Management of Surface Soils Removed Within Operational Right of Way

Frequently Asked Questions

Q: What are the limits for soils covered by this directive? Does this apply to soils, all the way to the toe of the fill, or just xx' from the edge of the pavement? To the ditch bottom in a cut section?

The lateral limits for this directive extend from the edge of pavement to the edge of right of way. However, we have no sampling data beyond 25 feet from the edge of pavement so it is recommended that soils be tested on projects extending beyond that distance, as soils may become cleaner with distance from the roadway. The vertical limits of soils covered by this Directive are 0 to 18 inches below the top of soil, regardless of whether that upper soil surface is under grass, under aggregate or in a ditch. So, if the top soil is 1 foot below grade, the directive covers soils from 1 to 2.5 feet below grade (0 to 1.5 feet below top of soil).

Q: Is the aggregate rock slope adjacent to the roadway pavement considered soil? Is the 1.5 ft below grade considered to be the material below the roadway aggregate rock slope or top of ground?

Although we have not sampled clean aggregate, it is unlikely that it would contain the same levels of contaminants, without any fines for those contaminants to sorb to. However, if the aggregate contains fines, it is considered "soil." Therefore, the 1.5 feet below grade is the depth below the point at which shoulder aggregate contains obvious fines.

Q: When drilling shafts to 20 feet do we need to segregate the top 1.5 feet per this directive?

No. The directive states that we should "characterize the excess material as it would be generated by typical excavation methods, i.e. as as single bulk material". If the drilled shaft process would generate soil across a 20-foot interval, we should characterize the soil across the whole 20 foot interval.

Q: Does this directive apply to median berms?

Yes. Median berms are also subject to aerial deposition of roadway contaminants. However, there may be a value in sampling berms, rather than assuming that contamination exceeds clean fill values to 1.5 feet in contaminants may be lower than in other areas of the median.

Q: Does this directive apply to clearing and grubbing materials?

If the clearing and grubbing materials are mostly (90% or more) vegetation, with only trace amounts of soil, then they can be managed as clean. If the clearing and grubbing materials have significant soil content (10% or more), then they must be
managed according to this directive.

Q: What analyses do we need to run?

The contaminants that typically exceed DEQ's clean fill values are lead and benzo(a)pyrene. However, other PAHs had metals have also exceeded the DEQ values on prior projects. therefore, we recommend analyzing soils for PAHs by EPA Method 8270 SIM, and the metals lead, cadmium, chromium, zinc and copper. If it is likely that soils will need to be taken to a landfill for disposal, add NWTPH-Dx, because landfills require it. If there is reason to suspect herbicides or pesticides could have also impacted the surface soils, add Herbicides by EPA Method 8151, Pesticides by EPA Method 8081, and metals arsenic and mercury.

Q: Do we need to write a new special provisions for managing contaminated surfact soils?

A: No, the existing boilerplate special provision 00294 covers all contaminated soils and has already been reviewed and approved by DOJ.

Q: This is not included in spec 00330, so I can ignore it?

No. When developing this directive, ODOT’s Spec Unit and GeoEnvironmental agreed that the soil management requirements are included in boilerplate special provisions 00294, which has been reviewed by DOJ.

Q: Are City and Counties required to use the directive/management strategy we are using?

Yes, Cities and Counties are required to use the same directive we are using, if the projects are being administered through our local agency program. The Directive, as originally posted seems to indicated this only applies to ODOT ROW; that is a mistake. An old draft of the directive was accidentally posted instead of the agreed to version. The intent is that it cover all projects and the correct version will be placed on the web site ASAP.

Q: Does this directive apply to maintenance?

No, Maintenance should follow the guidance provided in the current editions of the ODOT Routing Road Maintenance water Quality and Habitat Guide Best Management Practices (Blue Book) and the ODOT Maintenance Yards Environmental Management System Policy and Procedures Manual (EMS). Both of these publications provide the following guidance for ditchings (the primary soil remove process for highway maintenance). "Pollutant testing may be needed to determine if ditchings meet clean fill requirements (especially in urban, high traffic areas, or areas where chemical pollutants are suspected). Note that pollutants are suspected in surface soils at 0 to 1.5 feet below grade, located adjacent to roadways, based on ODOT’s testing of surface soils on at least 16 construction projects around the state.

Q: For State highways that are on Federal Lands (US Forest Service, BLM) by
easement - are those agencies willing to allow us to reuse materials w/in top 1.5’ (assumed to not meet clean fill requirements) within our operational RW, even though we do not own the land?

For projects on Federal Lands, ODOT should talk to the agency owning the land prior to soil reuse. The same applies to Tribal lands. It is up to the land owner to determine what they will and will not allow on their land, if it is not covered by the easement agreement. ODOT’s Statewide HazMat Lead can explain the logic behind ODOT’s Directive and explain pros and cons of allowing soil reuse to the land owner. The Statewide HazMat Lead can also aide in negotiations with Federal Agencies, if desired by the Region.

Q: Do we need to track where we move surface soils within our right of way?

The directive does not require tracking. However, there is a benefit to tracking large volumes of soil movement, because placing a foot of contaminated shoulder material on top of an existing 1.5 feet, means the new location will have 2.5 feet of contaminated shoulder soils and it will help future projects to know that. Therefore, Region HazMat Coordinators are looking into how to track soil placement on large projects. Such tracking would be voluntary and decided within each region, based on the recommendations of the HazMat Coordinators Committee.