Chapter 44

HAZARDOUS MATERIALS/SUBSTANCES

MDT ENVIRONMENTAL MANUAL

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HAZARDOUS MATERIALS/SUBSTANCES

44.1 OVERVIEW

Hazardous materials/substances are materials/substances that, because of their quantity, concentration, physical, chemical or infectious characteristics, may:

- cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible, illness; or

- pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed or otherwise managed.

The primary Federal laws governing hazardous materials/substances are the *Resource Conservation and Recovery Act* and the *Comprehensive Environmental Response, Compensation and Liability Act*. At the State level, hazardous materials/substances are addressed under a number of statutes and regulations, including the Montana *Comprehensive Environmental Cleanup and Responsibility Act*, the *Montana Hazardous Waste Act*, the *Montana Asbestos Control Act* and various Administrative Rules covering generation, treatment, storage and disposal of hazardous waste; underground storage tanks; land disposal restrictions; and asbestos control.

Hazardous materials/substances are frequently encountered and are potentially present on nearly all highway projects. They can present serious liabilities in terms of cost, delays and threats to the health and safety of MDT personnel, construction contractor employees and the public. Accordingly, all projects must consider the potential for encountering contamination within the project area. Regardless of the amount of land to be acquired, there is potential for encountering contaminated soil, groundwater or surface water during construction activities. Hazardous materials/substances that may be encountered in relation to proposed highway projects include a broad range of contaminants that are regulated as solid waste, hazardous waste and other wastes contaminated with hazardous substances, radioactive materials, petroleum fuels, toxic substances and other pollutants.

Early identification of hazardous materials/substances is important to maximize the options available for avoidance and/or developing and implementing timely and cost-effective remediation measures. Early identification and assessment of contamination with potential project involvements:

- allows for consideration of the effects of hazardous materials/substances on project alternatives;

- allows MDT to avoid or limit the liability of contamination during right-of-way acquisition;

- provides information for estimating and factoring the cost of any required remediation into the project;

- allows for avoiding or reducing the potential for delay claims during construction resulting from previously unidentified involvements with hazardous materials/substances;

- facilitates identification of and response to worker safety concerns associated with hazardous materials/substances; and

- permits development of specific management or institutional controls to address the hazardous materials/substances during construction.

This Chapter provides guidance and procedures for ensuring potential involvement of proposed MDT highway projects with hazardous materials/substances are identified and assessed early in project development. The guidance and procedures provide management tools for:

- avoidance and/or minimization,
- cleanup and/or monitoring of sites that cannot be avoided,
- coordination with appropriate regulatory agencies, and
- incorporation of mitigation measures in project plan documents.

44.2 LAWS, REGULATIONS AND GUIDANCE

44.2.1 42 USC 6901, et seq. "Solid Waste Disposal"

These *United States Code* (USC) Sections codify the provisions of the *Resource Conservation and Recovery Act* (RCRA). This 1976 statute gave the US Environmental Protection Agency (EPA) authority to control hazardous waste from "cradle-to-grave." This includes the generation, transportation, treatment, storage and disposal of hazardous waste. RCRA also set forth a framework for management of non-hazardous waste. Amendments to RCRA in 1986 enabled EPA to address environmental problems that could result from underground storage tanks storing petroleum and other hazardous substances. RCRA focuses only on active and future facilities and does not address abandoned or historical sites.

The 1984 Federal Hazardous and Solid Waste Amendments (HSWA) revised RCRA to focus on waste minimization and phasing out land disposal of hazardous waste. The amendments also addressed:

- corrective action for releases of hazardous waste,
- increased EPA enforcement authority,
- more stringent hazardous waste management standards, and
- comprehensive program for regulation of underground storage tanks.

Implementing regulations for RCRA are provided in Title 40 of the *Code of Federal Regulations* (CFR), Parts 260-282. The portions of the regulations that address underground storage tanks are provided in 40 CFR 280-282.

44.2.2 42 USC 9601, et seq. "Comprehensive Environmental Response, Compensation and Liability"

These USC Sections codify the provisions of the *Comprehensive Environmental Response, Compensation and Liability Act* (CERCLA). This 1980 statute is commonly known as "Superfund." The statute created a tax on the chemical and petroleum industries and provided broad Federal authority to respond directly to releases, or threatened releases, of hazardous substances that may endanger public health or the environment. Over five years, $1.6 billion was collected and distributed to a trust fund for cleaning up abandoned or uncontrolled hazardous waste sites. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites and established a trust fund to provide for cleanup when no responsible party could be identified.

The law authorizes two kinds of response actions:

- Short-term removals, where actions may be taken to address releases or threatened releases requiring a prompt response.

- Long-term remedial response actions, that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life threatening. These actions can be conducted only at sites listed on EPA's National Priorities List (NPL).

CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants or contaminants. The NCP also established the NPL.

The *Superfund Amendments and Reauthorization Act* (SARA) amended CERCLA in 1986. SARA reflected EPA's experience in administering the complex Superfund program during its first six years and made the following important changes and additions to the program:

- stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites,
- required Superfund actions to consider the standards and requirements found in other State and Federal environmental laws and regulations,
- provided new enforcement authorities and settlement tools,
- increased State involvement in every phase of the Superfund program,
- increased the focus on human health problems posed by hazardous waste sites,
- encouraged greater citizen participation in making decisions on how sites should be cleaned up, and
- increased the size of the trust fund to $8.5 billion.

SARA also required EPA to revise the Hazard Ranking System (HRS) to ensure that it accurately assessed the relative degree of risk to human health and the environment posed by uncontrolled hazardous waste sites that may be placed on the NPL.

Implementing regulations for CERCLA/SARA are provided in 40 CFR 300-374.

44.2.3 23 USC 139 "Efficient Environmental Reviews for Project Decision-Making"

For projects involving preparation of an environmental impact statement and for environmental assessments being prepared in accordance with the FHWA "SAFETEA-LU Environmental Review Process Final Guidance," this part of the USC requires that, at appropriate times during the study process, the lead agency or agencies for the project collaborate with agencies serving as participating agencies to determine the methodologies to be used and the level of detail required for assessing project effects, including those associated with contaminated sites that project alternatives may involve. See Chapters 11 "Preparing Environmental Documentation," 13 "Environmental Assessment/FONSI" and 14 "Environmental Impact Statement/ROD" for further guidance on this requirement.

44.2.4 40 CFR 312 "Innocent Landowners, Standards for Conducting All Appropriate Inquiries"

This Part of the implementing regulations for CERCLA/SARA establishes standards and practices for conducting all appropriate inquiries as required by CERCLA Sections 101(35)(B)(ii) and (iii). The standards and practices apply to conducting all appropriate inquiries into the

previous ownership and uses of a property for the purpose of meeting all appropriate inquiries and provisions necessary to qualify for certain landowner liability protections under CERCLA.

44.2.5 40 CFR 61, Subpart M (61.140 – 61.157) "National Emission Standard for Asbestos"

Asbestos is an EPA-designated hazardous air pollutant and is subject to national emission standards. This regulation includes provisions addressing applicability of the emission standard, definitions associated with the emission standard, specific standards for a variety of asbestos sources, requirements regarding air cleaning and requirements for reporting by new sources.

44.2.6 FHWA "Supplemental Hazardous Waste Guidance"

This January 16, 1997, supplemental guidance emphasizes early investigation and avoidance/ minimization of involvement with contaminated properties and includes guidance for addressing the potential for contamination on properties for which the State highway agency is denied access.

44.2.7 FHWA Technical Advisory T 6640.8A

RCRA and CERCLA regulate hazardous waste sites. The Technical Advisory, dated October 30, 1987, includes the following guidance for addressing hazardous waste sites in environmental documentation for proposed projects:

1. During early planning, identify the location of permitted and non-regulated hazardous waste sites. Early coordination with the appropriate Regional Office of the EPA and the appropriate State agency will aid in identifying known or potential hazardous waste sites.

2. Clearly identify known or potential waste sites on a map showing their relationship to the alternatives under consideration.

3. If a known or potential hazardous waste site is affected by an alternative, discuss the following in the draft EIS:

    - information about the site,
    - the potential involvement,
    - impacts and public health concerns of the affected alternative(s), and
    - the proposed mitigation measures to eliminate or minimize impacts or public health concerns.

4. If the preferred alternative impacts a known or potential hazardous waste site, the final EIS should address and resolve the issues raised by the public and governmental agencies.

44.2.8 MCA 75-10-601, et seq. "State Participation in CERCLA"

This Part of the *Montana Code Annotated* (MCA) protects the public health, safety and welfare through cooperation with the Federal government under the Federal CERCLA to provide for disposal and control of hazardous substances and contaminants in a safe and environmentally sound manner.

44.2.9 MCA 75-10-701, et seq. Montana *Comprehensive Environmental Cleanup and Responsibility Act* (CECRA)

This Part of the Montana Statutes implements requirements and provisions to:

- protect the public health and welfare of all Montana citizens against the dangers arising from releases of hazardous or deleterious substances;
- encourage private parties to clean up sites within the State at which releases of hazardous or deleterious substances have occurred resulting in adverse impacts on the health and welfare of the citizens of the State and on the State's natural, environmental and biological systems; and
- provide for funding to study, plan and undertake the rehabilitation, removal and cleanup of sites within the State at which no voluntary action has been taken.

Rules addressing "CECRA Remediation" are provided in the *Administrative Rules of Montana* (ARM), 17.55.101, et seq. Rules addressing "Underground Storage Tanks Petroleum and Chemical Substances" are provided in ARM 17.56.101, et seq. Rules addressing "Montana Petroleum Tank Release Compensation Board" are provided in ARM 17.58.101, et seq.

44.2.10 MCA 75-10-201, et seq. *The Montana Solid Waste Management Act*

This Part of the Montana Statutes establishes policy and requirements for control of solid waste management systems to protect the public health and safety and to conserve natural resources whenever possible. It requires the Montana Department of Environmental Quality (DEQ) to issue and administer rules governing the permitting and operation of solid waste management systems. Rules addressing "Solid Waste Management" are in ARM 17.50.101, et seq.

44.2.11 MCA 75-10-401, et seq. *Montana Hazardous Waste Act*

This Part of the Montana Statutes affirms the policy of the State to protect the public health and safety, the health of living organisms and the environment from the effects of the improper, inadequate or unsound management of hazardous wastes and used oil. This Part is intended to:

- establish a program of regulation over used oil and the generation, storage, transportation, treatment and disposal of hazardous wastes;
- ensure the safe and adequate management of hazardous wastes and used oil within the State; and

- authorize DEQ to adopt, administer and enforce a hazardous waste program pursuant to the Federal *Resource Conservation and Recovery Act* of 1976 (42 U.S.C. 6901 through 6987), as amended.

Rules addressing "Hazardous Waste" are provided in ARM 17.53.101, et seq. Rules addressing "Hazardous Waste Management" are provided in ARM 17.54.101, et seq.

44.2.12 MCA 75-2-501, et seq. Montana *Asbestos Control Act*

This Part of the Montana Statutes authorizes DEQ to adopt rules establishing standards and procedures for accreditation of asbestos-related occupations and control of the work performed by persons in asbestos-related occupations. The authority includes provisions for permitting and inspection of asbestos projects.

Rules addressing "Asbestos Control" are provided in ARM 17.74.301, et seq. ARM 17.8.341 "Emission Standards for Hazardous Air Pollutants" adopts the provisions of 40 CFR 61, which includes Subpart M "National Emission Standard for Asbestos."

44.2.13 MCA 75-5-101, et seq. "Water Quality"

This Chapter of the Montana Statutes implements provisions of the Montana *Water Quality Act.* They include provisions implementing a policy for additional and cumulative remedies to prevent, abate and control pollution of Montana waters. Under the authority of this *Act*, DEQ administers a *Water Quality Act* Program that is responsible for oversight of remediation at sites contaminated with petroleum, pesticides and solvents.

44.2.14 *Montana Asbestos Work Practices and Procedures Manual*

DEQ issued this 2005 *Manual* to provide guidance for compliance with the provisions of ARM 17.74.301, et seq. "Asbestos Control." The *Manual* identifies practices and procedures that satisfy DEQ requirements for inspecting for asbestos, conducting asbestos projects and clearing asbestos projects. It also provides guidance in additional areas including definitions, accreditation and training courses.

44.2.15 ASTM Standard E1527 "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process"

The practice addressed in this standard satisfies the all-appropriate inquiry standard (40 CFR 312) necessary to qualify for all of the defenses to liability under CERCLA — the innocent landowner, contiguous property owner and bona fide prospective purchaser defenses.

44.2.16 NCHRP Report 351 – *Hazardous Wastes in Highway Rights-of-Way*

This 1994 Report documents the results of a study that examined the systems and approaches used by State Departments of Transportation for detecting and dealing with hazardous wastes when acquiring and managing highway right-of-way. The Report presents recommendations for

policies and procedures that help minimize the cost, uncertainty, delay and liability from hazardous waste, while satisfying environmental and public interest responsibilities.

44.2.17 ARM 17.58.101 "Montana Petroleum Tank Release Compensation Board"

This part of the ARM addresses the functions of the Montana Petroleum Tank Release Compensation Board (Petro Board). The Petro Board administers the petroleum tank release cleanup fund. The purpose of the board and the fund is to provide a financial assurance mechanism. It is also intended to reimburse the owners or operators of eligible tanks for their expenditures in cleaning up releases and compensating third parties who live or own property near the tanks for bodily injury or property damage they may have sustained as a result of the releases. The intent is also to provide tank owners with incentives to improve petroleum storage tank facilities to minimize the likelihood of accidental releases.

44.3 PROCEDURES

The "Hazardous Material Site Assessment" process located in Appendix C of this *Manual* provides a flowchart of the necessary steps to address hazardous materials/substance investigation on a project.

44.3.1 Information Gathering

The Preliminary Field Review (PFR) is the initial step in the analysis of a proposed project's potential involvement with hazardous materials/substances. The Design Team (DT) notifies and invites appropriate MDT personnel, including the Solid/Hazardous Waste Specialists (S/HWS) within the MDT Environmental Services Bureau (ESB), to the field review. The ESB Project Development Engineer (PDE) reviews the list of ESB attendees and includes others as necessary to ensure appropriate ESB personnel are in attendance. The S/HWS may participate in the PFR to make a preliminary evaluation of available information on the project scope and the potential for involvement with contaminated sites or other contamination associated with the project location. Following the field review, the DT prepares a PFR Report summarizing the issues discussed during the PFR, including contamination issues. The DT distributes the final PFR Report for review and comment. Within ESB, the PDE serves as the document champion to collect and coordinate comments from the other Sections. The PDE compiles the comments into a PFR review memorandum for signature by the Environmental Services Bureau Chief.

Note: Throughout the remainder of this chapter the S/HWS and term consultant are referred to as "Analyst" for clarity.

For projects subject to the requirements of 23 USC 139 "Efficient Environmental Reviews for Project Decision-Making," the Analyst, in cooperation with FHWA, collaborates with participating agencies in determining the appropriate methodologies to be used and the level of detail required in the analysis of project alternatives' involvement with contaminated sites.

After the proposed project is programmed into OPX2, the Analyst gathers further information for evaluation of the project scope and location for potential involvement with hazardous materials/substances. This generally includes:

- in-house review of translites, historic as-built plans, Transportation Information System (TIS) Image Viewer, historic and current aerial photographs and on-site review (if determined to be warranted);
- review of historic land uses, Sanborn maps, historic R.L. Polk Directories, State and Federal Superfund site list, Montana Natural Resource Information System (NRIS) data, DEQ Underground Tank Program files and other relevant databases; and
- consultation with appropriate environmental regulatory agencies and local government agencies to determine if they know of hazardous materials/substances or groundwater quality issues that could potentially impact the project.

The Analyst collects information generally following the provisions of 40 CFR 312 "Innocent Landowners, Standards for Conducting All Appropriate Inquiries" and ASTM Standard E1527

"Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process."

44.3.2 Analysis and Findings

44.3.2.1 Initial Site Assessment Results

The Analyst documents the results of the initial information gathering/initial site assessment for hazardous materials/substances for the proposed project. The results are documented on the MDT Initial Site Assessment (ISA) Form (available on the MDT website). Appropriate supporting information should be attached (e.g., figures showing locations of potential sites of concern, summary information on sites of potential concern, documentation from regulatory agency files). The Conclusions section of the completed ISA Form indicates whether further evaluation is needed. The Analyst should identify the following:

1. Lead-Based Paints. If the ISA documents that the proposed project will involve disturbance of lead-based paint (e.g., on highway structures), the Analyst documents the need to prepare Special Provisions for inclusion in the contract documents. This documentation is necessary to ensure measures are implemented during project construction to provide for worker safety and that appropriate measures are addressed for containment, collection and disposal of lead-based paint dust and/or debris.

2. No Hazardous Materials/Contamination. If the results of the ISA indicate further investigation of hazardous materials/substances and/or groundwater contamination is not necessary, the Analyst documents the basis for this determination on the ISA Form. The Analyst may provide a copy of the ISA Form to the PDE and to the DT.

44.3.2.2 Site Investigation

If the results of the ISA indicate further investigations are needed for evaluation of hazardous materials/substances and/or groundwater contamination, the Analyst accomplishes the investigations through a Preliminary Site Investigation (PSI) and, if necessary, a Detailed Site Investigation (DSI).

44.3.2.2.1 Preliminary Site Investigation

The PSI is an investigation to determine the extent and levels of contamination as they may impact the project. In conducting the PSI, the Analyst typically completes the following tasks:

1. Research and Additional Field Work . Conduct additional research on the land use history to fill in any gaps in the information obtained during the ISA. An additional field review may be necessary.

2. Subsurface Investigation. The Analyst either tasks out the subsurface investigation to a term consultant, or coordinates with Core Drilling Staff in the MDT Geotechnical Section to attempt to delineate the extent and magnitude of soil and groundwater contamination in the right-of-way along the project corridor. The subsurface investigation should generally conform to the following guidance:

- limit investigations to depths and locations likely to be impacted by construction activities;
- install groundwater monitoring wells, if necessary;
- monitor groundwater for water level and water quality information to determine monthly or seasonal fluctuations; and
- report new releases to DEQ and affected landowners and businesses.

3. Petro Fund Eligibility. Determine eligibility of sites within the project corridor for Montana Petroleum Tank Release Compensation Fund (Petro Fund) reimbursement; see ARM 17.58.101 "Montana Petroleum Tank Release Compensation Board."

4. Design Coordination. Coordinate with the DT to avoid and/or minimize involvement with contaminated sites, to add information regarding contaminated sites on the project plans and to estimate quantities. Coordinate with municipalities that may be designing utilities and storm drains in conjunction with the MDT project.

5. Project Specific Agreements. Complete any needed agreements for cost sharing and assignment of responsibilities with local governments.

6. Documentation. Prepare a PSI Report to document all available information on contamination (e.g., assessment methods, soils and field data, analytical results), water quality and levels, avoidance and/or mitigation recommendations, responsible parties, draft Special Provisions, treatment/disposal options and recommendations for further work for evaluating the contamination (e.g., a DSI).

7. Dissemination of PSI Findings. Inform interested parties (e.g., affected municipality or municipalities, MDT District Preconstruction Engineer, District Construction Engineer, Right-of-Way Bureau, DT, PDE) of the PSI findings.

8. Monitoring of Site Conditions. If groundwater is an issue on the project, continue monitoring groundwater levels and quality and the status of existing leaking and non-leaking facilities on the project.

44.3.2.2.2 Detailed Site Investigation

If determined necessary, the Analyst conducts a DSI for further evaluation of the project's involvement with contamination. The DSI may include additional work addressing the tasks described for the PSI as well as the following additional tasks:

1. Coordination. Coordinate with regulatory agencies and responsible parties to develop cleanup and/or monitoring plans.

2. Site Protection. Work with the DT to adequately protect utilities in contaminated areas and prevent utility/storm drain corridors from exacerbating contamination problems.

3. Determination of Quantities. Determine quantities of contaminated material to be handled during construction and best management practices for soil, groundwater and other contamination issues.

4. Documentation. Prepare a DSI Report to document the results of the work and coordination accomplished for the DSI. The report may include a discussion of proposed groundwater and/or soil remediation options and methods.

5. Dissemination of DSI Findings. Inform interested parties (e.g., affected municipality or municipalities, regulatory agencies and responsible parties, MDT District Preconstruction Engineer, District Construction Engineer, Right-of-Way Bureau, DT, PDE) of the DSI findings.

The PDE reflects the results of the PSI and DSI in the project environmental documentation (see Chapters 11 "Preparing Environmental Documentation," 12 "Categorical Exclusion," 13 "Environmental Assessment/FONSI" and 14 "Environmental Impact Statement/ROD).

Using the results of the PSI and DSI, the Analyst determines if the project will encounter hazardous materials/substances contamination. If the project will not encounter hazardous materials/substances contamination, other than possible asbestos-containing materials (ACM) that may be found in structures, the Analyst documents the basis for that determination in the project file and provides a copy of the documentation to the DT and the PDE.

44.3.2.3 Remediation Plan Development

44.3.2.3.1 Regulatory Agency Coordination

If the results of the PSI and DSI indicate the selected project alternative will encounter contamination, the Analyst contacts the appropriate agencies to:

- apprise them of the contamination and the nature and extent of the project's involvement;
- determine the level of documentation necessary for compliance with regulatory requirements; and
- obtain a formal determination of eligibility for reimbursement from the Petro Fund for sites involving petroleum contamination that MDT may want to pursue reimbursement of cleanup costs.

44.3.2.3.2 Plan Development for Sites Eligible for Petro Fund Reimbursement

For petroleum tank release sites eligible for reimbursement from the Petro Fund, the Analyst prepares a Work Plan to establish the actions and estimated costs necessary for cleanup of the petroleum tank release contamination. In developing the Work Plan, the Analyst coordinates with the DEQ Remediation Division and Petro Board in an iterative process to refine work items and estimated costs for site cleanup to be approved by DEQ and the Petro Board. When DEQ and the Petro Board are satisfied with the corrective action work items and estimated costs in

the draft Work Plan, the Analyst transmits a final Work Plan to DEQ for approval. If necessary, the Analyst provides copies of the transmittal to EPA and to affected Tribes.

44.3.2.3.3 Plan Development for Sites Not Eligible for Petro Fund Reimbursement

For petroleum contamination sites that will not be reimbursed by the Petro Fund and for non-petroleum contamination sites, the Analyst prepares a Work Plan to establish the actions necessary for cleanup of the contamination. The scope of the Work Plan is commensurate with the nature and extent of the hazardous materials/substances contamination and the level of project involvement with the site. It also reflects the results of coordination with DEQ and/or EPA regarding the contamination site. In some cases, the Work Plan may be written in the form of Special Provisions describing the site cleanup tasks. The Analyst coordinates the Work Plan for approval by DEQ and/or EPA.

44.3.2.4 Remediation Plan Implementation

After approval of the Work Plan by appropriate regulatory agencies (DEQ, EPA, and/or Petro Board) , the Analyst initiates appropriate actions for implementing the remediation plan. The actions taken depend upon whether the approved Work Plan provides for conducting site cleanup prior to construction or during construction.

44.3.2.4.1 Remediation Prior to Construction

If the approved Work Plan provides for cleanup prior to project construction, the Analyst provides oversight and direction to a qualified contractor/term consultant selected for the remediation. The contractor conducts the cleanup in accordance with the provisions of the approved Work Plan prior to the initiation of construction.

44.3.2.4.2 Remediation During Construction

If the approved Work Plan provides for cleanup of hazardous materials/substances during project construction, the Analyst prepares Special Provisions for incorporation into the contract documents to address the tasks from the Work Plan for cleanup of contamination during project construction.

If the ISA identified involvement with lead-based paint on the project, the Analyst prepares Special Provisions for inclusion in the contract documents to ensure measures are implemented for worker safety and appropriate containment, collection and disposal of lead-based paint dust and/or debris.

44.3.3 Mitigation and Commitments

The Analyst and DT ensure the project plans accurately reflect avoidance and minimization measures associated with the contamination. For projects involving remediation during construction, including remediation for lead-based paint, the Analyst provides oversight during

project construction to ensure the project contractor or contractors accomplish the remediation in accordance with the Special Provisions included in the project plans.

The District Environmental Engineering Specialist also monitors project construction to ensure that measures for addressing hazardous materials/substances are implemented in accordance with the approved project plans.

If necessary, the Analyst conducts post-construction monitoring to determine the need for any further corrective action for hazardous materials/substances involved with the project and/or to confirm that site cleanup goals are met.

When site cleanup goals are met for contaminated sites, the Analyst obtains closure approval documentation from the appropriate regulatory agencies and site monitoring is terminated.

44.3.4 Asbestos Containing Materials

MDT Right-of-Way Bureau may request assistance from the Hazardous Waste Section during the right-of-way phase of project development to address ACM) in structures that need to be moved or demolished for the project.

44.3.4.1 Inspection for Asbestos Containing Materials

In response to a request from the Right-of-Way Bureau, the Analyst conducts asbestos and hazardous materials inspections at identified properties. The inspections generally are done when the structures are owned by MDT and are vacant. However, circumstances may arise, especially during right-of-way negotiations that require inspection of properties before MDT acquires them. A DEQ-accredited asbestos inspector (i.e., the Analyst) conducts an asbestos inspection, including sampling and analysis, in conformance with applicable State and Federal regulations and guidelines. The Analyst documents the results of the inspection and recommendations for abatement in a report that is provided to Right-of-Way. The report is retained in the electronic and hard-copy files for the project and is available to DEQ upon request.

44.3.4.2 Asbestos Abatement

If the asbestos inspection identified ACM requiring abatement in structures to be demolished or moved, the Analyst uses one of the following procedures for accomplishing the asbestos abatement:

1. MDT Purchasing. For this option, the Analyst prepares documentation (e.g., requisition forms and bid specifications) and coordinates with MDT Purchasing to obtain the services of a DEQ-accredited asbestos abatement contractor for the abatement work and the services of a DEQ-accredited asbestos project worker or asbestos project contractor/supervisor, not contractually associated with the contractor conducting the asbestos abatement, to conduct final air clearance monitoring.

2. Term Consultant. For this alternative, the Analyst prepares a term assignment directing the term consultant to complete the abatement work.

3. Direct Hire. For smaller projects less than $5,000, the Analyst retains the services of a DEQ-accredited asbestos abatement contractor for the abatement work and the services of a DEQ-accredited asbestos project worker or asbestos project contractor/supervisor, not contractually associated with the contractor conducting the asbestos abatement, to conduct final air clearance monitoring.

The contractor or term consultant applies for the necessary permits, conducts the abatement/ removal and disposes of ACM in accordance with applicable State and Federal laws, regulations and guidelines.