



Oregon

John A. Kitzhaber, Governor

Department of Environmental Quality

Northwest Region
2020 SW 4th Ave, Suite 400
Portland, OR 97201
(503) 229-5263
FAX (503) 229-6945
TTY 711

November 2, 2011

Mr. Bruce Schacht, Plant Engineer
Columbia Steel Casting Co.
P.O. Box 83095
Portland, OR 97283-0095

RE: Beneficial Use Determination Approval
BUD No. 20101208
Columbia Steel Casting Co., Steel Slag
Multnomah County

Dear Mr. Schacht:

The Department of Environmental Quality has reviewed Columbia Steel Casting Company's December 8, 2010 application for a solid waste beneficial use determination. Columbia Steel proposes to sell its electric arc furnace steel slag waste material to be beneficially used as a non-residential construction fill, utility trench fill or road-base material as a substitute for crushed natural rock from quarries, gravel pits, and river beds or as a substitute for crushed concrete.

DEQ has determined that Columbia Steel's beneficial use proposal meets the requirements for a Tier 2 case-specific Beneficial Use Determination (BUD) under the recently adopted Oregon Administrative Rules (OAR) 340-093-0260 through 0290. DEQ's determination is based on a review of whether Columbia Steel's proposed beneficial uses of slag meet the case-specific beneficial use performance criteria outlined in OAR 340-093-0280. Details of our review are provided in the attached Beneficial Use of Solid Waste Determination Evaluation Form.

This BUD approval is limited to the materials, approved uses, and conditions specified in this letter and in the table below. The conditions of this BUD approval are intended to prevent adverse impacts to public health, safety, welfare or the environment from the use of your steel slag waste.

Columbia Steel may sell electric arc furnace steel slag to customers for the uses identified below:

Solid Waste	Case-Specific Beneficial Use	Conditions of Use
Columbia Steel Casting Company steel slag	Non-residential construction fill, utility trench fill or road base	<ol style="list-style-type: none">1. Except for manganese, the steel slag must not contain concentrations of hazardous substances above DEQ approved human health occupational risk-based screening levels or naturally occurring background, whichever is higher. To address concerns about manganese concentrations, Columbia Steel must ensure that the steel slag to be sold meets conditions #2 through #9.2. The steel slag must be screened with sieves no smaller than 250 micrometers, the size of a US standard No. 60 sieve mesh, so that the finest particle fraction is removed from slag available for sale.3. The steel slag may be used only for non-residential construction fill, utility trench fill or road base that will not come into contact with or adversely impact groundwater or

		<p>surface water..</p> <ol style="list-style-type: none"> 4. The steel slag must not be stored or used in drainage applications or near water or wetland areas and must not be stored or used in ways that would allow discharge to groundwater, surface water, or wetland areas. 5. After being beneficially used, the steel slag must be covered by asphalt, concrete, clean fill or equivalently covered to minimize exposure to human and ecological receptors, such as cover with three inches of asphalt or concrete or six inches of clean soil, rock or sand or similar materials. 6. Columbia Steel must notify prospective users of the conditions of use. 7. In accordance with OAR 340-093-0280(3)(b), until the time the material is used under the BUD conditions specified, Columbia Steel and any person that receives the steel slag must store and manage the material to prevent releases to the environment or nuisance conditions. 8. Every year, Columbia Steel must submit a report to DEQ identifying the volume sold, to whom, and for what purpose (as stated by the purchaser). Per OAR 340-097-0120(2)(f), Columbia Steel must include the \$250 reviewing fee with the annual report. 9. Columbia Steel must keep records of sales containing the information in #8 above for five years.
--	--	--

Columbia Steel may demonstrate that the purchaser will meet the conditions that apply to use (conditions 3 through 7) by having the purchaser sign an agreement that they have been informed of the requirements to manage the slag according to these conditions.

If Columbia Steel has not sold 500 tons of spent steel slag for beneficial use under the conditions of this BUD approval within two construction seasons (approximately 24 months) from the date of approval, DEQ may re-evaluate this approval and may withdraw this approval and require Columbia Steel to manage the steel slag in a different manner or dispose of the steel slag at a permitted solid waste disposal site.

If you have any questions about this BUD, please call me at 503-229-5072 or Bill Mason at 541-687-7427.

Sincerely,



Audrey O'Brien, Manager
Northwest Region Environmental Partnerships

encl: Beneficial Use of Solid Waste Determination Evaluation Form
ec: Bill Mason, DEQ-Eugene, mason.bill@deq.state.or.us
Dan Hafley, DEQ NWR Cleanup Program, hafley.dan@deq.state.or.us