April 23, 2014
WAC 173-350 Revision - Earthen Materials/Soils Workgroup Face-to-Face Mtg.

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Agenda

9:00-9:25 Introductions

9:25-9:40 Background and Scope of Work

9:40-11:50 General Strategy Discussion

9:40-9:50 – Differentiate between inert waste and soil
9:50-10:05 – Tiered approach for use/disposal
10:05-10:30 – Use of existing guidance for parameters, limits, uses, for start at least

10:30-10:40 BREAK

--We were unable to get to the shaded items below in detail and plan to meet again to go through them--

10:40-10:50 – Exclusions
10:50-11:00 – Representative Sampling
11:00-11:20 – Review, Approval, Documentation
11:20-11:40 – Definitions
11:40-11:50 – Title for section

11:50-noon Future Meetings

Notes

Introductions

Name, representing what industry and material type, top concern leading into this.

Concerns:

- Lack of clear standards, consistency
- PAH criteria
- Beneficial reuse, recycling
- Cost vs. risk/benefit
- Dredged material increasing need to dispose upland, which is more costly than open water. Dioxin level concerns.
- Standards/testing must be practical in field and not lead to delays in construction projects. Business needs to move forward fairly.
- Need to protect water quality
- Would like change to definitions – clean, contaminated soils. Consider originally adopted definitions,which provided more use options.
- Fix inconsistencies between jurisdictions. Arbitrarily regulated.
- Increase landfill diversion, account for zero waste goals.
- Scientifically-based standards.
- Disposal costs
- Landscaper testing costs. Practical and implementable in field.
- Local planning authorities/land use laws associated with "solid waste" handling.

Background and Scope of Work

- *3-yr process began Nov, 2013. Will need draft language for public comment 2 years from now May 2016.*
- *This is a new section of the rule. Will keep format of rule sections the same – applicability, location standards, design, operation, closure – many sections will have no requirements since this is for assessing quality of material, not regulating a facility.*
- *Our section will address contaminant limits for use and dipsosal options.*
- *Our section will <u>not</u> address storage, treatment, or transportation.*
- *Will include differing materials - Street waste (vactor, street sweeping), drilling materials, general excavation, manufactured topsoil, dredged materials, PCS, and possibly car wash sump.*
- *Some guidance docs for certain material types. We can't reference guidance in rules so will need to incorporate guidance standards we like into rule. Legislature does not like referencing guidance in rules as there has been less, if any, public review and limited stakeholder involvement.*
- *Ecology decides on language, but hope for a consensus-based process where we all feel heard and can understand the justification for whatever contaminant limits are ultimately chosen.*
- *Today is get to know each other, get comfortable, and for Ecology to come away with general idea for how to get started on rule language. Want a work product that we can add to/revise as we go through process.*
- *Open to spending more time than allotted on agenda items if needed. We do not need to get through everything today.*

Current situation –

- *Rule currently allows only for limited reuse options for soils containing solid waste – must be a beneficial use under either Ecology oversight (BUD) or via land application permit from health agencies. Neither option would allow use as fill.*

- *To use as fill, such as in reclamation pits would require a limited purpose landfill permit.*
- *One could not have contaminated soils be reused somewhere with similar/greater contaminants without a landfill or some other type of permit or determination.*
- *Nothing in the rule addresses reuse of soils containing contaminants. Contaminated soil/dredge references in the rule pertain only to storage or treatment, not reuse.*
- *Contaminated soil definition ties soils to cleanup activities only.*
- *Other soils containing contaminants are viewed by regulatory agencies as solid waste with limited handling options – disposal in a highly regulated landfill, demonstration that meets inert criteria and handled as inert waste, potentially BUD, or land application permitting.*
- *Dredged materials are considered clean and can be used upland only if it meets criteria for open water disposal (and is not dangerous waste or regulated federally). Some contaminants harmful in aquatic environments may be fine for uses/disposal on land. Some open water disposal limits may not be suitable for uses/disposal on land. If dredged materials do not meet the criteria, it must go to a properly permitted landfill.*
- *For things like manufactured topsoil, solid wastes are often added (grass, wood ash, dry wall, PCS, etc) that puts all topsoil in the category of solid waste. Not enforced, but as rule currently exists, permitting for storage and use is required.*
- *There are currently no contaminant limits for expanding use options*
- *No straightforward list of parameters to test based on the material you have*
- *No sampling protocal*
- *No exclusions*
- *Now regulatory agencies use a variety of guidance and make case-by-case decisions. Not conducive to consistency. Our goal is to fix this.*

General Strategy Discussion

Differentiate between inert waste and soil.

Inert waste is cured concrete, road asphalt, brick and masonry, ceramic, glass, stainless steel and aluminum, and other materials that demonstrate meeting of inert waste criteria (not combustible, not capable of producing leachate or gasses that are harmful, not subject to biological and chemical degradation, etc.)

As the rule currently exists, there has been much crossover between soils and inert waste criteria. Many generators have been trying to dispose at inert waste landfills by showing soils meet inert criteria. Also, generators have used inert criteria to take soils to sand/gravel/reclamation sites, which are not permitted to take inert waste in the first place.

We need to differentiate between soils and inert waste to ensure only one section of WAC 173-350 will apply to soils. We want to avoid multiple sections of the rule potentially applying to the same material.

- In soil, allow a de minimus amount of materials (concrete, asphalt, other inert wastes) in the soil without reclassifying it as inert waste.
- Allow 5% non-soil by visual inspection.
- Allow much less than 5% non-soil.
- Allow a percentage up to a maximum tonnage – e.g. 1% up to 1,000 lbs.
- Look at “moving soils characterization” by City of Redmond.

Tiered approach for use/disposal

Base on out-the-door characterization to account for any treatment.

A. Clean, don't care where it goes. Will have clean soils as a listed inert waste so can go to inert waste landfill without fuss.
   1) Would include soils not suspected of containing contaminants.
   2) Soils suspected of contaminants will be tested. Key will be to setting appropriate contaminant limits.

B. Contains contaminants, but
   1) Going somewhere just as dirty would be okay. May involve receiving site characterization.
   2) Reuse at site of generation or close site with similar contaminants and levels.
   3) Use for engineering characteristics, such as soil with jet grout.

C. Too dirty – no reuse options, must go to limited purpose or municipal solid waste landfill.

- Generally like the approach.

Use existing guidance for parameters, limits, uses, for start at least

For materials addressed in existing guidance, include as appendices in rule with test parameters, limits, and use options.

Street waste - Stormwater Manual
Petroleum-contaminated soil – TPH guidance as starting.
Dredged materials - user manual, standards for open water disposal as starting point. Eliminate contaminants that are problematic in water only.

Others, not so clear a starting point:

General excavation – Is there a standard list of contaminants currently tested? Are there limits?

Drilling slurries and cementitious materials – concern about pH, metals and varying contaminants (chloride, acrylamide) depending on additives, and petroleum if in risk area. Do we separate into different materials – cementitious vs. vertical shaft drilling vs. horizontal boring?

Topsoil – Will vary greatly dependent on additives. Plan to address land application of vegetative materials in land application section. Set standards for what can/can't be used in topsoil. E.g. Can amend with products like compost, registered fertilizers. If add solid wastes like wood ash, dry wall, PCS, grease trap waste, etc, need testing. Different option is to no longer allow materials offering no benefit – grease trap,asphalt roofing, etc. Getting tip fee for accepting solid wastes that do nothing to improve the topsoil is a problem at some facilities.

Clean soil – Will be big list of contaminants with limits for materials we do not specifically call out in the rule.

- Support for use of existing guidance as a start. Would like some changes:
  - Stormwater manual for street waste – PAHs limit too low, BTEX not needed, change testing frequency
- Drilling materials – pH below 8.5 hard to achieve, but has been the standard based on groundwater quality criteria. Assumption has been that pH higher than 8.5 poses a risk to groundwater quality.

There may be flexibility with the pH standard depending on where materials get placed. We will need to consider this.

- Allow a de minimus amount of non-soil before moving out of clean soil realm. E.g. if soils are not suspected of containing contaminants, but additives were used (jet grout) amounting to less than 3% by volume, still consider clean soil.
- Use limits set for compost or biosolids. Those limits based on a limited application to ground and may not be appropriate for clean soils standard as fill.
- Concern about reuse/disposal of soils with naturally high pH.
- Allow reuse of drilling materials on-site – place above water table and cap with topsoil. Allow under roads.
- Some soil-like materials are not clearly soils - e.g. jet grout soils. Will need to figure out if earthen materials/soil section is appropriate for such materials.
- Testing frequency will need a lot of thought

Future Mtgs

- Location for face-to-face meeting: Ecology's Lacey building is fine, but people are open to Ecology's Bellevue office or the Tacoma/Pierce County Health office in Tacoma.
- Will have another face-to-face meeting in June to get through postponed agenda items.
- Will have monthly conference calls to keep up-to-date on progress and discuss issues. Will adjust this frequency as needed.