



# Oregon DEQ's Rules for the Beneficial Use of Solid Waste

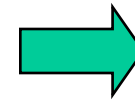
TRB: Waste Management and Resource  
Efficiency Workshop

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Tom Roick, Senior Policy Analyst  
Oregon Department of Environmental Quality



# Topics

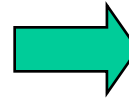


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- What is the beneficial use of solid waste?
- Parts of the new rules
- Where the rules don't apply e.g., “clean fill”



# Topics cont.



- Examples of how this will work
- Where to get more information



# Beneficial use of solid waste means...

Oregon Administrative Rules (OAR) 340-093-0030(12)

....the **productive use** of solid waste in a manner that **will not create an adverse impact** to public health, safety, welfare, or the environment.

- Solid Waste
- Productive use
- Will not create an adverse impact



# Beneficial use examples

- **Spent foundry sand** from the steel industry used as a substitute for virgin sand in making concrete
- **Dredged sediments** used for fill material on upland construction projects
- **Asphalt roofing shingles** used as a binder in asphalt mixtures
- **Asphalt pavement or grindings** used as aggregate in new pavement or as compacted fill within a road prism



# What the rules cover:

Rules adopted May 2010

1. Define beneficial use of solid waste  
(OAR 340-093-0030)
2. Scope and applicability of the rules  
(OAR 340-093-0260)
3. Identify “standing” beneficial use determinations  
(OAR 340-093-0270)
4. Identify performance criteria for evaluating case-specific applications  
(OAR 340-093-0280)



# What the rules cover cont.

5. Create three tiers for evaluation depending upon the potential environmental impact or amount of information needed  
(OAR 340-093-0290)
  
6. Establish fees  
(OAR 340-097-0120(2)(f))



# What is not covered by the beneficial use rules

OAR 340-093-0260

Materials addressed under existing rules such as:

- Source separated recyclables under the Opportunity to Recycle law
- Feedstocks for composting
- Permitted activities (e.g., landfill daily cover)
- Hazardous Waste
- “Clean fill”



# “Clean fill” means...

OAR 340-093-0030

...material consisting of soil, rock, concrete, brick building block, tile or asphalt paving, which do not contain contaminants which could adversely impact the waters of the State or public health.

DEQ is developing risk-based screening criteria for determining acceptable contaminant levels.

“Clean fill” is a solid waste, but clean fill disposal sites are exempt from solid waste permitting and if so, a beneficial use determination would not be necessary.



# Beneficial use - solid waste definitions

OAR 340-093-0030

- “Beneficial use”
- “Beneficial use determination” (BUD)
- “Acceptable risk level”
- “Sensitive environments”



# Scope of beneficial use rules

OAR 340-093-0260 (3)

A solid waste managed according to a beneficial use determination **is not regulated as solid waste.**

Note - if you are applying the beneficial use rules it's important to understand that the material is still solid waste, but when a BUD is granted, DEQ agrees to not regulate the material as solid waste as long as the BUD conditions are met.



# Standing Beneficial Use Determinations

OAR 340-093-0270

Criteria for, and tabulated list of, rule-authorized standing beneficial use determinations, such as:

<b><u>Material</u></b>	<b><u>Beneficial Use</u></b>	<b><u>Conditions on Use</u></b>
(a) Asphalt pavement or asphalt grindings from road projects	As asphalt and aggregate in new asphalt pavement or as fill within road prisms	Asphalt grindings must be compacted when used within road prisms



# 12 Standing BUDs

OAR 340-093-0270 (5)

- a) Asphalt pavement or grindings
- b) Asphalt shingle waste
- c) Dredged sediment
- d) Dredged sediment
- e) Foundry sand
- f) Foundry sand
- g) Soil from cleanup sites
- h) Soil from petroleum cleanup sites
- i) Steel slag
- j) Street sweeping fines
- k) Street sweeping sand from winter applications
- l) Wood-derived bottom ash from boilers



# How this will work

## Standing BUDs

e.g., Asphalt paving or grindings used for new asphalt or as fill within road prisms:

- Generator may apply an identified Standing Beneficial Use Determination
- No additional DEQ review or approval, no fees
- Generator/applicant must maintain records
- If requested by DEQ, generator/applicant must provide information to confirm that their beneficial use complies with the rules



# Case-specific beneficial use performance criteria

OAR 340-093-0280

Criteria for DEQ approval of BUDs:

(1) Must Characterize the waste -

Sufficiently to demonstrate compliance with the rules

(2) The use is productive –

- An identified or reasonably likely use for the material;
- The use is a valuable part of a manufacturing process or substitute for a raw material, not disposal;
- The use is within applicable engineering or commercial standards.



# Case-specific beneficial use performance criteria cont.

OAR 340-093-0280

- (3) The use will not create an adverse impact to public health, safety, welfare, or the environment –
- Not a hazardous waste;
  - Stored and managed as a solid waste before use;
  - Hazardous substances in the material do not exceed:
    - (i) concentrations in a comparable raw material or product,
    - (ii) natural background concentrations, or
    - (iii) acceptable risk levels;
  - No increase in hazardous substances to sensitive environments;
  - No objectionable odors, dust, fire, etc.



# Case-specific DEQ review of beneficial use applications

OAR 340-093-0290

**Tier One**...use of a material that does not contain hazardous substances significantly exceeding the concentration in a comparable raw material or commercial product and will be used in a manufactured product

**Tier Two**...use of a material that contains hazardous substances significantly exceeding the concentration in a comparable raw material or commercial product, or involves application on the land

**Tier Three**...use of a material that requires research, such as a literature review or risk assessment, or for a demonstration project to demonstrate compliance with this rule



# How this will work

## Case-Specific BUD applications

Example: a company wishes to sell wood boiler ash as a construction fill material or roadbase

- Generator/applicant applies to DEQ for a Beneficial Use Determination and pays a fee
- DEQ reviews:
  - Has the applicant adequately characterized the waste and evaluated the potential risks and exposure routes?
  - Does DEQ agree with the requested tier review?
  - Is the proposed use productive?
  - Does the proposed use meet hazardous substance criteria?
  - What type of public input may be needed to inform the public of the requested use?



# How this will work cont.

## Case-Specific BUD applications

- DEQ identifies specific conditions under which the proposed use will meet environmental and human health criteria
- DEQ will undertake a public comment process, if needed and may adjust the BUD based on public comment
- DEQ issues the BUD
- The applicant must meet specific conditions of the BUD including proper management of the waste until it is beneficially used, and keep records and report as required, etc.



# Fees

## OAR 340-097-0270 (2)

- (A) The review of an annual or other report required under a beneficial use determination: \$250;
- (B) A Tier One beneficial use determination: \$1,000;
- (C) A Tier Two beneficial use determination: \$2,000;
- (D) A Tier Three beneficial use determination: \$5,000;
- (E) Annual extension to a demonstration project authorization: \$1,000.



# When do I need a BUD?

## Take home message - some guidelines

- If it is Solid Waste (e.g., asphalt grindings)
- That will be used productively
- Material has been subject to DEQ oversight because there are environmental concerns with reuse (e.g., street sweepings)
- When a Solid Waste Letter Authorization for disposal is not appropriate
- Not addressed in other Solid Waste rules (e.g., not concrete that is “clean fill”)
- Look for a Standing BUD first



# DEQ's beneficial use web site

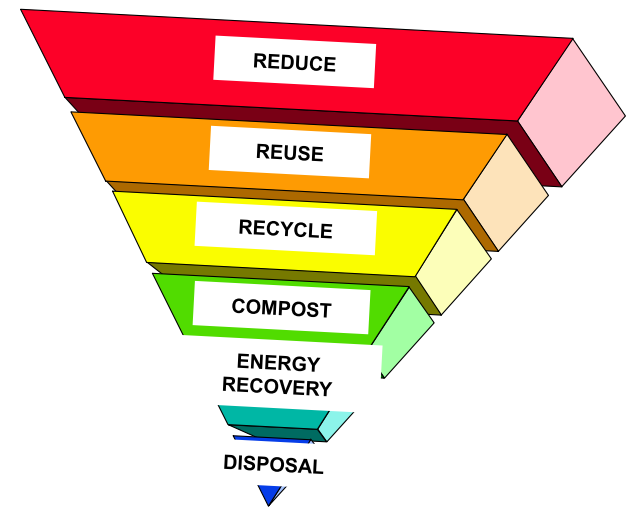
<http://www.deq.state.or.us/lq/sw/disposal/beneficialuse.htm>

- The rules
- Sign up on list serve to receive notices
- Fact sheets, application forms
- Guidance
- Beneficial Use Determinations



# Questions?

DEQ Solid Waste staff



- Eastern Region, Bruce Lumper, 541-298-7255 x240
  - Western Region, Bob Barrows, 541-687-7354
  - Northwest Region, Audrey O'Brien, 503-229-5072
- Tom Roick, Land Quality Division, 503-229-5502