

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

JUN - 8 2012

DEPUTY ADMINISTRATOR

MEMORANDUM

SUBJECT: U.S. Environmental Protection Agency's Notification of Rules and Regulations Regarding the Demolition of Asbestos-Containing Structures

Bol Perciosepe **Bob** Perciasepe FROM:

TO: Assistant Administrators Regional Administrators

The Office of Inspector General on December 14, 2011, issued *Report No. 12-P-0125, Early Warning Report: Use of Unapproved Asbestos Demolition Methods May Threaten Public Health.* In the report, the inspector general recommended that the U.S. Environmental Protection Agency should immediately and clearly communicate National Emission Standards for Hazardous Air Pollutants and Occupational Safety and Health Administration requirements for the demolition of asbestos-containing structures to regional, program and field offices to prevent potentially hazardous asbestos exposure. The inspector general also recommended that the "EPA should notify these offices that unapproved methods are not to be used without obtaining appropriate waivers."

The attached document is intended to fulfill both of these recommendations by reminding EPA employees of the Clean Air Act Asbestos National Emission Standards for Hazardous Air Pollutants regulations and their applicability to cleanups at Comprehensive Environmental Response, Compensation and Liability Act sites, and the worker-protection safety regulations under the Occupational Safety and Health Act and the Toxic Substances Control Act.

Prepared in a question-and-answer format, the document is organized in three sections. The first section summarizes the Clean Air Act Asbestos NESHAP requirements. The second section summarizes the CERCLA requirements for removal, remedial and brownfields actions where asbestos cleanup is required. The third section summarizes the worker-protection standards under the Occupational Safety and Health Act and the Toxic Substances Control Act.

We also recognize the need to review existing guidances, policies and procedures, as appropriate, to identify those requiring revisions. Such a review would include the EPA and U.S. Department of Energy *Policy on Decommissioning Department of Energy Facilities Under the Comprehensive Environmental Response, Compensation and Liability Act, May 22, 1995.* As we proceed with implementing the corrective actions to the Office of Inspector General's recommendations and analyze the information

associated with sites in question, we will learn more about where to focus our efforts in reviewing these guidances, policies and procedures.

Should you require additional information about asbestos removal, please contact one or both of the following colleagues, who based on area of expertise, can best address your question or concern: Keith Barnett, Office of Air and Radiation, and Barnes Johnson, Office of Solid Waste and Emergency Response.

Attachment

cc: Administrator General Counsel Inspector General Chief of Staff Deputy Assistant Administrators Deputy Regional Administrators Assistant Regional Administrators Regional Air Directors Regional Superfund Directors Regional RCRA Division Directors

Section 1 - Clean Air Act - Demolition Practices and the National Emission Standard for Asbestos

This section provides a summary of regulatory provisions of the Clean Air Act National Emission Standard for Asbestos (Asbestos NESHAP) that pertain to demolition of buildings that contain asbestos. The Asbestos NESHAP regulations are codified at 40 C.F.R., Part 61, Subpart M. The EPA regulations described in this document are legally binding requirements. This document merely summarizes those regulatory requirements; it is not a regulation itself, nor does it change or substitute for those regulations. Thus, this document does not impose legally binding requirements on any party, including EPA, states, or the regulated community.

Q 1. What is the Asbestos NESHAP?

The Asbestos NESHAP regulation establishes a national work practice standard that is designed to limit emissions of asbestos from a variety of activities, including demolition and renovation operations. It describes the actions that must be taken during demolition activities when asbestos may be present and identifies actions that are prohibited. It also establishes some training and health and safety requirements for persons working on and in the vicinity of demolition sites.

The Asbestos NESHAP includes several other requirements relevant to demolitions that are not summarized in this document, including, but not limited to, notification requirements and waste disposal requirements. Moreover, the Asbestos NESHAP contains requirements for activities other than demolitions, and this document does not summarize those requirements.

Q2. What types of facilities are covered by the Asbestos NESHAP?

The Asbestos NESHAP defines "facility" to include any institutional, commercial, public, industrial, or residential structure, installation, or building. Residential buildings with four or fewer dwelling units are excluded from the Asbestos NESHAP regulation. Consistent with EPA applicability determinations regarding the Asbestos NESHAP, the exclusion does not apply if the residential buildings are part of a project that also demolishes any institutional, commercial, public, or industrial structure, installation, or building or demolishes a total of more than four residential dwelling units.

For a complete discussion of facilities covered under the Asbestos NESHAP, please refer to 40 C.F.R. § 61.141 and 55 Fed. Reg. 48412 (Nov. 20, 1990).

Q3. What is regulated asbestos containing material (RACM) under the Asbestos NESHAP?

Under the Asbestos NESHAP, regulated asbestos containing material (RACM) generally includes any asbestos containing material (ACM) that contains more than 1 percent asbestos is friable (i.e., able to be crumbled when dry) or has the potential to become friable and release asbestos during demolition.

For a complete definition of RACM under the Asbestos NESHAP, please refer to 40 C.F.R. § 61.141.

Q4. How much RACM must be present in a facility where demolition will occur to trigger the emission-control requirements (also known as "work practice standards" that control asbestos emissions for demolition operations under the Asbestos NESHAP?

Prior to demolition beginning, the facility or the affected part of the facility must be thoroughly inspected to determine whether asbestos is present and, if present, in what amount. The inspection should also determine if the asbestos containing materials are RACM. If the combined amount of RACM meets one of the following, then the facility must comply with the emission-control requirements for demolitions:

- At least 260 linear feet on pipes; or
- At least 160 square feet on other facility components; or,
- The total volume of RACM is at least 35 cubic feet.

For a complete discussion of how much RACM must be present to trigger the Asbestos NESHAP for a demolition operation, please refer to 40 C.F.R. § 61.145(a).

Q5. What are the emission control requirements (also known as "work practice standards") that control asbestos emissions for demolition operations under the Asbestos NESHAP?¹

Under the Asbestos NESHAP, all RACM must be removed before a demolition begins, except in situations where: 1) the material is Category I nonfriable asbestos-containing material² that is not in poor condition and is not friable, 2) the material is encased in concrete or similar material and is adequately wet whenever exposed during demolition, 3) the material was inaccessible during testing and once discovered could not be safely removed, or 4) the material is Category II nonfriable asbestos-containing material³ and has a low probability of becoming pulverized, crumbled or reduced to powder during demolition.⁴

In addition to the requirement to remove all RACM, RACM that is exposed during cutting, disjoining, or stripping operations must be kept adequately wet and carefully lowered to the ground during the demolition. In certain instances specifically authorized by the regulations leak-tight wrapping or a local exhaust ventilation and collection system may be used instead of wetting. Whenever RACM is stripped, removed, or otherwise disturbed as part of a demolition, there must be at least one person on-site who is

¹ This response does not discuss other Asbestos NESHAP requirements that may be applicable to demolition projects (e.g., notification requirements and waste disposal requirements).

² Category I nonfriable asbestos-containing material (ACM) is defined at 40 C.F.R. 61.141 and means asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than 1 percent asbestos.

³ Category II nonfriable ACM is defined at 40 C.F.R. 61.141 and means any material, excluding Category I nonfriable ACM, containing more than 1 percent asbestos that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

⁴ Also consider the Asbestos NESHAP's provision on buildings that are structurally unsound and in danger of imminent collapse. This provision allows a building to be demolished with RACM in place under certain specified conditions, as explained below.

trained in compliance with the Asbestos NESHAP regulation. Demolition by burning of a building containing RACM is prohibited.

Once any RACM waste is removed from the building, or removed/scraped from facility components, it is considered asbestos-containing waste material (ACWM). The Asbestos NESHAP has detailed requirements for managing ACWM after demolition.

For a complete discussion of the asbestos emission control requirements for a demolition operation under the Asbestos NESHAP, please refer to 40 C.F.R. §§ 61.141 and 61.145(c).

Q6. How are asbestos-containing cement materials, such as transite siding and panels, required to be handled during a demolition operation under the Asbestos NESHAP regulation?

The Asbestos NESHAP classifies asbestos-containing cement materials, such as transite, as a Category II nonfriable asbestos-containing material so long as the material cannot be crumbled, pulverized or reduced to powder by hand pressure when it is dry. The Asbestos NESHAP does not require removal of transite and other asbestos-containing cement materials if the material is Category II nonfriable ACM and the probability is low that the material will become crumbled, pulverized, or reduced to powder during demolition.

However, transite is considered RACM and must be removed prior to demolition if it has a high probability of becoming crumbled, pulverized, or reduced to powder during demolition or has become crumbled, pulverized, or reduced to powder. A frequent example is when the transite is weathered, damaged, broken or otherwise in poor condition.

In addition, although the inquiry is fact specific, the use of mechanical devices to peel or pull the transite from the building has a high probability of causing the transite to become crumbled, pulverized or reduced to powder, and so the transite siding must be removed before the machines can demolish the building.

For transite siding or panels that are considered RACM, the Asbestos NESHAP requires that the RACM be carefully removed and lowered to ground level. Any RACM exposed during cutting or disjoining operations must be kept adequately wet. For example, often the areas of the transite that were attached to the building can be damaged during removal. If that occurs, such areas would need to be kept adequately wet and the transite carefully lowered to ground level.

The key point in these requirements is to be as careful as possible when removing transite siding and other asbestos-containing cement materials in order to minimize the potential of creating friable asbestos.

For the requirements applicable to handling transite siding during demolition under the Asbestos NESHAP, please refer to 40 C.F.R. §§ 61.141 and 61.145(c).

Q7. What is the Asbestos NESHAP's provision on buildings that are structurally unsound and in danger of imminent collapse?

Under the Asbestos NESHAP, if a facility is being demolished under an order of a State or local government agency, issued because the facility is structurally unsound and in danger of imminent collapse, the facility may be demolished without removing the RACM before demolition. Depending on the governing State or local regulation, the State or local determination may entail a professional engineer examining the building to make the determination that the facility is structurally unsound and in danger of imminent collapse and a local government body or local court agreeing with that assessment.

When the determination that a facility is structurally unsound and in danger of imminent collapse is made by the State or local authority, the facility is considered unsafe for workers to attempt to remove RACM from the facility prior to demolition, and the facility may be demolished with the RACM in place. The facility and building materials must be kept adequately wet at all times, starting with the demolition process, through site cleanup, transport and final disposal. "Adequately wet" means sufficiently wet to prevent the release of particulates and there are no visible emissions observed from any asbestos-containing material. If visible emissions are observed, the demolition must cease, and additional wetting must be performed until no emissions are occurring. However, the absence of visible emissions is not sufficient evidence of being adequately wet.

All the material in such a demolition's within the debris pile is considered asbestos-containing waste material.

For a complete discussion of the structurally unsound and in danger of imminent collapse provisions under the Asbestos NESHAP, please refer to 40 C.F.R. §§ 61.141 and 61.145(a)(3), 61.145(c)(4)-(9).

Q8. Can EPA approve an alternative to the work practice standards that control asbestos emissions for demolition operations under the Asbestos NESHAP, and how is such approval obtained?

The Asbestos NESHAP contains certain requirements to control asbestos emissions during demolition operations. Those emission limitation requirements are summarized briefly above and referred to as work practice standards. EPA can approve an alternative to the work practice standards required for demolitions under the Asbestos NESHAP, but certain criteria in the rule must be met, including that EPA must provide notice and an opportunity for public comment before taking final action approving or disapproving the proposed alternative.

Specifically, to obtain approval of an alternative means of emission limitation, you must submit your proposed alternative means of emission limitation, along with information that will allow EPA to evaluate whether or not the proposed alternative will achieve at least the same level of hazardous air pollutant (HAP) emission reductions as the emission limitation required by the Asbestos NESHAP. EPA will evaluate the alternative based on the data submitted and any other available pertinent information. If EPA determines that the alternative achieves at least the same level of HAP emission reduction as the emission limitation required by the Asbestos NESHAP. EPA will propose a notice to that effect, request comment, and provide an opportunity for a public hearing. EPA will then review its decision based on the comments and information obtained in response to the proposal and publish a final decision in the Federal Register either approving or disapproving the proposed alternative means of emission limitation.

There is no other mechanism under the Clean Air Act and Asbestos NESHAP to approve an alternative to the demolition requirements of the Asbestos NESHAP.

For a complete discussion of how to obtain approval of an alternative means of emission limitation for the Asbestos NESHAP requirements, please refer to 40 C.F.R. § 61.12(d).

Q9. Are there any approved alternatives to the work practice standards that control asbestos emissions for demolition operations under the Asbestos NESHAP?

As of April 2012, EPA has not approved any alternatives to the demolition requirements of the Asbestos NESHAP under the authority of the Clean Air Act. There have been research projects such as the "Wet Method" or the "Alternative Asbestos Control Method (AACM)." These research projects were conducted by EPA to identify potential alternative demolition methods. None of these research projects has been approved by EPA as an alternative work practice standard under the Asbestos NESHAP. EPA is not currently considering approval of any alternate asbestos demolition methods. Thus, there are no approved alternatives to the work practice standards that control asbestos emissions for demolition operations under the Asbestos NESHAP.

The applicable demolition requirements for the regulated community are those found in the Asbestos NESHAP regulations, which are found at 40 C.F.R. Part 61, Subpart M.

Q 10. How are the work practice standards that control asbestos emissions for demolition operations under the Asbestos NESHAP implemented at a facility subject to a remedial action or removal action under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)?

Please consult Section 2 of this document.

The form "attacked Council for Phillipping the south of the South

12 of the rest of the second second

Section 2 - Questions and Answers on the Application of the National Emission Standard for Asbestos (Asbestos NESHAP) at Sites Subject to a Remedial or Removal Action under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

This section provides a summary of the application of the Clean Air Act (CAA) Asbestos NESHAP at sites subject to a remedial or removal action under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The Asbestos NESHAP regulations are codified at 40 C.F.R., Part 61, Subpart M. CERCLA response selection is governed by section 104 and section 121. CERCLA requires remedial actions to achieve a level of control of hazardous substances, including asbestos, that at least attains any federal or more stringent state standard, such as the asbestos NESHAP, that is applicable or relevant and appropriate to the remedial action. Such standards are referred to as ARARs. The revised National Contingency Plan of 1990 (NCP) requires compliance with ARARs during remedial actions, and compels attainment of ARARs during removal actions to the extent practicable considering the exigencies of the situation. There are provisions for waiving ARARs, which require justification and documentation. These are generally described in the Q&As in this section and can also be found in the underlying regulations/guidances that are referenced in the footnotes. The EPA regulations described in this document are legally binding requirements. This document merely summarizes those regulatory requirements; it is not a regulation itself, nor does it change or substitute for those regulations. Thus, this document does not impose legally binding requirements on any party, including EPA, states, or the regulated community.

Q1. What should Remedial Project Managers (RPMs) and On Scene Coordinators (OSCs) do when addressing a site that involves asbestos?

If asbestos is present at a CERCLA site, RPMs and OSCs should consult with regional or Headquarters health and safety coordinators and their Asbestos NESHAP Coordinator. The Asbestos NESHAP, issued pursuant to the Clean Air Act (CAA), applies to the renovation and demolition of buildings with asbestos-containing materials and is codified at 40 C.F.R., Part 61, Subpart M. RPMs, OCSs, and members of the public can also ask general questions about asbestos by calling the EPA Toxic Substances Control Act Hotline.⁵ In addition, the Superfund program has a web page "Addressing Asbestos at Superfund Sites" (http://www.epa.gov/superfund/health/contaminants/asbestos/) that provides the latest Agency guidance on asbestos-contaminated site investigations including the 2008 guidance prepared by OSWER's TRW Asbestos Committee entitled "Framework for Investigating Asbestos-Contaminated Superfund Sites." It explains the role of the TRW Asbestos Committee and also offers a hotline for assistance.⁶

For CERCLA response actions involving the demolition of asbestos-containing structures, RPMs and OSCs shall ensure familiarity with and understanding of the work practices and other provisions of the CAA National Emission Standards for Hazardous Air Pollutants for asbestos (Asbestos NESHAP). These provisions are potentially applicable or relevant and appropriate requirements (ARARs). Based on a site-specific evaluation, if the Asbestos NESHAP applies by its terms to a particular situation, then that

⁵ The Toxic Substances Control Act Hotline number is (202) 554-1404.

⁶ The TRW Hotline for information on asbestos-contaminated site investigations is (866) 282-8622.

standard is applicable within the provisions of CERCLA ARARs. It is important to understand that EPA has not approved the Alternative Asbestos Control Method (AACM) or any other alternative method under the Asbestos NESHAP. EPA should not approve any deviation from the Asbestos NESHAP when selecting CERCLA remedial actions, unless justified under the CERCLA provision for waiving an ARAR.⁷ At all CERCLA actions, whether remedial or removal, EPA shall ensure that the response action will be consistent with the National Contingency Plan (NCP) and shall be protective of public health, welfare and the environment⁸.

Q2. How are the Clean Air Act's (CAA) Asbestos NESHAP work practice requirements considered at a site subject to a CERCLA remedial action?

CERCLA states that remedial actions "shall attain a degree of cleanup of hazardous substances, pollutants, and contaminants released into the environment and of control of further release, at a minimum which assures protection of human health and the environment."⁹ If any hazardous substance, pollutant or contaminant will remain onsite, the remedial action selected or agreed to must meet (or waive¹⁰) any standard, requirement, criteria or limitation of any legally applicable federal environmental law or more stringent state environmental and facility siting law, as well as such environmental requirements that are deemed to be relevant and appropriate under the circumstances.¹¹ Such standards are referred to as "ARARs" or applicable, or relevant and appropriate requirements. If asbestos is present at a CERCLA remedial site, a site-specific evaluation shall be conducted to determine if the Asbestos NESHAP is an ARAR. Based on a site-specific evaluation, if the Asbestos NESHAP applies by its terms to a particular situation, then that standard is applicable within the provisions of CERCLA ARARs.

Applicable requirements generally are those substantive standards that specifically address a chemical, location or activity at a CERCLA site. If it is determined that a requirement is not "applicable" to a specific chemical, location or activity, the requirement may still be "relevant and appropriate" to the circumstances. In deciding if a requirement is relevant and appropriate, the EPA evaluates a number of factors, including: the purpose of the requirement; the hazardous substance involved; the actions regulated; any regulatory waivers and the availability of those waivers for the circumstances at the site; and potential uses of affected resources.¹²

⁷ Section 121(d)(4).

⁸ Section 104(a) of CERCLA. Pursuant to Section 121(d)(1) of CERCLA, remedial actions "selected . . . or otherwise. . . agreed to" under the Superfund statute "shall attain a degree of cleanup of hazardous substances, pollutants, and contaminants released into the environment and control of further release, at a minimum, which assures protection of human health and the environment." Under Section 104(a) of CERCLA the President (or his designee) is "authorized to act consistent with the national contingency plan." Section 104(a) of CERCLA. In addition, removal actions should, to the extent practicable, contribute to the efficient performance of any long term remedial action with respect to the release or threatened release concerned. Section 104(a)(2) of CERCLA.

⁹ Section 121(d)(1) of CERCLA, 42 U.S.C. 9621(d)(1).

¹⁰ Section 121(d)(4); 40 CFR 300.430(f)(1)(ii)(c). A remedial action meeting the requirements of Section 121(d)(1)("at a minimum...assures protection of human health and the environment")but not meeting ARARs, may be selected if certain findings are made, explained and documented.

¹¹Section 121 (d)(2) of CERCLA, 42 U.S.C. 9621(d)(2),40 CFR 300.430(f)(i)(A). Pursuant to Section 121(d)(4) of CERCLA, a remedial action that does not meet ARARs may be selected based on certain findings, including, a determination that compliance will result in a greater risk to human health and the environment, an alternative remedy is equivalent to the ARAR, or compliance is technically impracticable from an engineering perspective. The findings used as a basis for a waiver are published, together with an explanation and appropriate documentation. See also 40 CFR 300.430(f)(1)(ii)(C).

Q3. How are the Clean Air Act's Asbestos NESHAP work practice requirements considered at a site subject to a CERCLA removal action?

Fund-financed removal actions under CERCLA Section 104 and removal actions pursuant to CERCLA Section 106 are required, to the extent practicable considering the exigencies of the situation, to attain ARARs.¹³ Compliance with the ARARs, including the Clean Air Act's Asbestos NESHAP work practice standards, is a cornerstone of CERCLA. Based on a site-specific evaluation, if the Asbestos NESHAP applies by its terms to a particular situation, then that standard is applicable within the provisions of CERCLA ARARs.

A basis for requiring that ARARs be met during removal actions is that "regulations under other environment and public health laws may help determine the appropriate manner in which to proceed with a removal action."¹⁴ "Complying with ARARs both during the implementation and upon completion of an action helps the lead agency assure that the activity can be carried out in a manner that is protective of human health and the environment."¹⁵

Every removal action must be based on an administrative record, including an Action Memorandum (AM) that explains the basis for the action, including how the action protects public health, and compliance with ARARs. EPA identifies ARARs on a site-specific basis by first determining whether the given requirement is applicable, and then if not, determining whether it is relevant and appropriate for on-site activities.

Q4. How is the practicability of meeting ARARs handled by the EPA Removal Program?

Recently updated AM guidance (Superfund Removal Guidance for Preparing Action Memoranda, September 2009) and existing removal process guidance on the consideration of ARARs during removal actions provide an explanation of practicability. Removal actions should attain ARARs to the extent it is practicable based upon the urgency of the situation and the scope of the removal.¹⁶

Q5. How are the demolition requirements of the Asbestos NESHAP considered at federal facilities or other sites or situations not subject to a remedial action or removal action under CERCLA?

When federal agencies demolish buildings at federal facilities, they are subject to the Asbestos NESHAP requirements, which are described above in Section 1. Under the Clean Air Act, federal agencies are subject to, and must comply with, all federal, state, interstate, and local requirements respecting the control and abatement of air pollution, in the same manner and to the same extent as any nongovernmental entity.¹⁷

¹³ NCP 40 C.F.R. 300.415(j)

¹⁴ OSWER/OERR Memorandum "Introduction to ARARs" (July 29, 1992). "Fund-financed removal actions under CERCLA Section 104 and removal actions under Section 106, shall to the extent practicable considering the exigencies of the situation, attain applicable or relevant and appropriate requirements (ARARs) under federal environmental or state environmental or facility siting laws." 40 C.F.R. 300.415(j).

¹⁵ OSWER/OERR Memorandum, "Introduction to ARARs" (July 29, 1992).

¹⁶ 40 CFR 300.415(j)

¹⁷ CAA Section 118, 42 USC 7418(a)

Q6. How are the demolition requirements of the Asbestos NESHAP considered at federal facilities subject to a remedial action or removal action under CERCLA?

Sometimes federal agencies will demolish buildings using the federal agency's CERCLA removal or remedial authority. Federal agencies can utilize CERCLA response authority whenever a hazardous substance has been released or where there is a substantial threat of release into the environment, and response is appropriate to protect public health, welfare, or the environment.¹⁸ When a removal action is undertaken it should, to the extent practicable, contribute to the efficient performance of any long term remedial action.¹⁹ Removal action should not create new or additional contamination that could jeopardize protectiveness. CERCLA and Executive Order 12580 establish a framework for the use of removal and remedial authorities by federal agencies. Based on a site-specific evaluation, if the Asbestos NESHAP applies by its terms to a particular demolition of buildings performed by a federal agency exercising its CERCLA response authority, then that standard is applicable within the provisions of CERCLA ARARs.

Q7. What are the authorities for CERCLA removal actions at federal facilities, and are there mechanisms for regulatory oversight to include compliance with ARARs?

CERCLA Section 120 states that federal agencies shall be subject to, and comply with CERCLA in the same manner and to the same extent as any nongovernmental entity. Under Section 120 of CERCLA, and pursuant to Executive Order 12580, federal agencies and departments have been designated as lead agencies for conducting non-emergency removal actions at sites under their jurisdiction.²⁰ Removal actions taken by federal agencies should be consistent with the National Contingency Plan (NCP). ARARs analysis is a part of the removal decision process. It should generally be practicable to meet ARARs in non-time critical removal actions. Federal agencies should carefully consult with EPA and the states to identify ARARs in the removal or remedial decision process.²¹

At federal facility National Priorities List (NPL) sites, EPA has an oversight role²² that is specified on a site specific basis in each Federal Facility Agreement (FFA). FFAs may also extend provisions for EPA involvement in CERCLA removal actions on a site specific basis. This may include, but is not limited to, EPA approval/concurrence on removal action decision documents, including Engineering Evaluation/Cost Analyses, removal work plans, and ARARs waivers. In accordance with CERCLA Section 120(a)(4), state laws concerning removal actions apply, including state laws regarding enforcement for sites not listed on the NPL.

When exercising removal authorities delegated by Executive Order 12580 at NPL sites, federal agencies should consult with EPA, states and the public to ensure that the action is consistent with overall facility restoration goals and will result in cleanups consistent with the operable unit Record of Decision (ROD) and/or the final installation-wide ROD to delete the site from the NPL.

Section 104(a)(1) of CERCLA

¹⁹ Section 104(a)(2) of CERCLA

²⁰ The Department of Defense (DOD) and DOE have emergency removal authority in accordance with Executive Order 12580.

 ²¹ August 24, 1994 EPA, DOD, DOE "Guidance on Accelerating CERCLA Environmental Restoration at Federal Facilities"
²² As defined by CERCLA Section 120

Q8. What are the authorities for CERCLA remedial actions at federal facilities, and are there mechanisms for regulatory oversight to include compliance with ARARs?

CERCLA Section 120 states that federal agencies shall be subject to, and comply with CERCLA in the same manner and to the same extent as any nongovernmental entity. In addition, guidelines, rules, regulations, and criteria that are applicable to CERCLA remedial actions at other facilities (non-federal) are also applicable to federal facilities in the same manner and to the same extent.²³

For federal facilities on the NPL, if EPA and the Federal agency are unable to agree on the selection of a remedial action, EPA has the final decision making authority for remedy selection.²⁴ The CERCLA remedy selection process includes identification of ARARs, and the federal facility is responsible for compliance with ARARs. For federal facilities on the NPL, EPA has the responsibility to confirm that the federal agency identified the ARARs and, under the FFA, to ensure compliance with ARARs.

At federal facility non-NPL sites, federal agencies generally are the lead agencies²⁵ for all remedial actions and for ensuring compliance with CERCLA, the NCP, and ARARs. EPA retains all appropriate statutory and regulatory authorities to ensure compliance. In accordance with CERCLA Section 120(a)(4), state laws concerning removal and remedial actions apply, including state laws regarding compliance monitoring and enforcement.

Q9. How are the demolition requirements of the Asbestos NESHAP considered at brownfields sites?

Under CERCLA, each grant or loan under the Brownfields Program shall be subject to an agreement that requires the recipient to comply with all applicable federal and state laws and to ensure that the cleanup protects human health and the environment.²⁶ This would include the Clean Air Act's Asbestos NESHAP work practice standards, as well as other applicable environmental regulations. EPA may also require a Brownfields grantee to follow a requirement of the NCP to the extent it is relevant and appropriate to the Brownfields Program.²⁷ The program requires (through its grant terms and conditions) that cleanups include an analysis of cleanup alternatives. Documentation should include information about the site and contamination issues (i.e., exposure pathways, identification of contaminant sources, etc.), cleanup standards, applicable federal and state laws, the evaluation of the various cleanup alternatives, and the proposed cleanup plan. The evaluation of alternatives must include information on the effectiveness, ability to implement, and cost of the proposed response. All cleanups require a site-specific community relations plan that includes providing reasonable notice, opportunity for involvement, response to comments, and administrative records that are available to the public. In addition, cleanup grant recipients must ensure the cleanup is protective of human health and the environment.

Q10. How should asbestos-containing waste material (ACWM) and regulated asbestos-containing material (RACM) be disposed?

²³ CERCLA Section 120(a)(2)

²⁴ CERCLA Section120

²⁵ As defined in the NCP at 40 CFR 300.5

²⁶ CERCLA 104(k)(9)(B)(i)(II)

²⁷ CERCLA 104(k)(5)(A)(i)(II) and 104(k)(9)(A)

ACWM and RACM are to be managed consistent with the Asbestos NESHAP waste disposal provisions.²⁸ In addition, the NCP includes requirements on contamination transferred off-site.²⁹

described in this particular an codification 29 C/F & 1910-1001, 29 C/F & 1913-1001, and 29 C/F & 1925-1101. The EFA Ashiettan Worker Protocoles Ratio described in the obstation is codified at 50 C/F & 1913-1001, Subpare G. The mereditation requirement described in the document for public and complete at 50, Subpare G. The mereditation requirement described in the document for public and complete at 65 U.S.C. 2646, and the EFA's Asheetos Madel Astronomy Protocoles Protocoles in the document for public and the contribution of C/F.B. Pare 263, Subpare G. The mereditation requirement described in the formation for public and commercial buildings is contributed at 15 U.S.C. 2646, and the EFA's Asheetos Madel Astronomy Protocoles Protocoles in the contribution of C/F.B. Pare 263, Subpare 11, Appendix C. The OSILA and the EFA's Asheetos Madel Astronomy Protocoles in the third described at the term of the theorem at the term of the ter

Where are the Occupational/Sofety and Health Administration (OSTA) regulations on recognitional exponences in athesise formed?

The OBTA regulations found at 20 C.F.R. 1910, 1001 address accognitional expansion to intention in the industries operand by the Occupational Safety and Health Act, except construction work at defined in 29 CFR.1910.12(b) and ship expairing, depleteRling, and shiphredking employments and whited employments as defined in 29 CFR. (9154, The OSHA regulations found at 29 CFR.1920.116) atdress explore to advertes in construction work and the OSHA regulations found at 29 CFR.1920.116) 1913,1001 address exposure to asbestor in ship reputring, altiphtediate, and efficience found at 29 CFR. 1913,1001 address exposure to asbestor in ship reputring, altiphtediate, and efficiencies found at 29 CFR.

> For more information to the OSHA information regulatory requirements, visihttp://www.asha.yov/SLTC defermed standards fated and http://www.asha.eeu/SLTC hebened/construction.html

Q2 IF had are the minister presidential requirements promisigated by the EPA expecting meropedianal requirements in entertax in construction extictly re?

The RNA has also based worker protection importantion purposed to the Fourie Software Fourier's of a (1903), he would suppose who work for a State or local protectioner coupleyer that is not subject to an OSMA-approval State substate strandard. The EPA's Arburates Worker Fourier's Bale cover these employees in regaring a State or fouri governation employer to outply with the OSMA organization at here we coupling a State or fouri governation employer to outply with the OSMA organization at here we coupling a state or fouri governation employer to outply with the OSMA organization at here we coupling a state or fouri governation of particular relevance, these State of local governances couple) and the state of the output of the state of the sta

Allow, index is builting we considered a 'public or consumation building' under TSCA. DVCA requires, that any popular who predime tableator-intend work is a public or comparaint building (insteading supervision, werkers, insperiors, and you) or descriptors) with the percedited (e.g., trained according to

The second for the last of the second of the second s

Section 3 - Demolition Practices and the Worker-Protection Requirements for Asbestos

This section provides a summary of the worker-protection requirements that pertain to the demolition of buildings that contain asbestos. The Occupational Safety and Health Administration (OSHA) regulations described in this section are codified at 29 C.F.R. 1910.1001, 29 C.F.R. 1915.1001, and 29 C.F.R. 1926.1101. The EPA Asbestos Worker Protection Rule described in this section is codified at 40 C.F.R. Part 763, Subpart G. The accreditation requirement described in this document for public and commercial buildings is codified at 15 U.S.C. 2646, and the EPA's Asbestos Model Accreditation Plan is codified at 40 C.F.R. Part 763, Subpart E, Appendix C. The OSHA and the EPA regulations described in this document are legally binding requirements. This document merely references those regulatory requirements; it is not a regulation itself, nor does it change or substitute for those regulations. Thus, this document does not impose legally binding requirements on any party, including the EPA, states, or the regulated community.

Q1. Where are the Occupational Safety and Health Administration (OSHA) regulations on occupational exposures to asbestos found?

The OSHA regulations found at 29 C.F.R. 1910.1001 address occupational exposures to asbestos in all industries covered by the Occupational Safety and Health Act, except construction work as defined in 29 CFR 1910.12(b) and ship repairing, shipbuilding, and shipbreaking employments and related employments as defined in 29 CFR 1915.4. The OSHA regulations found at 29 C.F.R. 1926.1101 address exposure to asbestos in construction work and the OSHA regulations found at 29 C.F.R. 1915.1001 address exposure to asbestos in ship repairing, shipbuilding, and shipbuilding, and shipbreaking employments and related address exposure to asbestos in ship repairing, shipbuilding, and shipbreaking employments and related employments.

For more information on the OSHA asbestos regulatory requirements, visit http://www.osha.gov/SLTC/asbestos/standards.html and http://www.osha.gov/SLTC/asbestos/construction.html

Q2. What are the worker-protection requirements promulgated by the EPA regarding occupational exposures to asbestos in construction activities?

The EPA has also issued worker protection requirements, pursuant to the Toxic Substances Control Act (TSCA), for certain employees who work for a State or local government employer that is not subject to an OSHA-approved State asbestos standard. The EPA's Asbestos Worker Protection Rule covers these employees by requiring a State or local government employer to comply with the OSHA regulations that address occupational exposures to asbestos.³⁰ Of particular relevance, these State or local government employers with employees performing construction activities must comply with 29 C.F.R. 1926.1101.

Also, federal facilities are considered a 'public or commercial building' under TSCA. TSCA requires that any persons who perform asbestos-related work at a public or commercial building (including supervisors, workers, inspectors, and project designers) must be accredited (i.e., trained according to

³⁰ The EPA's Asbestos Worker Protection Rule can be found at 40 C.F.R. Part 763, Subpart G.

their responsibility) pursuant to the requirements of the EPA's Asbestos Model Accreditation Plan program, which is implemented by the states.

For a complete discussion of these worker-protection regulations about occupational exposures to asbestos, please refer to the EPA's Asbestos Worker Protection Rule at 40 C.F.R. §§ 763.120 through 763.123, the accreditation requirement at 15 U.S.C. 2646, and the EPA's Asbestos Model Accreditation Plan at 40 C.F.R. Part 763, Subpart E, Appendix C. For more information, also visit http://www.epa.gov/asbestos

Q3. As a Federal agency, how does EPA comply with the OSHA regulations on occupational exposures to asbestos for EPA employees while they are working at EPA facilities?

As a Federal agency, the EPA complies with all standards, including OSHA regulations on occupational exposure to asbestos, issued under section 6 of the Occupational Safety and Health Act of 1970.³¹

To ensure compliance with these standards the Agency issued EPA Order 1440.1. This Order defines the Agency's Safety, Health, and Environmental Management Programs (SHEMP) and establishes policies, outlines authorities, defines management functions and responsibilities, and creates an agencywide organizational structure for the administration of these programs. Program documentation required by the Order which address asbestos exposure issues and standards includes: SHEMP Guideline 22: Asbestos Procedures & Programs for Employees; SHEMP Guideline 51: Safety, Health and Environmental Management Training; SHEMP Operations Manuals; and the SHEMP Audit Protocol.

SHEMP Guideline 22 presents an overview of the program requirements for controlling and minimizing employee exposures to asbestos fibers at EPA facilities. SHEMP Guideline 51 outlines specific training requirements for all EPA employees on a variety of subjects, including training that covers those employees who have the potential for occupational asbestos exposure. The SHEMP Operations Manual addresses common SHEMP activities, such as field operations; designing and operating facilities; office environments; laboratory operations; dive operations; lead-containing building materials; and asbestos-containing building materials. The SHEMP Audit Protocol provides management officials, union officials, SHEMP Managers, and other Agency employees with an explanation of the processes, criteria, and protocol used to conduct audits, inspections, and program evaluations.

Other agency policies applicable to occupational exposures to asbestos include: EPA Order 1440.2 Training Requirements for Agency Employees; EPA Order 1460.1 Occupational Medical Surveillance Program; and EPA Facilities Manual, Volume 4.

For more details about the requirements described herein, please refer to the relevant citations within the U.S. Code of Federal Regulations (C.F.R.), available online from the Government Printing Office at http://www.gpo.gov/fdsys/. Please note that this document only summarizes the most relevant aspects of the regulations. Also consider how other laws and regulations may apply.

³¹ See Executive Order 12196 ("Occupational Safety and Health Programs for Federal Employees") (Feb. 26, 1980) and 29 C.F.R. Part 1960 ("Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters"), Part 1910 ("Occupational Safety and Health Standards") and Part 1926 ("Safety and Health Regulations for Construction"). The Executive Order provides an exception where the Secretary of Labor approves compliance with alternative standards.

their responsibility) parated to the requirements of the UPA's Ashesios Model Accreditation Phrapropress which is implemented by the states.

For a complete discussion of index weights protection regulations about neargetinnal exponents to advance, plane refer to the EPA's Astructor Warker Protection Rule at 40 C.E.R. 51 763.130 deputy for (C.D. do: acareditation requirement at (S.U.S.C. 2046, and do: EPA's Astructor Model Acareditation Flacs at 40.0.2.5.8. Part 763, Subpart D. Agecodis C. For once information, the wait hep-laterat 40.0.2.5.8. Part 763, Subpart D. Agecodis C. For once information, the wait

(1) An Fadrowit againsty frame data EEA complete with the OBHA regulations on analysis and experiments to acheroim for EPA considerate within they are well they at EPA fitvillica?

As a Sederal agroop, the EPA compiles with all stimularity including OSHA requisitions as operational exposure to whether, leaded tooler station for the Group Monal Sofety and Health Act of W10.

(a) entities compliance with their structure the Agency listed CMA Codes (440.1) This Gales Jahlass do: Agency's Rafety, Héalfte, and Environmental Management Programs (SHEMP) and establishes policies confirm automation, definer management functions and responsibilities, and establishes agency reads organizational structure for the advointigation of these programs. Program documentation required by the Onder which address advointigation intrates and structures. Program documentation (Cantel) - 22: Astroneous Proceedance & Programs for Explored Integrations SHD40 (Cantel) - 22: Astroneous Proceedance & Programs for Explored SHR40' Guideline (1) Suffy, Houlds and Exvindemental Management Training, SHE40' Occursions Mantalis, and the SHE40' Acde (Fronce)

Stillible Conduction 22 presents on reports of the program regimentation for controlled and characteria, require accorders to astronom libers at EPA facilities. Striktle Condition 11 continue specific training require academics for all EPA conductors on a vertice of subjects, including training that cover these employees who have the potential for occupational rebutics expression. For SUEDEP Operations Manual addresses correction 91 EPAF activities tach as field operations, despring training that cover these eddresses correction 91 EPAF activities tach as field operations, despring to the proceeders of the contaction between the potential for occupational rebutics, despring to the proceeder of the contactions for the test of the second rest operations, lead contacting to the proceeder and entrations that the proceeder and other Agenty stephysics with an explanation of the proceeder, other to be a protocol media contact Agenty stephysics with an explanation of the proceeder, other and protocol media contact a subject tax, and propagator with an explanation of the proceeder, other and protocol media contact and the imposition, and propagator contaction of the proceeder, other and protocol media contact and the imposition, and propagator contaction of the proceeder, other and protocol media contact and the imposed tax, and propagator excluding the

Other agentry policies applicable to excapational experimento abastes include: EPA Order 140.2 Training linguitements for Agency Employees, EPA-Order 1400.1 Occupational Medical Surveillance Supremote and EPA Facilities Manual, Volume 4.

For more denote about the requirements described forests, please refer to the retenant attributes within the U.S. Fork of Faderal Regulations (C.F.S.), associable value from the Government Perating Office at large drawing gas gaughtysis. Please must this discincent only summarized the ment relevant atprets of electrications. New resultder how other laws and regulations may apply.

¹ See Examples Data 12164 ("Ourquerment failing and limith Property for Federal Employees") (Ed. 25, 1960) and 29 (17.8, Par. 1960) "Data Frequence Examples in Federal Ling Eyer Occupational Subay and Herlin Programs and Extend Instance", Eur. 1910 ("Cocupationed Subay and Health Standards") and Pat. 1926("Subay and Health Programs with Constance and The Examples' Order provides on exception where the Sectory of Labor approved decidings with the active standards.