

SLDS
Administrative
Record
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To K. Albin

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Subject Scoping Notice: Decontamination
Activities at the St. Louis Downtown
Site (Building K)

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Of Environmental Compliance

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BACKGROUND

The purpose of this Scoping Notice is to formalize the identification of applicable requirements per the FUSRAP Standards/Requirements Integration Document (S/RID) and evaluate the application of federal, state, and local rules and regulations that are applicable or relevant and appropriate requirements (ARARs) for the decontamination of Building K at the St. Louis Downtown site (SLDS), in St. Louis, Missouri. This environmental compliance evaluation is based on information contained in the Radiological, Chemical, and Hydrogeological Characterization Report for the St. Louis Downtown Site in St. Louis, Missouri and on subsequent boundary delineation and sampling performed by the Environmental Technology (ET) Group.

This Scoping Notice reviews various environmental regulations. However, although they may be referenced generally, neither Occupational Safety and Health Act (OSHA) nor U.S. Department of Transportation (DOT) regulations are within the scope of this review. Although OSHA and DOT regulations are routinely applicable to all FUSRAP remedial actions, identifying the specific elements of these regulations that apply to site work is done through site specific Health and Safety Plans by the Safety and Health Department and through standard shipping procedures and work instructions issued by the Waste Management Department.

REGULATORY FRAMEWORK

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

Removal Action

DOE is implementing a cleanup program for three groups of properties in the St. Louis, Missouri area: (1) SLDS, (2) the St. Louis Airport Site (SLAPS) and vicinity properties, and (3) the Latty Avenue Properties. These properties are referred to collectively as the St. Louis Site. As part of the St. Louis site, SLDS is being managed in accordance with the requirements of CERCLA and its implementing regulations found in the National Contingency Plan (40 CFR Part 300). DOE is proceeding with the decontamination of Building K at SLDS as an interim component of a comprehensive cleanup strategy for the St. Louis Site under the authority of the Atomic Energy Act of 1954, as amended. This activity is consistent with CERCLA, which requires that interim actions be consistent with and contribute (to the extent practicable) to the efficient performance of any anticipated final remedy.

The following is a summary of the requirements for CERCLA removal actions for which the planning period before onsite activities commence exceeds six months (40 CFR Part 300.415).

- An Engineering Evaluation/Cost Analysis (EE/CA) must be prepared. This includes publishing a public notice of availability, establishment of a public comment period, and preparation of a responsiveness summary.
- A formal community relations plan must be prepared within 120 days of the initiation of removal activities or prior to the end of the removal action if it does not last 120 days.
- An administrative record file must be established within 120 days of the initiation of removal activities, or prior to the end of the removal action if it does not last 120 days.
- ARARs affecting the removal action must be documented in advance and complied with to the maximum extent practicable.

This document is intended to identify ARARs affecting this removal action to meet the last requirement above. The other removal action requirements have already been met as an EE/CA has been prepared, a community relations plan prepared, and an administrative record file established.

§121(e)(1) Exemption

Since SLDS is being remediated under CERCLA authority, the CERCLA §121(e)(1) exemption from administrative requirements for onsite activities is available. Administrative requirements are defined by EPA as "those mechanisms that facilitate the implementation of the substantive requirements of a statute or regulation" (see CERCLA Compliance With Other Laws Manual).¹

Administrative requirements include but are not limited to the issuance of permits, providing notification, preparing documentation, reporting, and obtaining approvals of administrative bodies. CERCLA cleanups must comply with the substantive requirements of other laws. However, notifications, approvals, or permits need not be made to or obtained from regulators.

Therefore, onsite activities for a CERCLA response action are to comply with the substantive provisions of applicable or relevant and appropriate requirements to the maximum extent practical; whereas, offsite activities must fully comply with administrative (e.g., preparation of a hazardous waste manifest for offsite shipment of hazardous waste) and substantive requirements (e.g., treating hazardous waste in accordance with the treatment standards of 40 CFR Part 268).

The following is a list of some of the administrative requirements that if applicable to the Building K decontamination activity, would fall under the §121(e)(1) exemption:

- providing notifications or documentation to EPA pursuant to NESHAPs regulations found in Subparts H, M, or Q;
- obtaining a permit for the storage or treatment of any generated hazardous waste; and
- obtaining a NPDES permit for onsite discharges of pollutants to a water of the state.

¹ Substantive requirements are defined as "those requirements that pertain directly to actions or conditions in the environment" (see CERCLA Compliance With Other Laws Manual, 1988).

The Offsite Rule

The Offsite Rule codifies the CERCLA requirement that waste generated from remediation activities conducted in accordance with CERCLA (i.e., CERCLA waste), must not contribute to present or future environmental problems at off-site waste management facilities. Thus, the Off-Site Rule requires that CERCLA wastes only be sent to off-site facilities that meet EPA's acceptability criteria. FUSRAP periodically verifies the acceptability of contracted permanent disposal facilities as an acceptable facility to receive CERCLA waste. However, as CERCLA waste is transported to other facilities, FUSRAP is required to verify the acceptability of such facility by contacting the appropriate EPA Regional office where the receiving facility is located.

The National Environmental Policy Act (NEPA)

NEPA, as implemented by Executive Orders 11514 and 11991, establishes national policies and goals for the protection of the environment. Section 102(2) of NEPA contains provisions which direct federal agencies to give appropriate consideration to the environmental effects of their decision making and to prepare appropriate documentation. Appropriate NEPA documentation may include the preparation of either an Environmental Impact Statement (EIS), Environmental Assessment (EA), or a Categorical Exclusion (CX), depending upon the potential significance of the activities' impact upon the environment.

Since activities at SLDS will not have an individual or cumulative significant effect on the environment, a generic SLDS Categorical Exclusion (CX) under NEPA has been prepared specific to interim removal activities planned for the site (e.g., routine utility repair, maintenance activities, and building demolition). The CX has been submitted to and approved by DOE-Headquarters (CCN 076604). The CX applied to work at this site is "B.6.1 Removal Actions Under CERCLA (including those taken as final response action and those taken before remedial action) and Removal-Type Actions Similar in Scope Under RCRA and Other Authorities." Although there has been some discussion concerning whether or not this existing CX is adequate for recent interim actions at SLDS, the DOE-ORO NEPA Compliance Officer, Patty Phillips, has stated that since these interim actions are part of a larger action to be covered by CERCLA documentation which incorporates NEPA values, no additional NEPA documentation is required at this time (CCN 131149).

The Federal Facility Compliance Act (FFCA)

The site treatment plan (STP) requirements of the FFCA are applicable to DOE-owned or -leased sites where waste subject to land disposal restrictions is generated and treated onsite. If the requirements of the FFCA are triggered, the federal EPA must approve the STP. Since Building K is not part of a DOE-owned or -leased site, the site treatment plan requirements are not applicable to any potential hazardous waste generated during decontamination activities.

ADDITIONAL FEDERAL REGULATORY CONSIDERATIONS

DOE Order 5400.5

Cleanup of SLDS will be conducted pursuant to DOE Order 5400.5. However, the Department of Energy (DOE) is currently in the process of codifying all DOE Orders. A proposed rule which would codify DOE Order 5400.5 (10 CFR 834) has been published in the Federal Register (58 FR 16268). The final rule was expected to be published in 1996. Upon codification of 10 CFR 834, the requirements governing cleanup of radioactively contaminated areas would have to be reevaluated, particularly if the new requirements become effective before remediation commences.

Clean Air Act (CAA)

The federal National Emissions Standards for Hazardous Air Pollutants (NESHAPs) regulate air emissions from facilities owned or operated by DOE. In addition, the CAA has established concentrations for particulate matter in the ambient air.



Emissions of Radionuclides Other Than Radon - Subpart H

NESHAPs Subpart H regulates the emissions of radionuclides other than radon from facilities owned or operated by DOE. A literal reading of the regulation indicates that DOE "operations" which emit radionuclides must demonstrate compliance with the 10 mrem/yr standard. The current DOE interpretation of the applicability of Subpart H, based on a DOE-HQ memorandum, is that Subpart H only applies to DOE owned or leased sites (see DOE memorandum "Clean Air Act Regulatory Requirements Applicable to FUSRAP"; from J. W. Wagoner, II to W. M. Seay; dated March 22, 1990). Although the requirements of Subpart H are not applicable since Building K is not part of a DOE-owned or -leased site, the regulation is a relevant and appropriate requirement in as much as it pertains to the modification of an existing facility [40 CFR Part 61.96(b)]. Therefore, although information does not have to be submitted to EPA Region VII due to the CERCLA §121(e)(1) exemption, substantive compliance with the standard is necessary.

A calculation is being prepared to verify that Building K radionuclide emissions other than radon are kept below 1% of the 10 mrem/yr standard [40 CFR Part 61.96(b)]. The calculation will document that decontamination activities will remain below the standard of 0.1 mrem/yr.

Emissions of Radon - Subpart Q

NESHAPs Subpart Q regulates the emission of radon from facilities owned or operated by DOE. The current DOE interpretation of the applicability of Subpart Q, based on a DOE-HQ memorandum, is that Subpart Q only applies to DOE owned or leased sites. Nevertheless, Subpart Q is an ARAR since it is relevant and appropriate to the decontamination of Building K.

Subpart Q prohibits a source at a DOE facility from emitting more than 20 pCi/-m³-s- of radon-222 as an average for the entire source, into the air. Historical data obtained by ET indicates that decontamination efforts at Building K will not exceed this limit. However, ET is in the process of further evaluating this issue and will prepare a letter to file documenting their analysis and our subsequent compliance with Subpart Q.

Asbestos Abatement

Characterization activities indicate that Building K may contain asbestos materials in the form of vinyl floor tiles. These tiles are not expected to be friable. However, should friable asbestos be encountered NESHAPs Subpart M requirements for asbestos demolition and renovation activities in 40 CFR Part 61.145 would be applicable. Since potential asbestos abatement activities are not expected to involve the removal of load supporting structures, such operations will likely be considered a renovation activity.

Renovation activities where the amount of regulated asbestos containing material is at least 260 linear feet on pipes or 160 square feet on other facility components trigger the notification requirements and procedures for asbestos emission control found in 40 CFR Part 61.145(b)&(c). The regulations require that the notification to EPA be updated as necessary, including when the amount of asbestos affected changes by at least 20 percent [40 CFR Part 61.145(b)(2)]. DOE is exempt from the notification aspect of these requirements due to CERCLA §121(e)(1).

The Missouri Department of Natural Resources (MDNR) has also promulgated asbestos requirements (i.e., state NESHAPs equivalents) which are more stringent than federal NESHAPs regulations. These regulations are discussed in the State Requirements section.

Particulate Matter Requirements

National primary and secondary ambient air quality standards for particulate matter have been established (40 CFR Part 50.6). These federal standards have been adopted as state requirements in Missouri's Ambient Air Quality Regulations (see Additional State Regulatory Considerations for further discussion).



Clean Water Act (CWA)

The CWA regulates the discharge of pollutants to waters of the United States through the application of Federal, State, and local discharge standards. Since no discharges of water are planned as part of this activity, CWA regulations should not impact Building K decontamination activities.

NPDES Requirements

EPA regulates the direct discharges of pollutants through the National Pollutant Discharge Elimination System (NPDES). States may receive authorization from EPA to administer their own equivalent or more stringent state program (i.e., a State Pollutant Discharge Elimination System [SPDES] program) in lieu of the federal requirements. Since Missouri's SPDES program has been authorized by the U.S. EPA, state requirements must be evaluated for applicability where water discharges are planned (see State Requirements section).

Resource Conservation and Recovery Act (RCRA)

RCRA regulates the storage, treatment, and/or disposal of hazardous waste or radioactive mixed waste (RMW) that contains hazardous constituents (40 CFR Part 261 through 40 CFR Part 268). Since Missouri's hazardous waste program has been authorized by EPA, the regulations contained in the Missouri Code of State Regulations (CSR) govern activities at Building K (these state hazardous waste regulations are in some instances more stringent than federal RCRA regulations).

Toxic Substances Control Act (TSCA)

PCBs

TSCA establishes requirements for the manufacture, processing, distribution in commerce, use, disposal, storage, and marking of PCBs of 50 ppm or greater (40 CFR Part 761) or PCBs from a source of 50 ppm or greater. Based on site specific information, TSCA regulated PCBs are not expected to be encountered. Should PCBs be encountered, they will be managed in accordance with TSCA regulations.

Asbestos

TSCA establishes requirements which must be followed by employers of state or local government employees during asbestos abatement projects not governed by OSHA (40 CFR Part 763.120). These requirements are not applicable to Building K since any required asbestos abatement will not involve state or local government employees and OSHA asbestos standards under 29 CFR 1926.1101 will be followed. However, OSHA regulations do reference the training requirements of the TSCA Model Accreditation Plan (MAP) found in 40 CFR Part 763.

National Historic Preservation Act (NHPA)

Since this removal action is a federal undertaking, compliance with §106 of NHPA is required. Building K has been identified by the State Historic Preservation Officer (SHPO) as eligible for inclusion on the National Register of Historic Places. In accordance with NHPA, a letter which provides a summary of the scope of work at Building K has been sent to the SHPO. In this letter, DOE requested that the SHPO concur with DOE's assessment that the activities will not detrimentally impact Building K. The SHPO has concurred with DOE's assessment and indicated that based on the scope of work at Building K, decontamination activities will have "no effect" on the property (see CCN 149360).

Federal Real Property Requirements

General Services Administration (GSA) regulations related to the management and disposition of real property are not applicable to activities at Building K.



ADDITIONAL STATE REGULATORY CONSIDERATIONS

Hazardous Waste

Missouri's hazardous waste program, which has been authorized by EPA, establishes requirements related to the management of RCRA hazardous wastes (including hazardous debris [e.g., concrete, asphalt, wood, etc. which are contaminated with hazardous waste]). Lead anchor bolts which meet the definition of a hazardous waste may be present in Building K. If removed from the walls, these anchor bolts would be considered a hazardous waste; however, should the anchor bolts be destined for transportation to an appropriate facility for recycling, they would not be subject to regulation as a hazardous waste under the state equivalents to 40 CFR Part 262, 264, and 268 [10 CSR 25-4.261]. As a result, the anchor bolts would not require manifesting when shipped for recycling. However, the recycling facility must meet EPA's acceptability criteria for CERCLA waste per the Offsite Rule (see discussion on page 3).

Based on preliminary data received from the ET team representatives, no RCRA characteristic wastes have been identified as of this date and none are expected to be present. In addition, process knowledge does not indicate the presence of any listed waste in Building K. Should hazardous waste be identified at Building K, it will be removed, managed, and disposed of in accordance with Missouri hazardous waste regulations.

Solid Waste

State solid waste regulations do not establish requirements for the storage and management of solid waste [e.g., demolition waste which does not meet the definition of hazardous waste]. However, state regulations do provide acceptance criteria for sanitary and demolition landfills. Should it be determined that land disposal in a demolition or sanitary landfill is a preferred disposal option, further evaluation of landfill acceptability criteria will be necessary.

Air Issues

Fugitive Dust Emissions

Missouri regulations prohibit a person from causing or allowing to occur any handling, transporting, or storing of any material or any construction, repair, cleaning or demolition of a building without installing reasonably available control measures to prevent fugitive particulate matter from going beyond the premises of origin as follows:

- in quantities where the particulate matter remains visible in the ambient air beyond the property line of origin or
- in quantities where particulate matter may be found on surfaces beyond the property line of origin [10 CSR 10-6.170(A)].

Should regulators determine that fugitive particulate matter has migrated beyond the premises of origin a notice of violation may be issued by the enforcement authorities (i.e., St. Louis Division of Air Pollution Control). In addition, regulators may require any reasonable measures to be employed to curtail this migration. Reasonable measures, include, but are not limited to, application of water; application of dust free surfaces; planting and maintenance of vegetative ground cover; and the use of equipment to contain, capture, vent, and control fugitive dust [10 CSR 10-6.170(B)].

MDNR Asbestos Regulations (State NESHAPs equivalent regulations)

MDNR regulates asbestos demolition and renovation activities more stringently than the federal NESHAPs provisions.² MDNR has established registration, certification, and notification standards [10 CSR 10-6.240(2)(A)-(C)] for asbestos. The registration and notification requirements are administrative in nature and thus fall under the CERCLA 121(e)(1) exemption. The certification requirements are substantive in nature and must be adhered to as ARARs. For example, a person taking samples to determine the presence or absence of asbestos material must be certified as a Missouri Asbestos Inspector.

In addition, asbestos abatement projects must comply with certain abatement work practices and procedures [10 CSR 10-6.240(2)(D)].³ The abatement work practices are not likely to be triggered since based on information currently available all potentially asbestos containing material is expected to be nonfriable. However, should friable asbestos be encountered, the specifics of these regulations will be addressed in a specific Interoffice Memorandum (IOM).

MDNR has delegated enforcement authority for asbestos abatement projects in the city of St. Louis to the St. Louis Division of Air Pollution Control. Therefore, where issues regarding the interpretation of asbestos regulations arise, the City Division of Air Pollution Control should be consulted.

Ambient Air Quality Standards

Missouri has established ambient air quality standards which establish regulatory limits for particulate matter concentration. These state regulations establish the same concentration limit as the provisions found in 40 CFR Part 50. These requirements establish a particulate matter concentration of 150 micrograms per cubic meter based on a 24-hour average and of 50 microgram per cubic meter based on annual arithmetic mean. Particulate air monitoring devices will be placed near the work area to provide continuous air monitoring and to confirm that contamination is not migrating outside the work area. Monitoring will verify compliance with particulate matter concentration limits. Should concentrations be elevated, controls will be implemented as appropriate.

Water Issues

Due to the nature of the activities to be conducted at Building K, it is not expected that significant amounts of water will be generated. However, any water generated onsite (e.g., decontamination water or water used for dust control) will be managed in accordance with Missouri regulations. Should minimal amounts of water be generated, such water will be drum heated. Should sufficient quantities of water be generated to render drum heating impractical, discharge in accordance with the Missouri SPDES program will be considered.

SPDES Point source discharges

Missouri regulates the discharge of any "pollutant" to a "water of the state" from a "point source" (3745-33-02). These terms are sufficiently broad to cover the discharge of almost any substance to any water body, including any discharge onto the ground. Missouri requires permits for such discharges. Although the CERCLA 121(e)(1) exemption would alleviate the need for obtaining a permit for the onsite discharge of a pollutant to a water of the state, all discharge scenarios should be evaluated to determine permit applicability prior to the discharge of any potential pollutant to a water of the state. In addition, substantive requirements should be verified with state and local regulators.

² The regulations are triggered where asbestos is present in quantities of 16 linear feet or 10 square feet as opposed to 260 linear feet or 160 square feet per the federal regulations.

³ A more detailed discussion of these state regulations and their applicability to SLDS asbestos abatement may be found in CCN 140485.

Stormwater Discharges

Since all work will be indoors, stormwater regulations are not ARARs for the decontamination of Building K.

Lead Abatement

The Missouri Department of Health regulates lead in paint, soil, or dust at levels of 5,000 ppm. Should regulated concentrations of lead in paint, soil, or dust be encountered the worker and supervisor licensing requirements would be applicable. Since highly elevated levels of lead are not expected to be encountered during decontamination of Building K, lead abatement requirements are not currently considered ARARs.

State Radioactive Waste Code

Missouri is not a Nuclear Regulatory Commission (NRC) agreement state. Therefore, the state only has jurisdiction over Naturally-Occurring Radioactive Materials (NORM) and accelerator-produced material (NARM).

Radioactive materials such as byproduct, source, and special nuclear material are regulated by the NRC and in certain instances by DOE. Since the radioactive material at Building K is considered a source, byproduct, or special nuclear material, and Missouri is not an NRC Agreement State, the Missouri Radiation Protection Standards are not directly applicable. However, these requirements may be considered ARARs and as such may be applied to activities at SLDS. Specifically, the general prohibition from dumping or burial of radioactive materials in soil except at sites approved by the Missouri Department of Health could be considered relevant and appropriate [Missouri Department of Health Rules for Protection Against Ionizing Radiation; 19 CSR 20-10.090]. As a result, radioactive materials should only be land disposed in the state of Missouri after concurrence from appropriate state and federal regulators has been received.

Potential Local Ordinances and/or Permits

The CERCLA 121(e)(1) exemption alleviates the need to obtain any permits related to the interim removal action at Building K. However, local ordinances have been evaluated in an effort to identify any exempted permits for which substantive requirements would be triggered. This evaluation did not identify any exempted permits or any substantive requirements. In addition, Mallinckrodt has verified that for similar activities conducted by Mallinckrodt, no permit requirements were triggered.

Fugitive Dust

The enforcement of the state fugitive particulate matter regulation [10 CSR 10-6.170] is handled at the local level. The regulations, which are discussed in the state requirements section, prohibit the migration of particulate matter beyond the premises of origin. Best Management Practices (BMPs) should be used to control fugitive particulate matter and ensure compliance with this regulation.

Noise Control

There are no local requirements related to noise control.

CONCLUSION

This review has identified the major regulatory drivers that will guide the Building K decontamination. An evaluation of the regulations and standards identified in the project S/RID has been completed to ensure the completeness of this review.

Based on the above assumptions and research, the Environmental Compliance Department has not identified any laws, regulations, or requirements, other than those included in this Scoping Notice, which will impact decontamination activities.

