

Two of the main Federal laws that address hazardous and toxic materials issues are the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and the Resource Conservation and Recovery Act (RCRA). CERCLA, commonly known as Superfund, has the major objectives to identify hazardous and toxic material sites, determine liability, and oversee the cleanup. The financial liability aspects of these sites or sites in proximity should be of greater concern to Sub-applicants in buyout projects because they will hold title to acquired property and will therefore share in any liability. For this reason, FEMA will not fund the acquisition of contaminated property (with the exception of residential or commercial properties containing normal quantities of lead or asbestos, home septic systems, home heating oil tanks, and normally occurring quantities of household hazardous materials).

The RCRA of 1976 addresses the handling, disposal and recycling of debris and solid waste, including hazardous materials. The requirements of RCRA are implemented at the State and local levels and are often included as conditions or best management practices in permits required at those levels. Besides disposal and recycling of waste materials, RCRA is also concerned with the transportation, treatment, and storage of hazardous waste. In addition to health and safety issues, RCRA is closely tied to some of the objectives of the Clean Water Act and Clean Air Act, relating to potential effects on water and air quality.

H.-1 Determining if there are hazardous or toxic materials present in your project area

There are two general types of concerns relating to hazardous or toxic materials. The first are hazardous or toxic materials that already exist at or near the site either in or on the ground or in structures on the site. These must be identified to protect the future users of the site once the project is completed. Examples of this include asbestos and lead based paint in structures being modified or demolished and contamination of soil or groundwater from a leaking underground storage tank (UST). The second concern is hazardous and toxic materials that are brought to the site because of the project, most likely during the construction phase but also possibly because of the nature of the operation of the project, such as a water treatment plant. Examples of this include special paints, sealants, fuels, chemicals, or solvents.

When hazardous substances are involved there are usually increased costs associated with the investigation, characterization, removal, and disposal. Who pays for these costs usually depends on who is responsible for the presence of the materials and whether or not violations of environmental laws occurred. Therefore it is important to conduct a little research on the property to see if there a reason to suspect contaminates from a current or past use. FEMA cannot fund the buyout of a contaminated site unless it has been cleaned up to appropriate standards.

One of the best ways to determine if hazardous materials may be present in your project area is to visit the project site. Some of the visible indicators that hazardous materials could be present include stains on the ground and dead or dying vegetation; pipes

protruding from the ground; piles of waste materials including abandoned automobiles or farm equipment; electrical transformers or batteries; and discarded or partially buried metal drums or other containers.

If the site has had a spill, incident, or permitted activity associated with it, it is likely that there will be a record of it in a government database. The Environmental Protection Agency (EPA) maintains a searchable database that is available on its web page (<http://epa.gov/environ/html/em>). In addition, the EPA has delegated permitting and cleanup responsibilities to the states. EPA maintains a web page to help find state environmental agencies (<http://www.epa.gov/epahome/state.htm>).

Input from the agency responsible for hazardous waste management regarding the potential for nearby hazardous conditions could affect the design of your project. It may be possible to contact the agency directly to get a quick response.

If your project involves a building that was built before 1976, it is likely to have asbestos containing materials, lead based paint and other household hazardous materials. It is important that you document the potential for these materials to occur and to indicate how they will be managed or disposed of during the implementation of the project, as well as the cost of these measures. Most localities have standards on how to handle these materials. Be sure to get estimates on how much it will cost to dispose of these materials and include it as a line item on your cost estimate and scope of work.

H.-2 How to find out if there has been any studies, investigations, or enforcement actions related to your site

If the land use in your project area has ever been commercial or industrial, or if there are any indicators of the presence of hazardous materials as described in Section H.1, you should contact your county or state hazardous materials agency to find out if there are any studies, investigations, or enforcement actions related to your site.

In your communication with the state or local hazardous materials agency, you should:

- indicate that you are applying for federal aid, and you are requesting information about the presence or potential for the presence of hazardous materials, on or near your project area
- include in your communication the name of the nearest city and the names of the county and state where the project will occur
- include a detailed description of the proposed project and past land uses
- include a 1:24, 000 scale USGS map showing the project boundaries. Topographic maps can be ordered from the USGS directly (<http://topomaps.usgs.gov/>), or can be obtained free of charge online from the United States Department of Agriculture (<http://datagateway.nrcs.usda.gov/>).
- Include photographs of the project site

H.-3 How do I determine if my project will involve the use of any hazardous or toxic materials?

The types of hazardous materials typically associated with construction sites include items such as vehicle fuels, heavy equipment fluids, cement and concrete additives from concrete batch plants, cleaning fluids and solvents, adhesives, and materials that can pose physical hazards (such as explosives). Carefully review your scope of work, engineering estimates, work plans or other descriptions of the proposed work and identify any material such as those listed above that may be used in your project.

H.-4 Determining past land uses of properties in your project area

Determining past land uses of properties in your project area is important in evaluating the potential presence or impacts of hazardous materials at your project site. In general, if the property is currently commercial or industrial, or has a commercial or industrial history, you should find out more about the land use history of the site. Many avenues exist for obtaining such historical information. Some of these avenues are listed below:

- Tax records and maps at your local tax assessor's office;
- Sanborn Fire Insurance Maps available at the local public library;
- Historical city cross-reference directories from the local public library;
- Local title records at the Recorder of Deeds;
- Historical topographical maps from the U.S. Geological Survey;
- County soil survey maps from the local NRCS office;
- Historical aerial photographs from the USDA County Extension Service, the local public library, or the city or county planning office;
- Local building permits from the local building department;
- Fire department records available from the local fire prevention office; or
- Previously conducted environmental surveys or investigations.

This information can be combined with direct visual observations and local histories to evaluate the potential presence of hazardous materials. Additionally, sometimes interviewing local people familiar with the history of the project site (i.e., local government personnel, project site neighbors) may provide insight that might not otherwise be available.

H-5 How to Address Adverse Effects

Adverse effects are impacts to your project resulting from the presence or use of Hazardous and Toxic materials. If you anticipate that your project will have an adverse effects resulting from the presence or use of Hazardous and Toxic materials, then you should first consider ways to avoid or minimize those effects. If adverse effects cannot be avoided, develop appropriate treatment measures into the scope of work so adverse effects are reduced and minimized. Lastly, if adverse effects cannot be avoided,

compensate for the adverse effects through documentation or development of other treatment measures. Listed below are some of the possible adverse effects from Hazardous and Toxic materials that your project may have, together with possible treatment measures that you may include in your project to avoid, reduce or minimize, or compensate for adverse effects. The list is illustrative, and does not include all adverse effects that a project may have or all of the ways to potentially treat those effects.

Adverse Effects	Treatment
<ul style="list-style-type: none"> • Exposure of construction personnel to hazardous materials • Discharge of hazardous materials into the air <ul style="list-style-type: none"> ○ Lead ○ Asbestos • Discharge of hazardous materials into the soil or water 	<ul style="list-style-type: none"> • Develop a Health and Safety plan for field personnel • Train field crews in procedures for handling potentially hazardous materials • Use Personal Protection Equipment to limit exposure of personnel to hazardous materials • Acquire permits for handling hazardous materials from State regulatory agencies • Construct temporary barriers to limit release of hazardous materials • Store materials in appropriate containers that confine the hazard. • Dispose of materials at a certified site • Acquire permits from State regulatory agencies; report any accidental discharge of hazardous material immediately to the regulatory agency • Develop and implement a spill response, containment, and cleanup plan • Designate locations for servicing, washing, and refueling of equipment away from temporary channels or swales that would quickly convey runoff to the drainage system and into receiving water. • Confine contaminated materials in temporary barriers and containers while on-site. • Keep equipment properly maintained. • Dispose of hazardous material at a certified site

<ul style="list-style-type: none"> • Acquisition of contaminated property 	<ul style="list-style-type: none"> • Perform a Phase II Environmental Site Assessment to determine the extent of contamination • Perform a Phase III Environmental Site Assessment to remove hazardous materials from the property and remediate the site
--	---

H- 6 How to provide relevant and helpful support documentation

If there are no indicators of hazardous materials present at the project site, and if the reply from the state hazardous waste agency indicates no known hazardous materials present near your project area, attach the response from the state agency to your application in Section H of the PDM Environmental and Historic Preservation questions and write a short narrative in the comments box indicating no hazardous materials were observed during your site visit.

If there are any indicators of the presence of hazardous materials in your project area as a result of your field visit or research of past land use, attach a copy of the information obtained (e.g., the EPA web address showing your project area or a statement from the fire chief or mayor), a 1:24000 scale USGS topographic map showing your project site, and digital photographs of the project site and adjacent properties. Topographic maps can be ordered from the USGS directly (<http://topomaps.usgs.gov/>), or can be obtained free of charge online from the United States Department of Agriculture (<http://datagateway.nrcs.usda.gov/>).

Also include responses from any state or local hazardous materials permitting agency that you may have received. If any conditions or permits are required indicate that in the comments box in Section H, Question 1 of the PDM Environmental and Historic Preservation questions.

Documentation of interviews conducted, copies of historical documentation regarding the site (i.e., previous land use information collected), photographs, diagrams or sketches indicating the location of present, past, or future hazardous materials use or storage at the site, and copies of previous environmental investigations or surveys conducted at the project site are all helpful and relevant supporting documentation.

If your project involves a building with asbestos containing materials, document how it will be managed or disposed of during the implementation of the project along with an estimate of the costs. Be sure to include a line item for this cost in your cost and Scope of Work sections of the PDM Application as well.

If your project involves the use of hazardous materials in the construction of your project, write a short narrative describing what kinds of materials will be present at the project site, how they will be stored, how they will be used, how they will be disposed of, and any

preventative measures that will be taken to prevent accidental releases of those materials in the comments box in Section H, Question 3 of the PDM Environmental and Historic Preservation questions.

If you have obtained any information which documents the past land use of your proposed project site, be sure to document and cite the source of this information in the comments box in Section H, Question 4, of the PDM Environmental and Historic Preservation questions.