee control  $\geq 95\%$  for high volume, low concentration air streams; vendor guarantees typically are worded to read that emissions reductions will be  $\geq 95\%$  or to a lower limit of XX ppmv (~20-40 ppmv as methane is typical). The commenter recommended modifying either §63.7885(c)(1)(ii) to remove the volumetric flow rate limit (maintain less than 20 ppmv) or modify §63.7890(b) to allow  $\geq 95\%$  or to a lower limit of 40 ppmv.

**Response:** Comment does not pertain to the amendments proposed for subpart GGGGG.

## **2.4 Compliance Requirements**

### ***2.4.1 Requirements for Remediation Material Sent Offsite***

**Comment:** Two commenters (0042, 0043) stated that the preamble to the proposed amendments clarifies that the 10 ppmw average total VOHAP concentration value for remediation material transferred offsite is to be interpreted not as a treatment standard but rather a threshold at which some action may be required under this rule. The proposal preamble (71 FR 25535-25536) stated that the 10 ppmw action level simply means that “some action” may be required by both the transferring facility and the receiving facility. The commenters requested that the preamble clarification discussion also be included in final rule language.

**Response:** The requirements for owners and operators transferring remediation material, having an average VOHAP concentration of 10 ppmw or greater, to an off-site facility are specified in §63.7936 of subpart GGGGG. We did not propose to amend the existing language in §63.7936, but did include an explanation in the preamble to the proposed amendments as guidance on how the 10 ppmw action level is applied to remediation material transferred off-site. We specifically selected this approach because we concluded that the existing rule language for the provision does not require revision but publishing additional guidance on implementing the provision would be helpful to facility owners and operators.

### ***2.4.2 Startup, Shutdown, and Malfunction Plan (SSMP) Requirements***

**Comment:** One commenter (0040) stated that the standards in subpart GGGGG provide owners and operators an alternative compliance option for affected sources already using air emission controls pursuant to another applicable subpart in 40 CFR part 61 or part 63. The commenter requested that EPA confirm for a source already complying with standards in Part 61 that the source is not required to meet the SSMP required in subpart A of Part 63.

**Response:** For affected process vent, remediation material management unit, and equipment leak sources required by subpart GGGGG to use air emission controls or work practices, but already using such measures to comply with another subpart under 40 CFR part 61 or 63, the affected source is in compliance with subpart GGGGG if the HAP emissions from the affected source are controlled in compliance with the standards specified in the other subpart in part 61 or 63 that are applicable to the source. In those cases when the affected source is

controlled in compliance with applicable standards under subpart in 40 CFR part 61, then the corresponding general provisions in 40 CFR part 61 apply to the affected source.

**Comment:** One commenter (0043) stated that EPA recently issued a final rule relating to the SSMP provisions in the General Provisions and made corresponding changes in NESHAP rules including 40 CFR subpart GGGGG (71 FR 20446, April 20, 2006). The commenter requested that these amendments now be incorporated into the final subpart GGGGG rule and provided suggested rule language to be added.

**Response:** Provisions in subpart GGGGG related to startup, shutdown, and malfunction requirements have been revised, as appropriate, to be consistent with the amendments to the General Provisions in subpart A under 40 CFR part 63 that we promulgated on April 20, 2006.

## 2.5 Other Comments

### 2.5.1 Including Methyl Ethyl Ketone as a HAP in Subpart GGGGG Table 1

**Comment:** Several commenters (0039, 0043) requested that methyl ethyl ketone (MEK) be deleted from the Table 1 list of HAPs since EPA has formally de-listed methyl ethyl ketone (MEK) as a HAP (70 FR 75047, December 19, 2005).

**Response:** For purposes of implementing the requirements of subpart GGGGG, Table 1 in the rule lists the specific organic chemical compounds, isomers, and mixtures that are HAP. The final amendments update this table to be consistent with EPA's current HAP list. The final amendments remove from Table 1 the listings for 1,1-dimethyl hydrazine and MEK. Both of these organic chemical compounds have been delisted as HAP.

### 2.5.2 Rule Editorial Corrections

**Comment:** One commenter (0037) identified and requested the following editorial and cross-reference corrections be made to the proposed rule language.

- §63.7938(b)(2): Refers to documentation required in §63.7886(c)(2). This reference is incorrect and should refer to §63.7885(c)(2).
- §63.7918(d)(2): Refers to inspection requirements in §63.7918(c). This reference is incorrect and should refer to §63.7917(c).
- §63.7918(d)(3): Refers to inspection requirements in §63.7918(e). This reference is incorrect and should refer to §63.7917(e).
- §63.7941(h): Refers to Method 21 inspections for Container Level 1 controls according to the requirements in §63.925(a). This is the only citation where Method 21 inspections are indicated for Container Level 1 controls. The reference to Method 21 inspections is incorrect and should actually refer to §63.926(a) visual inspection requirements.
- §63.7950(c): Requires notification of initial startup of a new affected source within 120 days of startup and references §63.9(b)(3). This reference is incorrect; the correct reference is §63.9(b)(4)(v) or §63.9(b)(5)(ii) which only allow for 15 days.

- Table 3 citation §63.8(c)(6): Erroneously refers to CPMS requirements in §63.7900 and §63.7913. This reference is incorrect and should refer to §63.7927.
- Proposed §63.7884(b)(2): Incorrectly references itself in the statement “for the purpose of complying with this paragraph (b)(2).” This reference should refer to paragraph (b) only, not (b)(2).

**Response:** We checked the cross-reference citations in the proposed amendments and found several cases where the subpart GGGGG paragraph cited was not the correct requirement that we had intended to be implemented by the facility owner or operator. For these cases, we revised the cross-reference citations in the final amendments to cite the correct provision in subpart GGGGG that we had intended to be referenced. Also, the final amendments correct terminology, typographical, and grammatical errors in specific provisions of subpart GGGGG that have been identified since the rule was originally promulgated. These final amendments replace the rule language with the correct cross-reference citation, term, or wording, but do not change any of the technical or administrative requirements of the rule.