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

- Clean Soil: UNRESTRICTED
- Site-specific Exemptions with restriction: SOME RESTRICTION
- Landfill: RESTRICTED
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
“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

4 feet

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

3 feet

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

Water Table

< 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

Ground Surface

4 feet

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

3 feet

Water Table

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

< 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
UNDER ROADWAY/PARKING LOT CAP

Ground Surface

Roadway/Parking Lot Type Cap

Asphalt/Concrete

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

3 feet

Water Table

> 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
UNDER STRUCTURE - RESIDENTIAL

- 4 feet above the Ground Surface
- 3 feet above the Water Table

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

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

- > 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
UNDER STRUCTURE –
NON INDUSTRIAL/NOT RESIDENTIAL

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

- Acceptable VOCs pose No Vapor Risk
- Consider Co-solvency Effect for VOCs
- Contaminant Loading potential for sites accepting large quantities of material
RESTRICTED PLACEMENT
LARGE RECEIVING SITE/QUARRY

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

- No restriction
- No cover
- No obligation

Clean?

LHE + NR718?
- Location criteria met
- Shown to be protective
- Possible cover and/or restriction

Licensed Landfill
- Managed by facility guidelines
4. TRACKING

- **Issue paper**
  - Use of BRRTS/SHWIMS
    - Map based system
  - Approval for further evaluation received
    - Meeting on November 18\textsuperscript{th} 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