CONTAMINATED MATERIALS MANAGEMENT

External Advisory Group

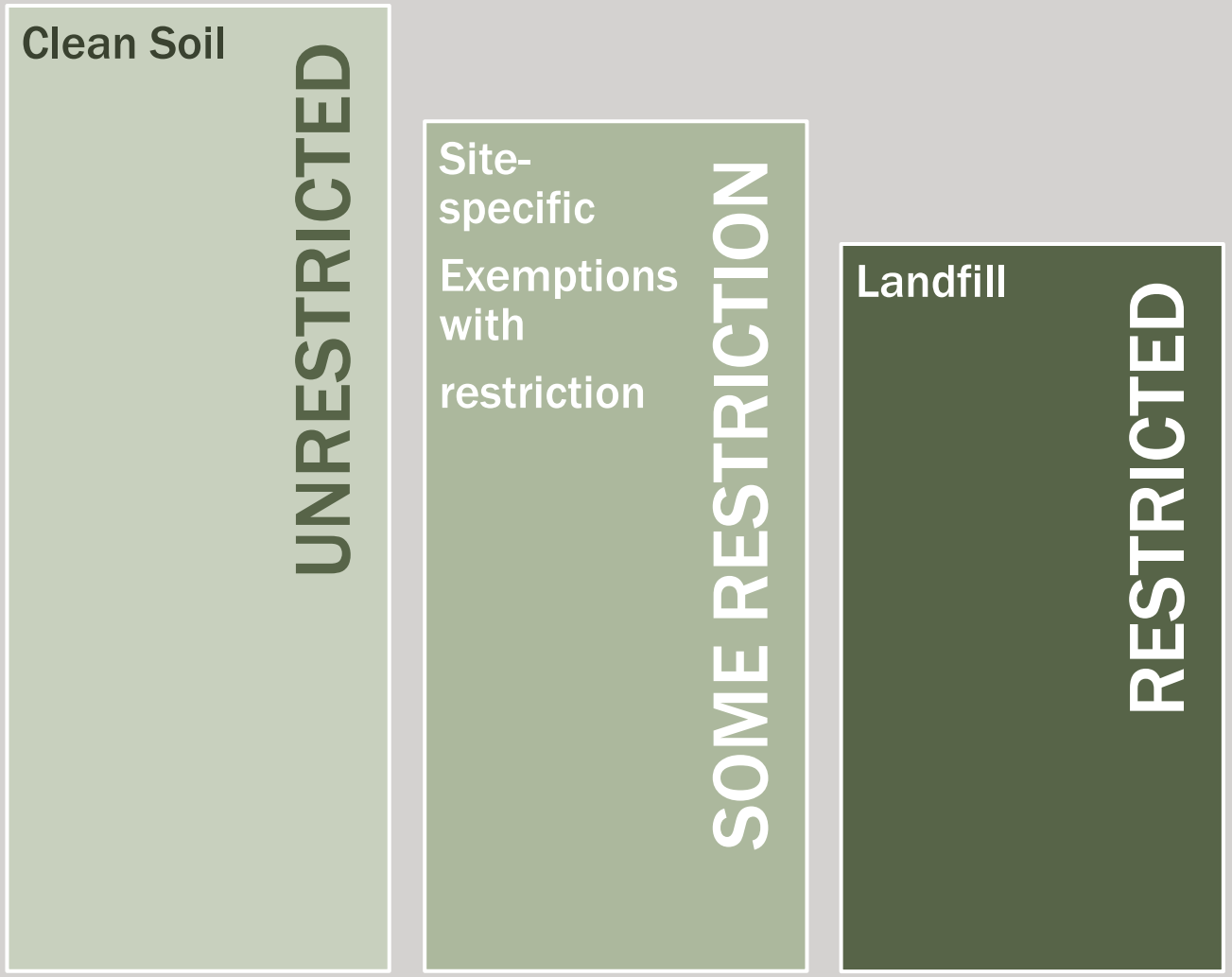
Update

WISCONSIN
DEPT. OF NATURAL RESOURCES

WORK GROUPS

1. Material Characterization
   PAH Guidance, Assessment & Study
2. Utility, Developer, DOT and Local Government concerns
3. Long-term Stewardship of Relocated Materials
4. Tracking
5. Innovative Initiatives

1. MATERIAL CHARACTERIZATION



1. MATERIAL CHARACTERIZATION

- Issue Paper – Define "clean" soil
- ***VOCs*** *- below laboratory Method Detection Limits (MDLs)*
- ***Metals*** *– Below BTVs values unless a release is suspected.**
- ***PAHs*** *– below residential direct contact RCLs and below groundwater RCLs.*
- ***PCBs*** *- below laboratory MDLs*
- ***Other*** *non-naturally occurring parameters – below laboratory MDLs*

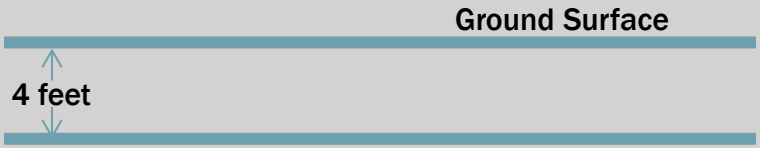
1. MATERIAL CHARACTERIZATION

- "Clean" soil definition was preliminarily approved by Remediation & Redevelopment Program and Waste & Material Management Program.
- MDLs for several WI Certified labs under evaluation to specify acceptable level
- Formal approval process developing

1. MATERIAL CHARACTERIZATION

- Next issue paper developing
  - Gradient between Unrestricted ("clean") and Restricted (landfill) Material
- Note: Receiving sites should have similar types and concentrations of contaminants in soil planned for placement. Goal is to avoid building new brownfield sites.

RESTRICTED PLACEMENT
NON INDUSTRIAL/NO CAP



< Non Industrial DC RCLs
> GW RCLs & < NR 140 SPLP

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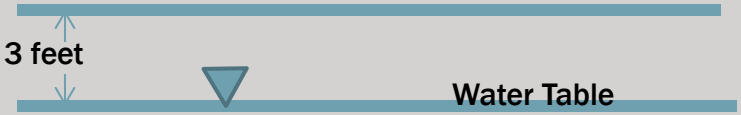
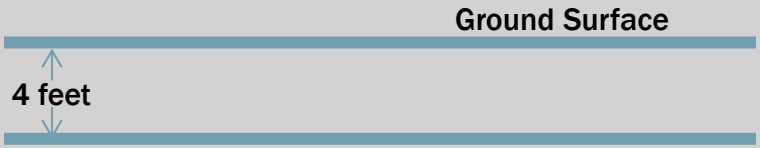


< Industrial DC RCLs
< GW RCLs

Not Allowed

- Acceptable VOCs pose No Vapor Risk
- Consider Co-solvency Effect for VOCs
- Contaminant Loading potential for sites accepting large quantities of material

RESTRICTED PLACEMENT INDUSTRIAL/NO CAP



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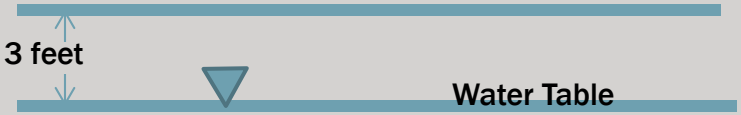

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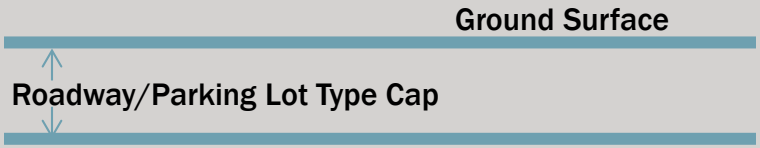
RESTRICTED PLACEMENT UNDER ROADWAY/PARKING LOT CAP



Asphalt/Concrete

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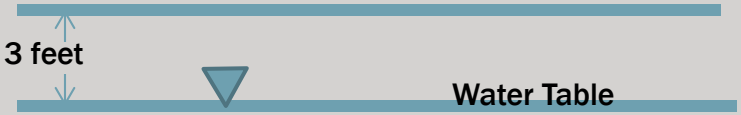

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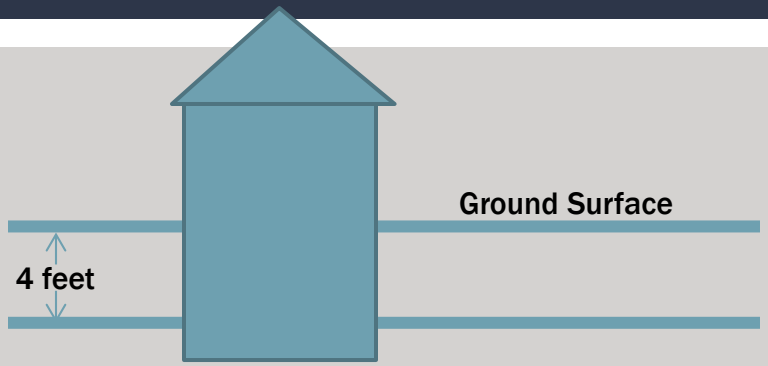
RESTRICTED PLACEMENT UNDER STRUCTURE - RESIDENTIAL



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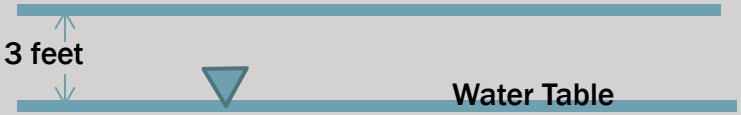

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RESTRICTED PLACEMENT UNDER STRUCTURE – NON INDUSTRIAL/NOT RESIDENTIAL

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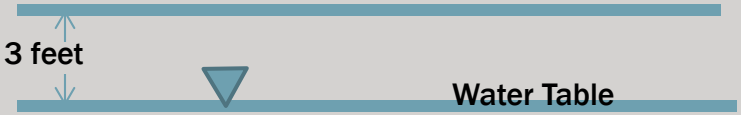

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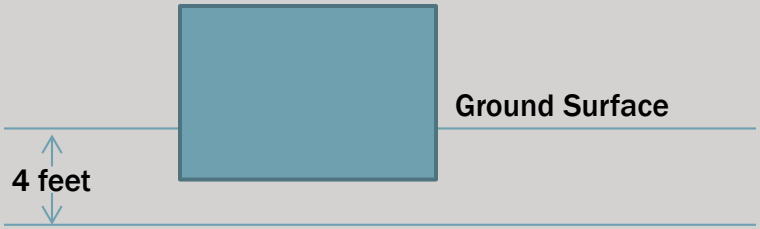
RESTRICTED PLACEMENT UNDER STRUCTURE - INDUSTRIAL



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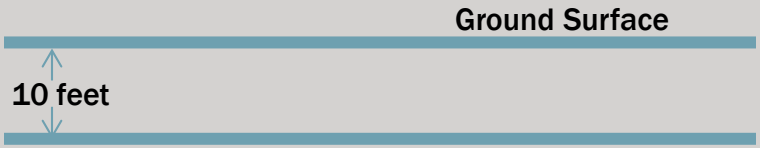
RESTRICTED PLACEMENT
LARGE RECEIVING SITE/QUARRY



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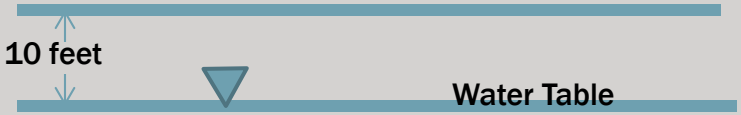

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2. MATERIAL CHARACTERIZATION PAH UPDATE

- Widespread Contaminant Guidance
  - Define “No Action Required” Process
- WI Dept of Health Services
  - Reassessment of PAH Soil Standards
- PAH Background Study
  - Determine which PAHs to include in the study
  - Evaluate sampling methodology
  - Evaluate analysis procedures
  - Select sampling locations
  - Secure funding for study

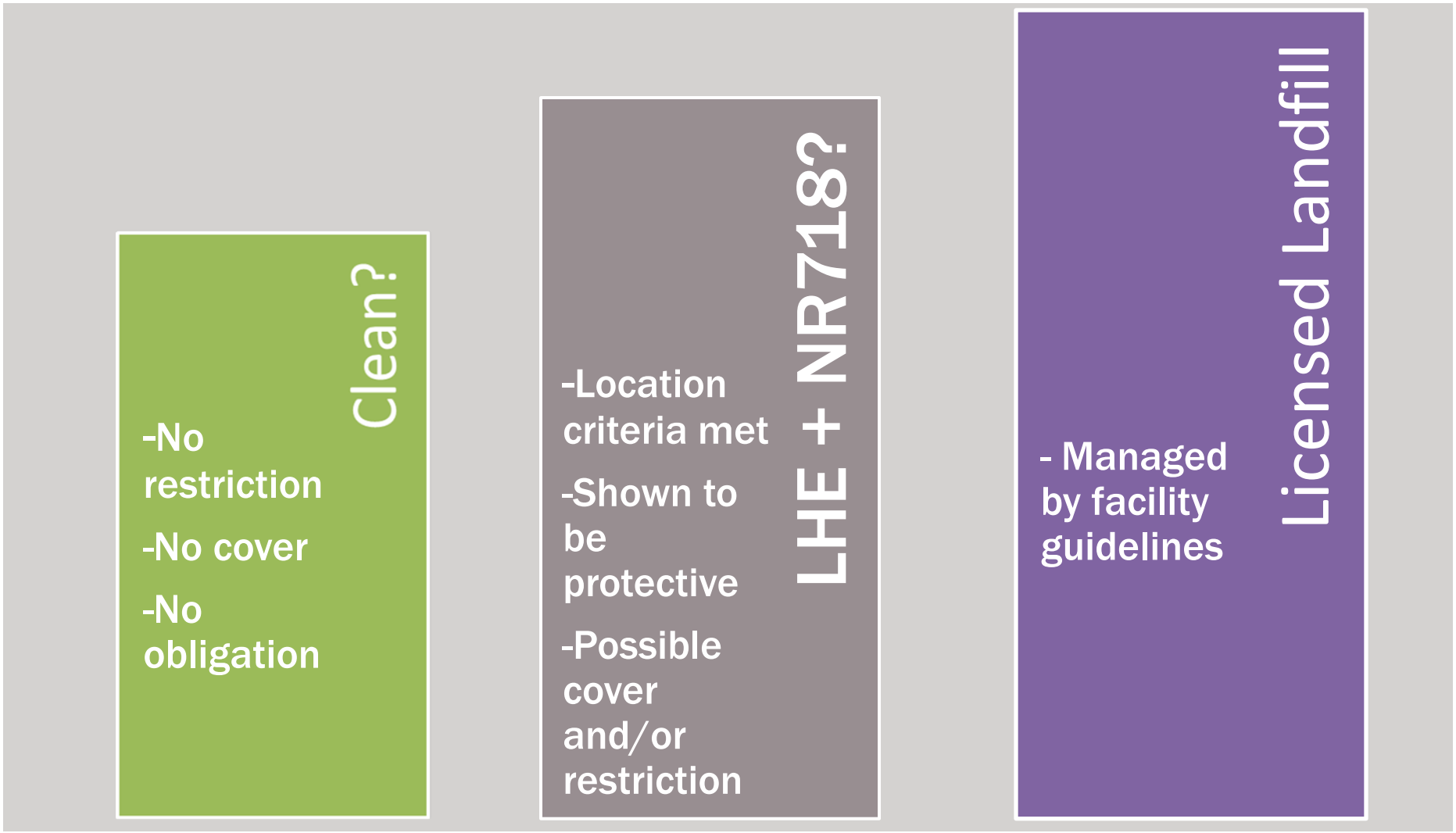
2. UTILITY, DOT, LOCAL GOVERNMENT

- Sampling
  - When to test
  - What to test for
- Conditions that require reporting
- Reporting responsibility
  - In ROW
  - On private property
  - With contractor involvement
- Placement options when contamination is present
  - Process for determining what is acceptable
  - Interim movement – stockpiling/storage/future reuse

2. UTILITY, DOT, LOCAL GOVERNMENT

- Next Steps
  - Suggest BMPs for Waste Determination Process
  - Evaluate Possible Sampling Protocol Recommendations
  - Clarify reporting requirements as applicable to
    - In ROW
    - On private property
    - With contractor involvement

3. LONG TERM STEWARDSHIP OF RELOCATED MATERIAL



4. TRACKING

- Issue paper
  - Use of BRRTS/SHWIMS
    - Map based system
  - Approval for further evaluation received
    - Meeting on November 18th for initial process development

5. INNOVATIVE INITIATIVES

- Voluntary soil management certification program
  - Concept introduced at NR700 Technical Focus Group

FUTURE MEETINGS

- PAH Work Group Meeting – Chemistry subgroup
  - December 10th
  - GEF 2 Madison
- Soil Advisory Workgroup Meeting/Call
  - December 15th
  - GEF 2 Madison
- Soil Advisory Group
  - January 25th Tentative
  - To be Determined, Milwaukee