ODOT
HazMat Program
Procedures Guidebook

Revised: November 11, 2004
Additional Revisions: March 2010
## TABLE OF CONTENTS

1.0 Program Components ................................................................. 3
2.0 Document Templates ........................................................................ 3
3.0 Safety ......................................................................................... 4
   3.1 Site Work .................................................................................... 4
   3.2 Spill Response ............................................................................... 4
   3.3 Abandoned Waste ......................................................................... 4
   3.4 Safety Qualifications ................................................................... 4
4.0 Liability Determination ..................................................................... 5
5.0 STIP & OTIA Projects ....................................................................... 6
   5.1 Prospectus .................................................................................... 8
   5.2 Scoping ......................................................................................... 8
   5.3 Start Project .................................................................................. 8
   5.4 Hazardous Materials Corridor Study ............................................... 9
   5.5 Additional Research .................................................................... 10
   5.6 Level 2 Scope of Work .................................................................. 10
   5.7 Level 2 Preliminary Site Investigation (PSI) .................................... 11
   5.8 Structure Surveys ......................................................................... 11
   5.9 Level 2 PSI Addendum .................................................................. 13
   5.10 Special Provisions ....................................................................... 13
   5.11 Advanced Plans .......................................................................... 14
   5.12 Bid Let ....................................................................................... 14
   5.13 Construction ............................................................................... 14
   5.14 Project QA ................................................................................ 14
6.0 Surplus Property .............................................................................. 14
   6.1 ASTM Phase 1 Assessment ........................................................... 15
   6.2 “Site Only” Property Assessment .................................................. 15
   6.3 ASTM Phase 2 Assessment ............................................................ 16
   6.4 Cleanup Options .......................................................................... 16
   6.5 Funding ....................................................................................... 16
7.0 Maintenance Yard Cleanup .............................................................. 17
   7.1 Identification and Delineation ....................................................... 17
   7.2 Cleanup Options .......................................................................... 17
   7.3 Funding ....................................................................................... 17
8.0 Spill Response & Abandoned Waste ................................................. 17
   8.1 Spill Response ............................................................................. 17
   8.2 Abandoned Waste ....................................................................... 18
   8.3 Funding ....................................................................................... 18
9.0 Technical Assistance ........................................................................ 18
   9.1 Environmental Management System (EMS) ................................... 18
   9.2 Spill Prevention Control and Countermeasure (SPCC) .................... 18
   9.3 Documentation ............................................................................ 19
   9.4 Audits and Violations .................................................................... 19
1.0 Program Components

The Hazardous Materials (HazMat) Program provides various services within ODOT. Region HazMat services include:
- Site assessment and waste characterization for STIP and OTIA projects
- Special provisions for management of contamination, hazardous material and waste, and related worker health and safety during construction.
- Underground storage tank (UST) decommissioning and/or contaminated soil removal, before or during construction
- Remediation and risk assessments for contaminated maintenance yards.
- Site assessment and cleanup for surplus properties, prior to sale
- Technical assistance regarding hazardous materials and waste management
- Spill assistance on ODOT right-of-way (ROW)

Technical Services Statewide HazMat Program services include:
- Negotiating with regulatory agencies, i.e. Oregon Department of Environmental Quality (DEQ) and U.S. Environmental Protection Agency (EPA).
- Liability determination for contamination located on ODOT property
- Quality Assurance (QA) for the HazMat portion of select STIP and OTIA projects
- Training HazMat staff, other ODOT groups, local agencies, and contractors
- Technical assistance to Region HazMat staff on complex projects
- Policy and guidance preparation for HazMat work, including project schedules, report templates and safety protocols.
- Maintenance yard cleanup budget management and prioritization.
- Research that benefits ODOT and the HazMat program.

Two ODOT Policies direct how Hazardous Materials Issues should be handled in ODOT:
- ENV 16-01 “Hazardous Materials and Wastes”, revised 12/12/2008, sets forth ODOT’s policy for the use and control of hazardous materials and wastes in compliance with federal and state laws, rules and regulations in an efficient and cost effective manner.” Available at: https://transnet.odot.state.or.us/cs/BSS/Policies%20and%20Procedures/ENV%2016-01.pdf
- ENV 16-02 “Contaminated Site Management”, revised 12/12/2008, sets forth ODOT’s Policy for “investigation and cleanup of properties and structures that may be contaminated with hazardous materials...” This policy includes property acquisition, investigation of hazardous materials and contamination, management of contaminated sites, consideration of liability and funding sources and dealing with third parties who have impacted ODOT right of way.

2.0 Document Templates

All standard HazMat reports and the health and safety plans referred to in this guidebook are available electronically on ODOT’s FTP web page at https://www.oregon.gov/ODOT/HWY/GEOENVIRONMENTAL/pages/sample_documents.
The Statewide HazMat Program Leader is responsible for maintaining these templates and notifying region staff of any changes. Region HazMat staff are responsible for using the latest template available and requesting template changes, as necessary.

3.0 Safety

3.1 Site Work
For all site assessment and remediation activities that may disturb contamination, follow the ODOT Hazardous Waste Cleanup Operations Safety Standard,

A complete approved Health and Safety Plan (including a Site Specific HASP, Generic HASP and Work Plan) must be available on Site during all such operations.

3.2 Spill Response
For emergency spill response, follow the following ODOT standards:


For continued remediation, after the initial emergency spill cleanup, follow the ODOT Hazardous Waste Cleanup Operations Safety Standard, cited above.

3.3 Abandoned Waste
ODOT HazMat personnel may not touch or disturb the following wastes:

- Suspect drug lab materials (these materials can be exceedingly hazardous and can explode or release corrosive vapors without warning)
- Containers with contents that can not be visually identified
- Suspect explosive materials

See ODOT’s Hazardous Litter Debris Advisory at https://transnet.odot.state.or.us/od/employeesafety/Advisories/Hazardous%20Roadway%20Litter%20and%20Debris%20ADV02001.pdf Use a trained and experienced contractor to test, remove and dispose of these wastes. For drug lab wastes, contact the State Police first.

3.4 Safety Qualifications
The table below indicates the safety qualifications required for ODOT HazMat staff
<table>
<thead>
<tr>
<th>Qualification</th>
<th>Frequency</th>
<th>Site Work</th>
<th>Spill Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>HazWoper 40-hour training</td>
<td>One-time</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>HazWoper 8-hour refresher</td>
<td>1 year</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>HazWoper Supervisor training</td>
<td>One-time</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>24-hours supervised site work</td>
<td>One-time</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>ODOT Plug &amp; Patch training</td>
<td>One-time</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>DOT Hazardous Materials Transportation</td>
<td>3 years²</td>
<td>Maybe²</td>
<td>Maybe²</td>
</tr>
<tr>
<td>HazMat medical evaluation</td>
<td>1–2 years³</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Respirator training &amp; fit test</td>
<td>1 year</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Respirator medical approval</td>
<td>1 year</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>1st Aid/CPR/BBP</td>
<td>1 year</td>
<td>Yes⁴</td>
<td>Yes⁴</td>
</tr>
<tr>
<td>Confined Space Entry</td>
<td>One-time</td>
<td>Maybe⁵</td>
<td>No</td>
</tr>
<tr>
<td>Excavation Safety</td>
<td>One-time</td>
<td>Maybe⁶</td>
<td>Maybe⁶</td>
</tr>
<tr>
<td>Asbestos Inspector Certification</td>
<td>1 year</td>
<td>No⁷</td>
<td>No⁷</td>
</tr>
</tbody>
</table>

1. Supervisor training required for Site supervisors. Not required if employee will be working under another qualified supervisor.
2. Only required for staff that will sign hazardous waste manifests and bills of lading for transportation of hazardous substances or will transport such substances themselves.
3. HazMat medical must be conducted upon hire and every 1 to 2 years thereafter, at the doctor’s discretion. An exit medical is also required within 6 months prior to an employee leaving employment with ODOT HazMat.
4. Required for work in remote regions, highly recommended for all HazMat workers.
5. Only required for those responsible for assessing confined spaces, in addition to other HazMat duties.
6. Required for those responsible for excavation safety. No ODOT HazMat employees should enter an excavation greater than 3 feet deep, regardless of training.
7. Required only for those conducting asbestos surveys.

### 4.0 Liability Determination

ODOT can not spend the monies from the State Highway Fund on HazMat activities that the agency is not legally responsible for, unless there is some benefit to the highway system, per Department of Justice interpretation of ORS 366.505 et seq. For example, if completing cleanup allows the sale of valuable property, then that work would be appropriate. ODOT should also consider whether pursuing cost recovery from other responsible parties is viable and practical. The table below helps determine ODOT’s responsibility for contaminated sites.

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes (or maybe)</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Did ODOT, an ODOT employee, an ODOT contractor or an ODOT tenant cause the release?</td>
<td>Go to A</td>
<td>Go to 2</td>
</tr>
<tr>
<td>2. Is a UST or other known source located on ODOT ROW? (All ODOT ROW is obtained under eminent domain authority)</td>
<td>Go to 3</td>
<td>Go to 4</td>
</tr>
<tr>
<td>3. Did ODOT install or operate the UST/source, permit someone else to install or operate the UST/source or do anything to make the contamination worse?</td>
<td>Go to A</td>
<td>Go to 4</td>
</tr>
<tr>
<td>4. Is there a possible adjacent source?</td>
<td>Go to 5</td>
<td>Go to C</td>
</tr>
<tr>
<td>5. Does ODOT have any relationship with the adjacent source (lease agreement, easement, etc)?</td>
<td>Go to A</td>
<td>Go to 6</td>
</tr>
<tr>
<td>6. Are there any past ODOT practices (such as using oil for dust suppression) that could have caused the contamination?</td>
<td>Go to A</td>
<td>Go to 7</td>
</tr>
</tbody>
</table>
7. Has ODOT denied access to investigate/cleanup contamination?  Go to A  Go to B

<table>
<thead>
<tr>
<th>LIABILITY OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. ODOT may be a responsible party (reassess if additional facts become available)</td>
</tr>
<tr>
<td>B. ODOT is not a responsible party</td>
</tr>
<tr>
<td>C. Responsibility can not be determined, additional assessment may be required.</td>
</tr>
</tbody>
</table>

If ODOT’s legal responsibility is not clear, the determination should be referred to the Statewide HazMat Program Leader who will consult with DOJ, ODOT Risk Management, DEQ and/or EPA as necessary. If ODOT is a potentially responsible party, other entities may also be responsible and ODOT should establish cost sharing agreements prior to initiating cleanup.

5.0 STIP & OTIA Projects

HazMat work for STIP and OTIA projects should follow the schedule in the table below wherever possible. This schedule reflects the PD-02 AMS schedule adopted by ODOT.
# AMS Schedule for STIP Work

<table>
<thead>
<tr>
<th>Project Phase</th>
<th>Class 2 Projects</th>
<th>Class 1 &amp; 3 Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Prospectus</td>
<td>Complete or Approve Part 3</td>
<td>Complete or Approve Part 3</td>
</tr>
<tr>
<td>Scoping</td>
<td>Provide PE &amp; Construction cost estimates</td>
<td>Provide PE &amp; Construction cost estimates</td>
</tr>
<tr>
<td>Start Project</td>
<td>Project Team kick-off meeting</td>
<td>Project Team kick-off meeting</td>
</tr>
<tr>
<td>Field Survey &amp; Base Map – Phase 1</td>
<td>HazMat Corridor Study</td>
<td></td>
</tr>
<tr>
<td>Alternative Design</td>
<td>Level 2 Scope of Work</td>
<td></td>
</tr>
<tr>
<td>Right-of-Way Report</td>
<td>Level 2 PSI</td>
<td></td>
</tr>
<tr>
<td>Draft EIS/NEPA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final EIS/NEPA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field Survey &amp; Base Map – Phase 2</td>
<td>HazMat Corridor Study</td>
<td></td>
</tr>
<tr>
<td>Roadway Design</td>
<td>Level 2 Scope of Work</td>
<td></td>
</tr>
<tr>
<td>Right-of-Way Map &amp; Descriptions</td>
<td>Level 2 PSI &amp; other sampling Asbestos Survey</td>
<td>Level 2 PSI Addendum &amp; other sampling Asbestos Survey</td>
</tr>
<tr>
<td>Approved Design (30% - Pens Down)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preliminary Plan Review</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced Plans</td>
<td>Final Spec review</td>
<td>Final Spec review</td>
</tr>
<tr>
<td>Final Plans/PS&amp;E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bid Let</td>
<td>Pre-Bid meeting</td>
<td>Pre-Bid meeting</td>
</tr>
<tr>
<td>Construction</td>
<td>Pre-Con meeting Contamination and waste management oversight</td>
<td>Pre-Con meeting Contamination and waste management oversight</td>
</tr>
</tbody>
</table>
5.1 Prospectus
Region HazMat Coordinators should ensure that Part 3 of the Prospectus is completed correctly by completing the HazMat section or reviewing that section after the Region Environmental Coordinator has completed it. The HazMat Worksheet should include the following information:

- Qu. 31: Does the project involve any R/W acquisition or subsurface disturbance (e.g. excavation or drilling)
- Qu. 32: Does a search of DEQ's databases indicate the presence of any potentially contaminated sites within or adjacent to the API? At a minimum, include, DEQ's Facility Profiler at https://hdgcgcx1.deq.state.or.us/Html5viewer291/?viewer=FacilityProfilerLite.
- Qu 33: Does a search of the Oregon Fire Marshal's Hazardous Materials Incident database, at http://www.sfm.state.or.us/CR2K_IncDB/Incident_Searc.html, indicate any HazMat releases within or adjacent to the API?
- Qu 34: Are there any known current or historical land uses that could potentially have involved the use or storage of HazMat within or adjacent to the API? Include heating oil tanks, industrial properties, HazMat storage or retail facilities, services stations, laundry and dry cleaning, and agricultural land where pesticides may have been used, etc. Include information from site observations and Sanborn Fire Insurance Maps (where available – State Library Login Required): at https://proxy.osl.state.or.us/login?url=https://sanborn.umi.com/
- Qu. 35: Does the project include any structure demolition or repair? (This includes demolition or repair of buildings and bridges). Note that any such repair or demolition work will require an asbestos survey, and may also require other HazMat surveys.
- Qu. 36: Will the project disturb or remove items containing potentially hazardous materials? (e.g. lighting, electrical equipment, hydraulics, bridge mechanics, striping paint (separated from the asphalt), bridge or barrier paint, treated timbers, etc.)
- Qu. 37: (ODOT Only) Are there any known responsible parties within the API, with whom ODOT has established cost recovery agreements or whom ODOT could easily pursue for cost recovery? (see ODOT's internal HMDMS database at:\Sodata\ENV_SEC\DBMS\EAM\HazMat\hmdms.mdb).

Information developed during scoping can be used to supplement and update Part 3.

5.2 Scoping
The Region HazMat Coordinator or their representative should participate in scoping trips to:

- Identify obvious contaminant sources
- Identify hazardous materials/waste issues.
- Refine Part 3 of the prospectus, and
- Develop cost estimates for design and construction.

The Region HazMat Coordinator should explain this information to the Project Team Leader.

5.3 Start Project
The Region HazMat Coordinator or their representative should attend the project team kick-off meeting for all projects that have the potential to include ROW acquisition, excavation, hazardous waste generation, or other HazMat issues. The attendee should
inform the team of expected HazMat assessments and schedules, and inform the team that scope changes could trigger the need for additional HazMat involvement.

5.4 Hazardous Materials Corridor Study

- Due at “Roadway Design” (“Alternative Design” for Class 1 & 3 Projects)
- Included in, or issued concurrently with, the Environmental Baseline Report
- Requires peer (technical) and manager (corporate) review
- Requires a registered geologist or professional engineer stamp
- Provide copies to the Project Team Leader, the Right-of-Way agent, the Project Designer, and any other affected team members

The research for the HazMat Corridor Study should be initiated as soon as the designer can provide an outline of the maximum project limits on a map (this is just a box drawn on a map that encompasses all likely design options). In most cases a full Corridor Study report is required, but certain circumstances can limit this work, as set out in the table below.

<table>
<thead>
<tr>
<th>Project Elements</th>
<th>Yes (Or Unknown)</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Could there be any land acquisition?</td>
<td>Go to 3</td>
<td>Go to 2</td>
</tr>
<tr>
<td>2. Could there be excavation below road base?</td>
<td>Go to 3</td>
<td>See A</td>
</tr>
<tr>
<td>3. Is the area completely undeveloped? (i.e. no buildings, parking or storage areas, agriculture (other than grazing), etc.)</td>
<td>See B</td>
<td>See C</td>
</tr>
</tbody>
</table>

### Report Required

A – No HazMat Corridor Study Required  
B – Corridor Study limited to aerial photo and OSFM spill database review – use Corridor Study Memo  
C – Full HazMat Corridor Study required – use full Corridor Study Report

In all cases, Region HazMat must also determine whether there are other waste management issues associated with the project (e.g. asbestos, lead-based paint, PCBs, etc.) and ensure that the appropriate special provisions are included in the final plans.

The full HazMat Corridor Study report includes:
- A description of the corridor (proposed project components, physical setting, and adjacent land use involving hazardous materials)
- A review of historic records, going back 50 years, if possible (aerial photos and at least one of: Sanborn Maps, reverse directories and local government records).
- An environmental records review using DEQ’s facility profiler and OSFM’s spills database (or a commercial database provider).
- A conclusion regarding potential sources of contamination and recommendations
- In agricultural areas where no other contamination is expected, surface soil samples may be collected and analyzed for herbicides and/or pesticides.

The limited HazMat Corridor Study Memo includes:
• A description of the corridor (proposed project components and current land use)
• A review of historic aerial photos to ensure that the area has remained undeveloped and the road has always been paved
• A review of the OSFM spill database

Note: if a major spill has occurred or the road was historically unpaved and could have been oiled for dust suppression, this memo should recommend sampling.

5.5 Additional Research
• Complete prior to Level 2 PSI field work
• May be included with Corridor Study or Level 2 PSI Report
• Requires peer (technical) review
• Requires a registered geologist or professional engineer stamp
• Provide copies to all Corridor Study recipients

Additional research, if necessary, should be used to narrow the Level 2 Scope of Work and may include a detailed review of DEQ files, review of additional historical resources, Site specific ownership records, etc.

5.6 Level 2 Scope of Work
• Due at “Right-of-Way Map and Descriptions” (“Right-of-Way Report” for Class 1 & 3 Projects)
• Requires peer (technical) review
• Provide copies to the Team Leader, Right-of-Way agent and Designer

The Level 2 Scope of Work (SOW) should describe sampling activities proposed to address the project specific goals. Level 2 goals depend on the reason for conducting the Level 2, as follows:
• Construction Disturbance: Design the Level 2 scope of work to evaluate all potentially contaminated areas likely to be disturbed by excavation, trenching, drilling, trenchless technologies, pile driving, etc. The level 2 scope of work should consider the likely contaminants and the proposed extent and depth of construction activities. Complete sufficient characterization to achieve the following:
  o Prepare construction worker health and safety special provisions
  o Ensure construction does not exacerbate existing contamination
  o Characterize waste sufficient to determine re-use, recycling and disposal options.
  o Prepare waste management special provisions
  o Estimate bid item quantities and costs
• Whole Property Acquisition: Design the Level 2 scope of work to evaluate all potentially contaminated areas of the property. Consider site history, likely sources, contaminants and migration pathways. Complete sufficient characterization to achieve the following:
  o Identify all source locations
  o Delineate the extent of contamination
  o Perform a risk screening for current and likely future human and ecological receptors.
  o Develop a gross estimate of cleanup/site closure costs
Sampling should be conducted near the potential contaminant sources on property being acquired and/or in areas where the project will require excavation (or as close as is feasible with existing rights-of-entry and subsurface hazards). The SOW should include:

- Goals for the proposed sampling
- Pre sampling activities (e.g. geophysical surveys, utility clearance, etc.)
- Sampling locations (attach a sketch map)
- Sampling methods
- Field screening methods and sample selection for laboratory analysis
- Laboratory analytical methods
- Estimated costs

The Level 2 SOW should be discussed with the recipients, to ensure that the proposed investigation meets their expectations and needs.

5.7 Level 2 Preliminary Site Investigation (PSI)

- Due at “Approved Design” (“Draft EIS” or “Draft NEPA” for Class 1 & 3 Projects)
- Requires peer (technical) and manager (corporate) review
- Requires a registered geologist or professional engineer stamp
- Provide copies to the Project Team Leader, the Right-of-Way agent, the Project Designer, and any other affected team members

The Level 2 Preliminary Site Investigation (PSI) documents the findings of environmental sampling conducted to determine the presence and/or extent of contamination related to potential sources identified in the HazMat Corridor Study. The report should include:

- Site description and summary of previous assessments
- Description of field activities, including sampling methods, locations and laboratory analytical methods
- Geological descriptions (soil type, groundwater depth and flow direction, etc.)
- Geophysical survey results (if applicable)
- Analytical results (including a review of lab QA/QC results)
- Management of investigation derived waste
- Conclusions that include:
  - A preliminary risk evaluation comparing concentrations detected to DEQ and EPA generic cleanup values to determine waste management options and/or estimate cleanup costs, as appropriate
  - Options for managing sources and contaminated media prior to or during construction
  - Estimated volume of contaminated media to be disturbed during construction and estimated costs for each feasible management option
  - Health and Safety special provisions and other special provisions required for construction.
  - A preliminary estimate of extent of contamination and cleanup costs for whole property acquisitions.

Results of the Level 2 PSI should be discussed with the recipients, to ensure that they understand the impacts and the required mitigation measures.

5.8 Structure Surveys

- Due prior to “Preliminary Plans”
- Requires peer (technical) and manager (corporate) review
- Asbestos Survey requires signature of a licensed asbestos inspector
• Provide reports to the Project Team Leader, the Right-of-Way agent and the Project Designer

Structure survey results should be used to prepare appropriate special provisions and must be discussed with the recipients to ensure that they understand the abatement, demolition and disposal requirements and estimated costs.

Asbestos: An asbestos survey is required for all buildings and structures (including bridges, towers and sheds) that will be demolished or renovated (includes all work that disturbs building materials). An AHERA certified asbestos inspector must conduct all asbestos surveys. Building material samples must be analyzed by a NVLAP certified laboratory. For bridges, DEQ has approved a phased survey approach that may be used. See the OTIA III Bridge Delivery Program Materials and Contamination Performance Standards Manual for details of the process summarized below.

• Determine whether construction work is limited to the following four exempt repair activities: Filling cracks, replacing barrier/railing, replacing deck joints or Stage 1 seismic retrofit. (This step does not require AHERA certification)
• Review proposed construction work to determine whether it may disturb potential asbestos containing materials (ACM) such as abutment forms, electrical insulation, waterproof membranes between the deck and the paving, geo-textiles, cement pipes, and textured surfaces.
• For those bridges where the proposed work may disturb potential ACM, review as-built plans and construction specifications to determine whether potential ACM are actually present on the structure and likely to be disturbed by the proposed construction activities.
• If ACM are likely to be present on portions of the bridge that will be disturbed, sample all suspect ACM.

An Asbestos abatement plan is also required prior to asbestos removal and must be prepared by a licensed abatement contractor. If the plan is prepared by the asbestos surveyor prior to construction, the special provisions must refer to it. If the plan is produced by the abatement contractor during construction, the special provisions must require an abatement plan prior to start of any abatement work.

Lead-Based Paint: A lead-based paint survey is required for all buildings that will be leased as residences and for all structures that will be burned or demolished. A licensed lead-paint inspector is only required for occupied residential or educational buildings. Paint samples should be analyzed for total lead, cadmium and chromium.

Polychlorinated Biphenyls (PCBs): All electrical equipment in buildings that will be demolished should be inspected for labels identifying their PCB content. The number of light ballasts and their PCB content should be documented and a description of any other electrical or hydraulic equipment that could contain PCB oil.

Mercury: The number and length of fluorescent light tubes should be documented, along with any other potential mercury containing equipment such as thermometers, switches, high intensity lamps, etc.
**Treated Wood**: Treated wood that is in good condition can be given to the contractor or sold through ODOT Surplus. Treated timber that is no longer useful must be disposed of as solid waste. Only test the wood, if the accepting landfill requires such testing.

5.9 **Level 2 PSI Addendum**
- For Class 1 & 3 Projects Only – Due at “Approved Design”
- Requires peer (technical) and manager (corporate) review
- Requires a registered geologist or professional engineer stamp
- Provide copies to all Level 2 PSI recipients

This report documents additional sampling conducted later than the Level 2 PSI because ODOT could not access a property or because there have been major design changes in the project. The report should use the format for a Level 2 PSI report.

5.10 **Special Provisions**
- Due at Preliminary Plans. If possible, include with the Level 2 PSI or Addendum.
- Requires manager (corporate) review
- Provide copies to the Team Leader and the Spec Writer

Stand alone special provisions are required for all identified HazMat issues that will impact project construction. Templates to be used for the standalone special provisions are available from ODOT’s Statewide HazMat Program Leader, and will be posted on the ODOT GeoEnvironmental Web Site soon. Special provisions to consider using include the following:
- Hazardous Substance Health and Safety Plan
- Underground Storage Tank Decommissioning (includes HOTs)
- Excavation, Transport and Disposal of Contaminated Soil (includes all soil contamination – surface soils, LUST soils etc.)
- Pumping, Treatment and Disposal of Contaminated Groundwater
- Trench Seals (prevention of contaminant migration)
- PCB Equipment Removal and Disposal
- Asbestos Abatement
- Fluorescent Light Removal and Disposal (Universal Waste)
- Lead-Based Paint Removal and Disposal
- Septic system Abandonment
- Monitoring Well Decommissioning
- Monitoring Well Preservation
- Demolition Waste (Used asphalt, striping grindings, treated timbers, etc.)
- Underground Injection Control (UIC) system decommissioning

Bid items and cost estimates are required for each special provision used. Per Technical Services Bulletin 09-02, all changes to the boilerplate special provisions and all stand alone special provisions must be sent to ODOT’s technical expert for concurrence. The technical expert for HazMat special provisions is ODOT’s Statewide HazMat Program Leader.
5.11 Advanced Plans
Region HazMat must review the Plans and Specs to ensure that all required HazMat items were included and to ensure that there are no last minute design changes that could be impacted by HazMat issues.

5.12 Bid Let
Region HazMat should attend the Pre-Bid meeting, if significant HazMat issues are involved and/or the project is environmentally sensitive. If the project requires a RCRA ID number for hazardous waste disposal, obtain the ID number from DEQ at this time.

5.13 Construction
A Region HazMat representative should attend the Pre-Con meeting, if significant HazMat issues are involved and/or the project is environmentally sensitive.

Region HazMat should review all required HazMat documents submitted by the contractor, including pollution control plans, SPCC plans (for fuel storage near water), RCRA contingency plans, hazardous substance health and safety plans (or ODOT Safety may review this), asbestos abatement plans, PCB management plans, waste disposal permits, etc.

Region HazMat or a qualified contractor should conduct site visits, coordinated with the Project Manager, for projects where the project includes:
- Contaminant excavation
- Tank decommissioning
- Fuel or significant hazardous materials storage
- Hazardous waste generation, or
- Other HazMat related activities.

Identified problems must be reported to the Project Manager immediately. Region HazMat should help the Project Manager remedy HazMat problems and coordinate with regulatory agencies and the Statewide HazMat Program Leader, as necessary. All HazMat violations (e.g. spills or waste management issues) must be reported to the ODOT Statewide HazMat Leader.

5.14 Project QA
Project QA is conducted upon request and should be conducted as the project is being developed to facilitate discussion and exchange of knowledge.

6.0 Surplus Property
Right of Way has two sales mechanisms for ODOT’s surplus property:
- Sell clean through auction: ODOT conducts complete ASTM Phase 1 assessment, and ASTM Phase 2 assessment and cleanup (if required) prior to selling the property.
- Sell directly, as is: the buyer takes responsibility for HazMat assessments and can negotiate the property value based on the findings. In this case ODOT only provides information pertaining to use and potential sources of contamination on the property itself, without investigating adjacent sources or conducting a Phase 2 investigation to confirm or delineate potential on-Site releases.
Right-of-Way Property Management determines the sales mechanism and Region HazMat should discuss this with the Right-of-Way agent prior to initiating any Site work.

For all Site assessment work, Region HazMat should discuss schedule, budget and EA with the ROW Property Manager
- Requires peer (technical) and manager (corporate) review
- Requires a registered geologist or professional engineer stamp
- Provide copies to the Right-of-Way property manager

6.1 ASTM Phase 1 Assessment
- Requires peer (technical) and manager (corporate) review
- Requires a registered geologist or professional engineer stamp
- Provide copies to the Right-of-Way property manager

Conducting a full ASTM Phase 1 is intended to provide sufficient information to the purchaser for them to meet the “innocent landowner” defenses in CERCLA Section 107(b)(3). A full ASTM Phase 1 Assessment includes:
- A site reconnaissance noting site activities, building materials and utilities, oil/hazardous materials/waste storage, evidence of contamination, paving, etc.
- A description of adjoining land uses.
- A description of the physical setting, including USGS topographic map information and other available geologic or hydrologic information.
- An interview with an ODOT representative knowledgeable about ODOT’s property use (District maintenance staff, right-of-way agent, etc.)
- A review of past property use, in 5 year intervals, going back to 1940 or the property’s first developed use, whichever is earlier (including adjacent property if available from the same documents). Resources should include: aerial photographs, Sanborn Fire Insurance Maps, property tax files (County Assessor’s records), Land Title documents, USGS topographic maps, local street directories, building department records and/or zoning/land use records.
- An environmental records review using EPA, DEQ and OSFM databases (or a commercial database provider). Review should include NPL, RCRA CORRACTS TSD, and ECSI sites within 1.0 mile; CERCLIS, Non-CORRACTS TSD, landfills, OSFM spill and LUST sites within 0.5 miles; RCRA generators and UST facilities on or adjoining the property and ERNS on the property itself.
- Interviews of local officials likely to have knowledge of environmental issues at the property. E.g. local fire department, local health agency, or other local agency responsible for environmental matters.
- A report documenting the above information.

Note: ASTM Phase 1s must follow ASTM E 1527-05 to meet the requirements of a “CERCLA Environmental Site Assessment” or CERCLA-ESA per 40 CFR 312, which was published in 2005.

6.2 “Site Only” Property Assessment
- Requires peer (technical) and manager (corporate) review
- Requires a registered geologist or professional engineer stamp
- Provide copies to the Right-of-Way property manager
A “Site-only” Property Assessment is designed to provide information that ODOT should have within the agency. The goal is to ensure that ODOT maintains their cleanup liability defense, available due to acquisition under eminent domain authority, by disclosing all agency knowledge of any on-Site releases. A “Site-only” Property Assessment includes:

- Site reconnaissance to identify storage of petroleum, hazardous materials or waste; evidence of tanks or UICs; or any evidence of spills or contamination.
- Interview of someone knowledgeable about ODOT site activities (e.g. District maintenance staff, right-of-way agent, etc.)
- Review of historic resources for the property, going back every 5 years to the earliest of 1940 or first development. Resources should include: aerial photographs, Sanborn Fire Insurance Maps, reverse directories, local government records and/or tax or title records.
- Review of environmental records for the property (and any adjacent ODOT owned or operated property) using DEQ and OSFM databases (or a commercial database provider). Review should include ECSI, LUST, UST, landfill, RCRA and spill databases.

6.3 ASTM Phase 2 Assessment

- Requires peer (technical) and manager (corporate) review
- Requires a registered geologist or professional engineer stamp
- Provide copies to the Right-of-Way property manager

Use the guidance and report template for the STIP Level 2 PSI (see Section 5.7) and ensure that the scope of work aims at delineating contamination such that cleanup options and cost estimates can be developed.

6.4 Cleanup Options

If Right-of-Way has opted to sell the Site “clean” then Region HazMat must develop cleanup options (e.g. tank decommissioning, soil excavation, long term groundwater monitoring, active groundwater remediation systems, risk-based closure, property use limitation, etc.). The effectiveness of these closure options must be balanced with likely costs, time and future site use. Region HazMat must discuss these options with the Property Manager and obtain an EA, prior to proceeding with any remedial activities.

6.5 Funding

ODOT Property Management usually funds the assessment and cleanup of surplus property. However, when the site is a former maintenance yard, Property Management may negotiate with the District to pay for all or part of those costs.

If ODOT is not responsible for the contamination (see Section 4.0), and sale of the property will facilitate development that will stimulate the local economy, provide low-income housing or create green space, consider applying for Brownfields funds to help with assessment and cleanup costs. Information regarding Brownfields funding is available from the following resources:

7.0 Maintenance Yard Cleanup

7.1 Identification and Delineation
- Requires peer (technical) and manager (corporate) review
- Requires a registered geologist or professional engineer stamp
- Provide copies to the ODOT District Manager and then the DEQ project manager

Prior to initiating cleanup, it is usually beneficial to delineate the extent of contamination through sampling. This is very similar to a Level 2 Site Investigation. Use the guidance and report template for the STIP Level 2 PSI (see Section 5.7) and ensure that the scope of work aims at delineating contamination and obtaining data required for risk assessment so that cleanup options and cost estimates can be developed.

7.2 Cleanup Options

Region HazMat must develop cleanup options (e.g. tank decommissioning, soil excavation, long term groundwater monitoring, active groundwater remediation systems, risk-based closure, property use limitation, etc.). The effectiveness of these closure options must be balanced with likely costs, time and site use requirements. Region HazMat must discuss these options with the District Manager prior to proceeding with any remedial activities.

7.3 Funding

ODOT Maintenance sets aside funds for yard cleanups at the beginning of every biennium. The Statewide HazMat Coordinators committee prioritizes yard cleanup needs and provides cost estimates which the Statewide HazMat Program Leader submits to the Maintenance Leadership Team (MLT) for funding. This funding request also includes a Small Cleanup Fund for each region to handle abandoned roadside waste, spills with no available responsible party and unexpected yard contamination issues. Funds are set up in project specific EAs for each region (HZMTs). Funds can be redistributed during the biennium, based on cleanup priority (ODOT liability and risk to human health and the environment). Fund redistribution requires a betterment order signed by the Statewide HazMat Program Leader and the Statewide Maintenance Engineer.

The Region HazMat Coordinators are responsible for tracking site specific budgets in their region, keeping expenditures within budget and requesting additional funds for new or existing states, as necessary. The Statewide HazMat Program Leader is responsible for tracking HZMT budgets statewide, prioritizing cleanup needs and funding requests, and requesting fund re-allocations as necessary to complete cleanup of as many facilities as possible during the biennium.

8.0 Spill Response & Abandoned Waste

8.1 Spill Response

Region HazMat Groups have different spill response responsibilities. In Regions 1 and 3, Region HazMat provides on call assistance that responds to highway spills around the
clock. In Regions 2, 4 and 5 Region HazMat is called at the discretion of the District if a large spill requires ongoing cleanup and District needs technical assistance to determine whether cleanup is appropriate and protective of ODOT property. Section 3.2 deals with spill response safety requirements. Note that OSHA training is required in order to enter the spill scene per 29 CFR 1910.120.

8.2 Abandoned Waste
Litter crews and other ODOT maintenance workers, who find waste abandoned on State highways, usually call Region HazMat if the waste looks suspicious or can not be identified. Region HazMat or a District representative should call a contractor to test and remove such waste materials. If the waste is a hazardous waste, then it must be disposed of under the RCRA ID# for the nearest maintenance yard; however, the waste does NOT count towards the yards monthly totals for its waste generator status. Section 3.3 deals with safety issues for handling abandoned waste and lists wastes that ODOT employees must not touch, due to their extremely hazardous nature.

8.3 Funding
Spills with an identifiable responsible party (RP) should be charged to a CAO set up by District maintenance. For spills with no identifiable RP and for charges that can not be covered by a CAO, use the Region Small Cleanup fund should.

Disposal of abandoned roadside waste should be charged to the Region Small Cleanup fund, unless the responsible party can be identified from labels on the abandoned containers. In some cases, Oregon State Police may be able to fund drug lab waste removal.

9.0 Technical Assistance
Region HazMat may be called upon to provide technical assistance by other Region groups such as Maintenance, Construction, Right-of-Way, etc. Region maintenance should provide assistance within their training and areas of expertise. If additional information is needed, call the Statewide HazMat Program Leader, unless otherwise noted below. Typical areas requiring technical assistance are listed below.

9.1 Environmental Management System (EMS)
ODOT Maintenance operates an Environmental Management System (EMS), which includes a guidebook on how to handle typical yard materials and wastes, available at https://egov.oregon.gov/ODOT/HWY/OOM/EMS.shtml. Implementation of the EMS includes training and periodic audits. The monthly audits are a self-check by the yards. Regional audits are intended to inspect each yard once every 3 years to determine the effectiveness of the EMS and Region HazMat or Office of Maintenance Environmental Staff should always participate in these audits. Region HazMat should also provide technical assistance to yards that have questions about the EMS, if those questions are within that person’s technical expertise, or should refer such questions to the Office of Statewide Maintenance, Clean Water Program.

9.2 Spill Prevention Control and Countermeasure (SPCC)
Some yards with aboveground fuel tanks (ASTs) that are located near surface water bodies have SPCC plans to prevent or respond to fuel releases. Questions regarding
these SPCC requirements should be referred to the Office of Statewide Maintenance, Clean Water Program.

9.3 Documentation

Maintenance yards are responsible for maintaining documentation required for fuel storage, hazardous substance storage and waste generation and disposal for their yard. Such documentation includes annual State Fire Marshals hazardous substance surveys, tanks inspection and testing records, waste characterization, waste generation logs, waste disposal logs and receipts. Region HazMat staff should provide technical support to maintenance staff completing this documentation.

9.4 Audits and Violations

Region HazMat should be available to accompany DEQ or EPA and yard personnel on any yard audits. They should also help yard personnel prepare for such audits and understand any corrective action required. If a yard is audited by a regulatory agency, has a spill or any other regulatory violation, notify the Statewide HazMat Program Leader immediately and follow up with information about violations and fines. The Yard responsible should follow the ODOT Compliance Incident Reporting Process, as soon as possible. For spills, complete the “Spill Response Form for Spills in ODOT Maintenance Yards” in Appendix H of the ODOT Maintenance Yard Environmental Management System (EMS), available at https://egov.oregon.gov/ODOT/HWY/OOM/EMSdoc/AppH.pdf. The Statewide HazMat Program Leader should provide technical assistance to both Region HazMat and the affected yards to help respond to regulatory concerns and identify appropriate corrective actions.
ODOT HazMat Contacts 2010

Statewide HazMat Program Leader:
Jennie Armstrong
(503) 229-5129
Jennie.ARMSTRONG@odot.state.or.us
6000 SW Raab Road, Portland, OR 97221

Region 1 HazMat Coordinator:
Charles Schwarz
(503) 731-8290
Charles.SCHWARZ@odot.state.or.us
123 NW Flanders Street, Portland, OR 97209

Region 2 HazMat Coordinator:
Bart Bretherton
(503) 986-2647
Bart.G.BRETHERTON@odot.state.or.us
455 Airport Road SE, Bldg. A, Salem, OR 97301

Region 3 HazMat Coordinator:
Kenny Camp
(541) 957-3594
Kenny.L.CAMP@odot.state.or.us
3500 NW Stewart Parkway, Roseburg, OR 97470

Region 4 HazMat Coordinator (Interim):
Ryan Franklin
(541) 388-6088
Ryan.FRANKLIN@odot.state.or.us
63034 OB Riley Road, Bend, OR 97701

Region 5 HazMat Coordinator:
Dave Brooks
(541) 377-1590
David.E.BROOKS@odot.state.or.us
3012 Island Avenue, La Grande, OR 97850

Maintenance Environmental Program Manager:
Patti Caswell
(503) 986-3008
Patti.CASWELL@odot.state.or.us
800 Airport Road SE, Salem, OR 97301

Industrial Hygiene Safety Manager:
Jerry Shultz
(503) 378-6863
Jerry.L.SHULTZ@odot.state.or.us
2775 19th St SE, Salem, OR 97302