MCP Considerations for Construction of Clean Energy Installations

Patricia Donahue, MassDEP, Northeast Regional Office



Presentation Summary

- Regulatory Overview
 - Remedial action alternatives at disposal sites

- Technical Recommendations
 - applicable to all construction projects



Constructing Clean Energy Installations Within the Disposal Site Footprint

Major Regulatory Concerns:

- Risk to construction workers and nearby residents/receptors
- Risk to future on-site workers
- Preclusion of future remedial options



Regulatory Jurisdiction

- The MCP defines Remedial Action as "containment or removal".....broadly defined as the cleanup of oil and hazardous materials (OHM) released to the environment.
- Remediation Waste: includes soil and groundwater containing OHM at concentrations equal to or greater than the applicable reportable concentration



Construction Activities

MassDEP has maintained the consistent position that if you're handling remediation waste, then that activity is a Remedial Action, and as such must be conducted under one of the five remedial response alternatives set forth in the MCP.



The Five MCP Regulatory Vehicles to Undertake Remedial Actions

- Limited Removal Action (LRA)
- Immediate Response Action (IRA)
- Release Abatement Measure (RAM)
- Utility-Related Abatement Measure (URAM)
- Comprehensive Response Action (e.g. Phase IV)



Limited Removal Action

- Prior to notification
- Soil only
- "Limited" means "Limited"!
 - 100 yds oil, 20 yds hazmat
- Extent of Contamination- known
- Expectation that the cleanup can be completed within allowable limits



Construction Activities Under an IRA

- Only in limited cases (e.g. abandoned Underground Storage Tank encountered during excavation)
- Limit actions to what is necessary to abate IRA condition
- Perform follow-up construction activities as a RAM



Construction Activities Most Common - RAM

- May be conducted pre or post RAO
- Limited in scope and complexity
- Need an adequate site characterization commensurate with the proposed activities



Installation Construction Considerations

- For area within and adjacent to the proposed structure/building
 - Focused site characterization and risk assessment
 - Focused feasibility study
 - Source elimination or control
 - Remedial actions designed to achieve NSR for footprint area



Hints for Successful RAMs

- Provide sufficient background information, ie history, sources, data summaries, maps
- Include clear discussion on soil management including the final disposition, re-use on-site, segregation, soil volumes
- Financial assurance statement for large amounts of soil (>1500 yds)
- Detailed capping plans, if applicable



Hints for Successful RAMs, cont.

- Always discuss approach to dewatering to handle groundwater as well as stormwater accumulation
- Provide plan to manage new discoveries (e.g. new contaminants, buried USTs or drums)
- Provide health and safety plan
- Discuss environmental monitoring



RAM - Significant Modifications

Submit modified RAM Plan if:

- new contaminants(s) or unexpected conditions are discovered
- "significant" change in soil volume (20% of est.)
- change in soil management option
- major modification of remedial system or treatment technology



Utility-Related Abatement Measures

- Requires notification with written confirmation due <u>within 7 days</u>
- Utility work only- no foundations!
 - Sewer, water, gas, *electric*, telecommunications
- Develop health and safety plan
- Make sure follow-up paperwork including URAM completion statement is submitted
- Discuss <u>known</u> releases in vicinity off property



So, now that the RAO has been filed......



Construction at Disposal Sites with a Response Action Outcome Statement

310 CMR 40.1067



Potential New Release Condition

- 310 CMR 40.0317(17) notification exemption unless information would negate or change site closure documentation
- Handle conservatively- notify
- Retraction option within 60 days if LSP can opine that contamination is consistent with RAO filed.



Sites with Valid A-1, A-2 or B-1 RAOs

- Remediation Waste Management and "Anti-Degradation" provisions of 310 CMR 40.0030 still apply
- Permit, TC or extension not required
- No documentation to DEP can voluntarily submit
- Public involvement not required



Anti-Degradation Provisions

- 310 CMR 40.0032
- For soils less than reportable concentrations
- May be reused on-property or off-property at locations with the same or similar levels of contamination, provided the receiving location
 - Would not exceed an RC
 - OHM levels are not significantly lower



Sites with Valid A-3 or B-2 RAOs Activity and Use Limitations

Depending on planned work.....



"Limited" Soil Excavation

- Soil limits are analogous to Limited Removal Action provisions (100 yds oil, 20 yds hazmat)
- Excavation must be allowed by the AUL
- No RAM Plan required
- Follow Remediation Waste regulations



Beyond "Limited"

- Shall be conducted as a RAM: all provisions at 310 CMR 40.0440 apply
- Public involvement required
- No permit, tier classification or extension required
- If remedial actions are being conducted to allow change in site use or activities, requirements of 310 CMR 40.1080 must be met



Beyond Scope of RAM

- Conduct as Phase IV Comprehensive Response Action
- Valid Permit, Tier Classification or Extension Necessary
- Public Involvement Required
- If remedial actions are being conducted to allow change in site use or activities, requirements of 310 CMR 40.1080 must be met



Revise RAO?

- Yes, if AUL terms and conditions have changes as a result of the remedial action
- Yes, if information and assumptions change ie site boundaries, levels of OHM, Class of RAO
- Revised RAO can be limited to the disposal site area where the response actions were conducted.



Sites with Class A-4 or B-3 RAOs

Treated the same as A-3 or B-2 RAOs as described on previous slides unless an engineered barrier is present.



Engineered Barrier Present

Remedial activities that are in or will affect the area where the Engineered Barrier is present:

- Must be conducted as a Phase IV CRA
- Public involvement required
- Valid Tier Classification required



Sites with Valid Class C RAOs

- Actions conducted in accordance with a Remedial Action Plan
- May conduct a RAM
- No de minimis volumes
- C-2 requires valid Tier Classification



Exemptions Not Subject to MCP

- Release/Disposal Site Exemptions pursuant to MGL c. 21e
- Reporting Exemptions at 310 CMR 40.0317



Handle Cautiously

310 CMR 40.0370 - Response actions shall be undertaken for releases of oil and/or hazardous material that do not require notification under 310 CMR 40.0300 if the releases or threats of release pose a significant risk to health, safety, public welfare, or the environment, as described in 310 CMR 40.0900.



Managing Exempt Releases

- No submittal requirements or fees to DEP
- Develop and implement HASP
- Manage contaminated soil and groundwater in accordance with applicable requirements
- Use same standard of care to conform to applicable laws, regs, etc.



Part II - Technical Guidance

- No one set of guidance for addressing construction activities
- Available resources on MassDEP website
 - Construction Policy: WSC-00-425
 - Rail Trail Redevelopment BMP 2003
 - Real Time Air Monitoring paper (dust) 1997
 - Construction PP presentations Training info



Large Project

- Encourage your client to utilize an environmental manager to:
 - Confirm permitting/approvals
 - Verify Training and HASP implementation
 - Monitor all excavation activities
 - Monitor all removed soil
 - Ensure soil re-use and or transportation off-site in appropriate manner



Work Considerations Keep "It" On the Site

- Perimeter air and dust monitoring
- Dust control
- Odor control
- Noise control/abatement
- Anti-track truck pads/truck decontamination
- Stormwater control
- Monitor for and cleanup incidental spills



Soil Management

- Plan ahead appropriate containment
- Separate storage areas "clean"/reuse/dispose
- Secure storage snow fencing, haybales
- Locate stockpiles away from property line and residences (if possible)
- Consider direct load for soil to be recycled or disposed of off-site



Dewatering - Potentially Contaminated groundwater

Options detailed in 310 CMR 40.0040

- On-site discharge
- Off-site disposal
 - Treat and discharge to WWTP- local approval
 - Discharge to surface water- federal approval necessary



Summary

- Several ways to complete construction projects under the MCP
- Understand the site and how soil will be managed to meet project goals
- Plan ahead
- Go!



Contact Information

David.Slowick@state.ma.us / 413-755-2246

Patricia.Donahue@state.ma.us / 978-694-3364

