



Oregon

Kate Brown, Governor

Department of Environmental Quality
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July 2, 2019

Mr. Shawn Rapp
Statewide HazMat Program Coordinator
999 NW Frontage Rd., Suite 250
Troutdale, OR 97060

RE: Beneficial Use Determination (BUD-20181204), Highway shoulder soil throughout Oregon

Dear Mr. Rapp:

The Department of Environmental Quality (DEQ) has reviewed the June 2, 2017 application for a solid waste beneficial use determination (BUD) for highway shoulder soil material generated throughout Oregon.

ODOT defines “highway shoulder soil” to be soil outside of the current highway pavement and within highway rights of way generated during highway maintenance or construction activities. For the purposes of this BUD the highway shoulder soil is categorized by physiographic province, lateral distance from the edge of pavement (to a maximum of 30 feet from edge of pavement), and vertical distance from ground surface (to a maximum depth of 1.5 feet below ground surface). The approved beneficial uses by physiographic province and distance from pavement are provided in the tables below.

Shoulder soil material with indications of contamination (e.g., staining, odor) or in proximity to known potential contaminant source areas (e.g., industrial facilities, service stations, agricultural land, and areas where road-side spraying has been done for weed control) is not included in this BUD.

ODOT hired Cascadia Associates, LLC to review existing data on shoulder soil material, perform sampling to supplement the data, and to provide a statistical analysis of shoulder soil material to examine concentrations of hazardous substances in highway shoulder soil in Oregon. The results of the evaluation and recommendations for soil management were presented in the *2017 Statewide Highway Shoulder Soil Evaluation Results Report*, prepared by Cascadia and dated June 30, 2017.

DEQ has determined that the beneficial use proposal meets the requirements for a case-specific Beneficial Use Determination (BUD) under Oregon Administrative Rule (OAR) 340-093-0260 through 340-093-0290. This BUD is issued to ODOT and local governments who contract with ODOT for road maintenance and is limited to the materials, approved uses, and conditions specified in the Tables below. The conditions of the BUD are intended to prevent adverse effects to human health and the environment.

DEQ’s determination is based on a review of ODOT’s application for beneficial use of highway shoulder soil, demonstrating the case-specific beneficial use performance criteria outlined in OAR 340-093-0290 are met for the approved uses. Details of DEQ’s review are provided in the attached case-specific evaluation report.

Per OAR 340-093-0290(9), DEQ may modify or revoke this case-specific BUD at any time based on new information showing the potential to cause adverse impact to public health, safety, welfare, or the environment.

Tables 1 – 5: Approved beneficial uses by physiographic province and distance from pavement.

Table 1: Deschutes Columbia

Province: Deschutes Columbia			
Depth (ft bgs)	Distance from edge of pavement (ft) →		
	0-15	15-30	30+
0-0.5	Non-residential construction fill	Non-residential construction fill	CFD
0.5-1.0	Non-residential construction fill	CFD	CFD
1.0-1.5 ↓	Non-residential construction fill	CFD	CFD

Table 2: Coast Range

Province: Coast Range			
Depth (ft bgs)	Distance from edge of pavement (ft) →		
	0-15	15-30	30+
0-0.5	Non-residential construction fill	CFD	CFD
0.5-1.0	Non-residential construction fill	CFD	CFD
1.0-1.5 ↓	Non-residential construction fill	CFD	CFD

Table 3: High Lava Plains

Province: High Lava Plains			
Depth (ft bgs)	Distance from edge of pavement (ft) →		
	0-15	15-30	30+
0-0.5	Non-residential construction fill	CFD	CFD
0.5-1.0	Non-residential construction fill	CFD	CFD
1.0-1.5 ↓	CFD	CFD	CFD

Table 4: South Willamette Valley

Province: South Willamette Valley			
Depth (ft bgs)	Distance from Pavement (ft) →		
	0-15	15-30	30+
0-0.5	Non-residential construction fill	non-residential construction fill	CFD
0.5-1.0	Non-residential construction fill	CFD	CFD
1.0-1.5 ↓	Non-residential construction fill	CFD	CFD

Table 5: Other approved beneficial uses by physiographic province

Province	Entire area (0-30 ft from edge of pavement and 0-1.5 feet bgs)
Basin and Range	CFD
Blue Mountains	CFD
Owyhee Uplands	Non-residential construction fill
Cascade Range	Non-residential construction fill
Klamath Mountains	Non-residential construction fill
Portland Basin	Mine reclamation fill

Notes to Tables 1-5:

CFD = Make a clean fill determination using the most recently updated version of State of Oregon Department of Environmental Quality, *Internal Management Directive: Clean Fill Determinations*. For material requiring a CFD in the tables above, that is determined to not be clean fill, please contact the local DEQ materials management/solid waste specialist. This material is solid waste and may be disposed under a location-specific permit exemption, a solid waste letter authorization, or in a permitted landfill. The material also potentially may be reused under the authority of a separate Beneficial Use Determination.

Table 6: Conditions on use

Beneficial use	Conditions on use
All proposed uses	<ol style="list-style-type: none"> 1. Concentrations of hazardous substances must be below the higher of DEQ-approved human health occupational risk-based screening levels or naturally occurring background for contaminants of concern. 2. Material must not have any indications of contamination (e.g., staining, odor). 3. Material must not have been in proximity to (i.e. has the potential to have been contaminated by) known potential contaminant source areas (e.g., industrial facilities or service stations). 4. Material must be free of organic material (grass, roots, etc.) 5. At least every 5 years ODOT shall re-evaluate data collected during the previous 5-year period. This re-evaluation will be to confirm existing approved beneficial uses and assess if the data supports additional or modified beneficial uses are warranted. One year prior to the end of each 5-year period, ODOT shall submit a workplan for the next 5-year evaluation period for DEQ review and approval. 6. ODOT must ensure the material is covered during transport. 7. Material must be managed in accordance with ODOT’s Environmental Management System (EMS) Policy and Procedures Manual.
Non-residential construction fill. This is limited to the following uses: Commercial Agricultural Industrial Transportation	<ol style="list-style-type: none"> 1. Material must not be used on lots zoned residential. 2. Material must be managed in accordance with an Erosion and Sediment Control Plan and best management practices at all times. 3. Material must be managed to prevent windblown dust, runoff and erosion at all times. 4. The material may not be placed where it will be in contact with or adversely impact groundwater or surface water. 5. Material use must comply with all applicable federal, state, and local regulations.

Beneficial use	Conditions on use
Soil Banking	<ol style="list-style-type: none"> 6. Agricultural uses are limited to non-human food crops and in accordance with Oregon Department of Agriculture requirements. 7. Soil banking is limited to stockpiling on ODOT controlled property using ODOT BMPs established in the Environmental Management System (EMS) Policy and Procedures Manual.
Mine reclamation fill	<ol style="list-style-type: none"> 1. Material use must be in accordance with an approved DOGAMI mining permit and fill/reclamation plan and operating plan. 2. Each site must receive DOGAMI approval prior to placement. 3. The material should not be used in any wetland mitigation required as part of mine reclamation. 4. Material must not be stored or used near water or wetland areas in such a way that would allow discharge to groundwater or surface water. 5. Material must be stored and managed to prevent nuisance conditions or releases to the environment such as dust, runoff, objectionable odors and unsightliness. 6. Material use must comply with all applicable federal, state, and local regulations.

If you have any questions or concerns please contact Heather Kuoppamaki (DEQ project manager) by phone at (503) 229-5125, or email at kuoppamaki.heather@deq.state.or.us. DEQ appreciates your cooperation in protecting Oregon's environment.

Sincerely,



Lydia Emer
Land Quality Division Administrator

Enclosure: Beneficial Use of Solid Waste Determination Evaluation Report (updated July 1, 2019)

Cc: Heather Kuoppamaki, DEQ NWR, kuoppamaki.heather@deq.state.or.us
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