

Beneficial Use of Solid Waste Determination Evaluation Form

 <p style="margin: 0;">State of Oregon Department of Environmental Quality</p>	Applicant:		Oregon Dept. of Transportation		
	BUD#:		BUD-20150326-ODOT		
	Solid Waste:		Petroleum Contaminated Soil		
	Summary of Proposed Beneficial Use:				
	Construction fill for road base.				
	Reviewer:		Esch, David/Mason, Bill	Date:	3/26/2015
	Tier:		<input type="checkbox"/> One <input checked="" type="checkbox"/> Two <input type="checkbox"/> Three		

Beneficial Use of Solid Waste

Beneficial use of solid waste is a sustainability practice that may involve using an industrial waste in a manufacturing process to make another product or using a waste as a substitute for construction materials.

The environmental benefits of substituting industrial waste materials for virgin materials includes conserving energy, reducing the need to extract natural resources and reducing demand for disposal facilities.

Oregon Administrative Rules 340-093-0280 - 0290 establish standing beneficial uses and a process for DEQ review of case-specific beneficial use proposals. Under these rules, DEQ may issue a beneficial use determination as an alternative to a disposal permit for proposals that meet the rule criteria. If approved, once a beneficial use determination is issued, DEQ no longer regulates the waste as a solid waste as long as the waste is used in accordance with the approved beneficial use determination.

Beneficial Use Determination Evaluation Summary

- Yes, the Beneficial Use of this solid waste meets all the case-specific performance criteria listed below and is approved.
- No, the Beneficial Use of this solid waste does not meet all the case-specific performance criteria listed below and is not approved.

Summary: Oregon Dept. of Transportation provided a detailed and suitable characterization of the waste material to include pertinent analytical data. Used in accordance with the BUD approval conditions and currently acceptable construction techniques associated with the use of materials this beneficial use will replace, the environment as well as human health and safety will be adequately safeguarded. ODOT will provide appropriate use/management information to those receiving/using the material and will track the final uses/location/amounts of the material that is beneficially used. Demand for the material will be far greater than the supply; thus no speculative accumulation or errant uses are anticipated.

Beneficial Use of Solid Waste Determination Evaluation Form	Applicant:	Oregon Dept. of Transportation
	BUD #:	BUD-20150326-ODOT
	Solid Waste:	Petroleum Contaminated Soil
	Date:	3/26/2015

Case-Specific Beneficial Use Performance Criteria:

DEQ may approve an application for a case-specific beneficial use of solid waste only if all the following performance criteria are addressed: 1) Characterization of the Solid Waste; 2) Productive Beneficial Use of the Solid Waste; and, 3) The affect of the Proposed Beneficial Use on Public Health, Safety, Welfare and/or the Environment.

1) Characterization of the Solid Waste

Did the applicant characterize the solid waste and proposed beneficial use sufficiently to demonstrate compliance with the rules for case-specific beneficial use determinations (OAR 340-093-0280) by submitting required information for the appropriate tier? (See tier sections below for detailed characterization information.)

Yes No

Was the following information submitted for DEQ review and how adequate was it?

Tier 1 Applicable Not applicable

- Did the applicant provide an adequate description of the material proposed for beneficial use, the manner of generation and the estimated quantity to be used beneficially each year? Yes No

The material is petroleum contaminated soil currently located within the scope of the Hwy. 62 Corridor Solution Unit 2 Phase 1. The material will be placed a minimum of 3 feet above any high water and within the perimeter of the approach ramps. Once consolidated it is expected the volume of PCS will be approximately 14,150 cubic yards. Required fill to complete the project is expected to be approximately 75,000 – 85,000 cubic yards. The entirety of the PCS will be incorporated into the project. This is a one-time use.

- Did the applicant provide an adequate description of the proposed beneficial use and justify how the proposed use is beneficial? Yes No

Applicant proposes the following use: Fill for road base on approach ramps. Material will be sequestered under additional clean-fill materials and asphalt/concrete pavement.

- Did the applicant provide a sufficient comparison of the chemical and physical characteristics of the material proposed for beneficial use with the material it will replace? Yes No

Suitable demonstrations (analytical data) were provided for metal concentrations and petroleum concentrations in the waste material.

- Did the applicant successfully demonstrate compliance of the proposed beneficial use with the performance criteria in OAR 340-093-0280 based on knowledge of the process that generated the material, properties of the finished product or testing? Yes No

- If required, did the applicant provide any other DEQ required information to evaluate the proposal? Yes No

No other information was required.

Beneficial Use of Solid Waste Determination Evaluation Form	Applicant:	Oregon Dept. of Transportation
	BUD #:	BUD-20150326-ODOT
	Solid Waste:	Petroleum Contaminated Soil
	Date:	3/26/2015

Tier 2 Applicable Not applicable

- Did the applicant submit all the information required for a Tier 1 application? Yes No

- Did the applicant submit adequate sampling and analysis to make a determination of suitability for beneficial use? (Note: The analysis must provide chemical, physical and biological characterization of the material proposed for beneficial use and identify potential contaminants in the material or the end product, as applicable.) Yes No

Suitable demonstrations (analytical data) were provided for metal concentrations and petroleum concentrations in the waste material. There are no biological characteristics to evaluate.

- When applicable, did the applicant provide a risk screening comparing the concentration of hazardous substances in the material to existing, DEQ approved, risk-based screening level values and demonstrate compliance with acceptable risk levels? Yes No

- When applicable, did the applicant supply the location or type of land use where the material will be applied, consistent with the risk scenarios used to evaluate risk? Yes No

The proposed use is project-specific and location-specific. The PCS will be consolidated and sequestered beneath the interchange approach ramps, covered with additional clean-fill and paved over with asphalt and/or concrete.

- When applicable, did the applicant supply contact information of property owner(s) if this is a site-specific land application proposal, including name, address, phone number, e-mail, site address and site coordinates (latitude and longitude)? Yes No

The proposed use is fully contained within the state owned Hwy. 62 right-of-way.

- Did the applicant supply an adequate description of how the material will be managed to minimize potential adverse impacts to public health, safety, welfare, or the environment? Yes No

Material is to be hauled directly from point of origin to point of use. In the event PCS must be stockpiled, it will be placed on a minimum of 6-mil polyethylene sheeting with impermeable berms. Rainwater will not be allowed to enter the excavated PCS. Stored PCS will be suitably labeled with dates, material, contaminants, etc. ODOT will record the presence/existence of the PCS in the Environmental Project File (equivalent to a deed notice).

Tier 3 Applicable Not applicable

2) Productive Beneficial Use of the Solid Waste

Has the applicant demonstrated that the proposed beneficial use is a productive use of the material by providing information substantiating the criteria listed below? Yes No

- Did the applicant successfully identify or demonstrate a reasonably likely proposed beneficial use for the material that is not speculative? Yes No

Beneficial Use of Solid Waste Determination Evaluation Form	Applicant:	Oregon Dept. of Transportation
	BUD #:	BUD-20150326-ODOT
	Solid Waste:	Petroleum Contaminated Soil
	Date:	3/26/2015

This criterion consists of three parts.

1. Identified Use:

Has the applicant clearly stated what the waste is going to be used for, that the waste is compatible with that use and the proposed quantity is necessary?

Yes No

2. Reasonably Likely Use:

Has the applicant identified, with supporting documentation, the timeframe within which this use is likely to occur (e.g., zoning info, master plan for development, letters from local jurisdictions, etc)?

Yes No

3. Not Speculative:

For Land application - has this material been used at other sites for the same purpose, is the material feasible for use at this site for this purpose, or has the applicant identified a known potential for this use at this site?

Yes No N/A

For uses other than land application - has the material been used in a product before, is the material feasible for use in a product or has the applicant identified a known potential for use in this product?

Yes No N/A

- Is the use a valuable part of a manufacturing process, an effective substitute for a valuable raw material or commercial product, or otherwise authorized by the Department and does not constitute disposal?
 Yes No

- Is the use in accordance with applicable engineering standards, commercial standards and agricultural or horticultural practices?
 Yes No

3) Effect of Proposed Beneficial Use on Public Health, Safety, Welfare and/or the Environment

Has the applicant demonstrated the proposed beneficial use will **not** create an adverse impact to public health, safety, welfare or the environment, by providing information substantiating compliance with the criteria listed in the bullet list below?

Yes No

- Has the applicant demonstrated that the material is not a hazardous waste under ORS 466.00?
 Yes No

- Has the applicant demonstrated that until the time this material is used according to a beneficial use determination, the material will be managed, including any storage, transportation or processing, to prevent releases to the environment or nuisance conditions? Yes No

- Has the applicant demonstrated that hazardous substances in the material, if any, meet one of the criteria in the bulleted list below?
 Yes No

Beneficial Use of Solid Waste Determination Evaluation Form	Applicant:	Oregon Dept. of Transportation
	BUD #:	BUD-20150326-ODOT
	Solid Waste:	Petroleum Contaminated Soil
	Date:	3/26/2015

- Hazardous substances do not significantly exceed the concentration in a comparable raw material or commercial product;
- Hazardous substances do not exceed naturally occurring background concentrations; or
- Hazardous substances will not exceed acceptable risk levels, including persistence and potential bioaccumulation, when the material is managed according to a beneficial use determination.

- Has the applicant demonstrated that the proposed beneficial use will not result in the increase of a hazardous substance in a sensitive environment, such as a park, wildlife refuge or wetland?
 Yes No

- Has the applicant demonstrated that the proposed beneficial use will not create objectionable odors, dust, unsightliness, fire or other nuisance conditions? Yes No

- Has the applicant indicated that the proposed beneficial use will comply with any other applicable federal, state, and local regulations? Yes No

- Is public notice and participation being recommended for this application? Yes No