

Remediation and Redevelopment Program
Listening Session – April 20, 2018

CLEAN SOIL GUIDANCE

RR-103

1978 Wisconsin Spill Law 2018

CLEAN SOIL GUIDANCE

- What is a “clean soil” exemption?
- When can we use the “clean soil” exemption option?
- What may be considered “Clean Soil” excavated during a response action?
- What is the process for managing “Clean Soil”?

CLEAN SOIL GUIDANCE

NR 500.08(2)(a) lists materials exempt from NR 500-538 requirements for management at an operating, licensed solid waste site or facility or subject to a site-specific exemption:

- clean soil,
 - building stone,
 - concrete or reinforced concrete not painted with lead-based paint,
 - brick,
 - broken pavement, and
 - wood not treated or painted with preservatives or lead-based paint
- Locational requirements still apply (wetlands, Floodplains)

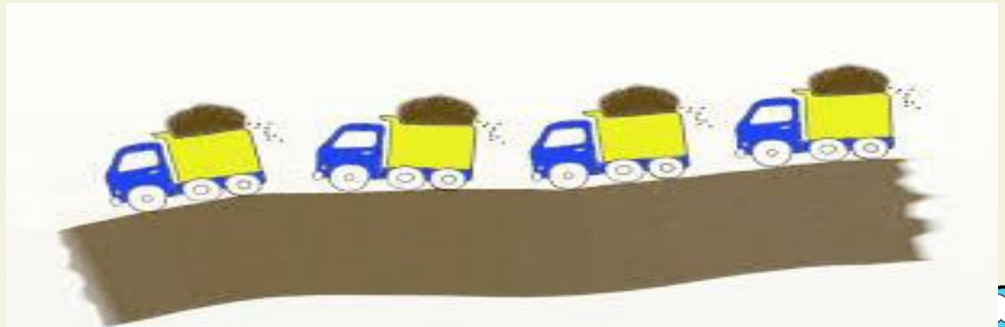
GUIDANCE APPLICABILITY



- Guidance is intended solely for use by RPs managing soil excavated as part of a response action pursuant to Wis. Stats. ch. 292 and Wis. Admin. Code chs. NR 700 - 754.

CLEAN SOIL GUIDANCE

- Guidance does not apply to soil excavated as part of:
 - a construction project,
 - utility project or
 - transportation project.
- If those projects also involve an NR 700 response action, this guidance applies only to the soil excavated as a direct result of the response action.



CLEAN SOIL GUIDANCE

- Optional approach for RPs when:
 1. soil is characterized and excavated as part of a response action and
 2. soil does not need to be managed at a licensed solid waste facility or through a site-specific exemption.

- “Clean soil” does not require Department pre-approval or tracking for the material to be excavated and managed.

CLEAN SOIL:SELF-IMPLEMENTING OPTON

Three categories

1. Non-Naturally Occurring Compounds
2. Naturally Occurring Compounds
3. Special Case Naturally Occurring Compounds - PAHs



CLEAN SOIL: SELF-IMPLEMENTING OPTION

1. Non-Naturally Occurring Compounds

- VOCs
- PCBs
- Pesticides
- Other non-naturally occurring compounds

“Clean” = below Limit of Quantification



CLEAN SOIL: SELF-IMPLEMENTING OPTION

2. Naturally Occurring Compounds

- Metals
- Other inorganic compounds

“Clean” = Below Background Threshold value
or

Less than the most restrictive of DC or GW RCLs



CLEAN SOIL: SELF-IMPLEMENTING OPTION

3. Special Case Naturally/Non-Naturally Occurring Compounds - PAHs

- “Clean” = Below GW Protective RCL and
- Either
 - a. Below Non-industrial DC RCL per NR720 or
 - b. Below Non-industrial DC risk levels on cumulative basis per NR 722.11



**Default Clean Soil Concentrations Table:
Maximum Allowable Concentrations (mg/kg) of
Specific Metals in Soil Excavated at Response
Action Sites**

Metal	<u>Non Industrial</u> DC RCL (mg/kg)	GW Protective RCL (mg/kg)	Background Threshold Value (mg/kg)
Aluminum			28,721
Arsenic			8
Barium			364
Cadmium			1
Calcium			14,536*
Chromium III	100,000		
Cobalt			22
Copper		91.6	
Iron	54,800		
Lead			52
Magnesium			8,290*
Manganese			2,937
Nickel			31
Strontium	46,900		
Vanadium			85
Zinc	23,500		

* - no RCLs have been established for calcium or magnesium
(background threshold values included for reference)

CLEAN SOIL PROCESS

- During NR 700 response action, characterize and segregate soil for appropriate management according to applicable laws.
- Sample according to § NR 716 & NR 718.12 (1)(e). Samples should be obtained and analyzed for all contaminants likely to be present.
- RPs may be able to characterize and segregate a portion of the material excavated as “clean soil” and may elect to use the self-implementing clean soil management option.

CLEAN SOIL GUIDANCE

- Responsible parties are required to immediately report hazardous substance discharges to the department pursuant to Wis. Stats. §292.11 and Wis. Admin. Code ch. NR 706.
- The “clean soil” guidelines or RCLs developed for soil cleanup standards per NR 720 should not be used as “reportable quantities” or “de minimis exemptions”.
- All discharges of hazardous substances are to be reported to the department.

CLEAN SOIL GUIDANCE

Questions?