Outline:

What is HazMat?

Place in Project Development – Overview

State and Federal Rules and Guidance

Hazardous Substances - Surveys

Corridor Surveys/ROWs/Easements

Contaminated Media

What’s coming – shoulder soil management

Case Studies/Discussion
What is “HazMat”? 

- Underground tanks 
- Contaminated media 
- Asbestos 
- Lead-based paint 
- Solid/Haz Waste 
- Fueling/oils 
- Spills 
- Standard Specifications: 290.20 (Waste/Haz Subs), 290.29 (H&S), 290.30 (Poll. Control), 290.80-.90 (M&P) 
- Specials: 293 (USTs), 294 (Media), 295 (Asb.), 296 (Paint), 297 (PCB/Hg), 299/A (UICs and Septic)
# Place in Project Development – Overview

<table>
<thead>
<tr>
<th>Phase</th>
<th>Document</th>
<th>QC (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scoping</td>
<td>Project HazMat Scoping Notes</td>
<td>N</td>
</tr>
<tr>
<td>Project Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DAP</td>
<td>Staff Assignments</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>Resource Sharing Agreements</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>HazMat Corridor Survey (HMCS; potential follow-up report elements below)</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>HMCS – Phase I Site Assessment</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>Minimal Assessment Memo</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>Clean Fill Determination Memo</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>DAP Submittal</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>Draft plans, specs, and estimates</td>
<td>Y</td>
</tr>
<tr>
<td>Preliminary Plans</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HMCS – Phase II Preliminary Site Investigation</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>HMCS – Sample and Analysis Plan</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>HMCS – Asbestos Survey</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>HMCS – Paint Survey</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>HMCS – Laboratory Reports</td>
<td>Y</td>
</tr>
<tr>
<td>Advance Plans</td>
<td>HazMat HMCS/Report/Memo Addenda (i.e., if additional sampling is required)</td>
<td>Y</td>
</tr>
<tr>
<td>Final Plans</td>
<td>HazMat HMCS/Report/Memo Addenda (i.e., if additional sampling is required)</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>Cost Recovery Agreements</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>Solid Waste Memo Documentation (SWLAs, Site Specific BUDs, permits and disposal clearances)</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>Final Plans, Specifications, and Estimates</td>
<td>Y</td>
</tr>
</tbody>
</table>

1 - Any of these typical HazMat Corridor Survey (HMCS) follow-up report elements may be standalone reports/memos, based on the nature of the initial scoping/project needs.
Rules and Guidance

Federal Rules

RCRA (Hazardous Waste)
CWA – and associated spills and petroleum rules
OSHA (HazWoper)

Oregon Rules

Solid Waste; RCRA Administered by State
Cleanup Rules
Asbestos Rules
Spill Rules (ER, SPCC Plans, etc.)

Guidance

ASTM vs. AASHTO (Site Assessments, etc.)
DEQ Guidance (Clean Fill, Fact Sheets, etc.)
Hazardous Substances - Surveys

Asbestos (SP 00296)

“Friable”

Insulation, Transite Pipe, Construction Materials (tile, mastics, etc.)

DEQ Air Quality permits (Mitigation Plan, disposal, transport, etc.)
Hazardous Substances - Surveys

Lead Paint (SP00296)

Lead, Cadmium, Chromium
Painted metal, concrete, wood, etc.
Often a Haz Waste (RCRA)
Hazardous Substances - Surveys
PCBs and Mercury (SP00297)

- Transformer oils
- Switches and Lamps
- Often a Haz, Special or TSCA Waste
Corridor Surveys/ROWs/Easements

For larger corridor projects and large or small property acquisitions requiring historic research on property uses and nearby environmental hazards.

- Underground Storage Tanks (USTs) (SP00293)
- UICs ("drywells") (SP00299)
- Septic Systems (SP00299A)
- Contaminated Media (soil, GW, sed.) (SP00294)
Corridor Surveys/ROWs/Easements

Environmental Site Assessments -
“Phase I ESA”
- Historic Research
- Environmental Databases
- Site Visit
- Memo/Report

“Phase II ESA”
- Drilling
- Sampling – Soil, GW, Sediment, building materials, paint, etc.
- Sources, responsible parties, volumes, costs, liabilities
- Memo/Report
Contaminated Media (SP00294)
Contaminated Media (SP00294)

Complex
- Former/current Service Stations
- Former/current industrial sites
- Former drycleaners
- UICs
- Groundwater and sediments

“Simple”
- Shoulder soil — statewide issues
- Residential properties (?)
What’s coming – Shoulder Soil Management

Fig. 1. Schematic sketch of a roadside environment and pathways for pollutant dispersion.
What’s coming – Shoulder Soil Management

1) DEQ’s Solid Waste Rules - OAR 340-093 and Clean Fill IMD (2014)

2) ODOT Specs – 00290.20(2) - Clean Fill (per OARs) is property of the Contractor – “Clean Fill Determination”

3) ODOT Directive GE14-01(D) - Established ODOT policy on soil management in operational ROW to 1.5 feet deep.
2015 Data Evaluation
What’s coming – Shoulder Soil Management

- “Beneficial Use Determination” (BUD)
- Internal considerations
  - Contracting
  - Construction Specs (and DOJ)
  - Upcoming SP00294 revs
- Rollout and training
Case Studies/Discussion – R1 Duke and 82nd
Case Studies/Discussion – R1 Duke and 82nd
Case Studies/Discussion – R1 Duke and 82nd

2016/02/18
Case Studies/Discussion – R2 Tillamook
Case Studies/Discussion – R2 Tillamook
Case Studies/Discussion – R2 Tillamook
Case Studies/Discussion – R2 Tillamook

- Tanks were identified during Phase I/Corridor Survey
- Area of known shallow GW, and numerous DEQ Cleanup sites with GW impacts.
- HMC and CPM recommended GW management in SP 00294
- A&E – stage during low GW (low bid)
- End result -
  - 650,000 gallons contaminated GW
  - ~$2 million C.O.
Spend time and money on front end with the hope that nothing major/unmanageable is found.

Purchase of property with buried tile – asbestos waste = funding?

ROW – easement vs. fee simple (liability implications)

*ANY* time we are in the subsurface, predictability is directly proportional to investigation, but can never be 100%.
ODOT Regional HazMat Coordinators

Region 1
Charles Schwarz
503-731-8290

Region 2
Bart Bretherton
503-986-2647

Region 3
Kenny Camp
541-957-3594

Region 4
Scott Billings
541-388-6097

Region 5
Michelle Peterson
541-963-1334

Statewide
Shawn Rapp
503-667-7442
Final Thoughts on Project Development and HazMat

“Never think a project is beyond, or too simple for, a HazMat issue – sidewalks, ADA ramps, pavement, shoulder soil ....” (B.B.)

“Engage with HMC staff early in scoping, and avoid property purchases when possible. If not – work with ROW and HMC for cost recovery agreement.” (C.S.)
Questions?

CORRELATION

DOES NOT IMPLY CAUSATION