

CertainTeed Corporation
1200 Avenue G
White City, OR 97503

July 19, 2013

Western Region
DEQ Solid Waste Programs
750 N Front St. NE Suite 120
Portland, OR 97301

*CertainTeed BUD
Jackson Co.
proj 6454*

Please find enclosed a Solid Waste Beneficial Use Application. As instructed in the application procedure, I have been working with David Esch of the local DEQ office to determine which tier is applicable to this application and for assistance in completing the form. He has been very responsive and extremely helpful in answering questions and pointing me to available resources.

Please let me know if any further information is needed.

Sincerely,



Dan Beck
Engineering Manager &
EHS Coordinator

ENCLOSURES:

APPLICATION (2 COPIES), CHECK

RECEIVED

JUL 23 2013

DEQ-SALEM OFFICE



State of Oregon
Department of
Environmental
Quality

Application for a
**Solid Waste
Beneficial Use
Determination**

proj 6454

DEQ USE ONLY - BUSINESS OFFICE

Date Received: _____

Amount Received: _____

Check No.: _____

Deposit No.: _____

Forward confirmation of fee payment for:
Eastern Region to DEQ, The Dalles
Northwestern Region to DEQ-NWR, Portland
Western Region to DEQ, Salem

A. REFERENCE INFORMATION (Please type or print clearly.)

CertainTeed Corporation		Business name of applicant if different	
Legal name of applicant		Business name of applicant if different	
1200 Avenue G		White City	OR 97503
Mailing address		City	State Zip
541 830-2106	541 210-0177	dan.t.beck@saint-gobain.com	812 645-4748
Phone	Mobile	E-mail	Fax

Same as applicant			
Generator of solid waste (may be same as applicant)			
Mailing address		City	State Zip
Phone	Mobile	E-mail	Fax

B. TYPE OF BENEFICIAL USE DETERMINATION REQUESTED Beneficial Use Determination applications are categorized based on the type of information and potential amount of work required by DEQ staff to review application materials and render a decision. A tiered review and fee system has been established in rule. The tiers are:

- Tier 1 For a beneficial use of a solid waste that does not contain hazardous substances significantly exceeding the concentration in a comparable raw material or commercial product and that will be used in a manufactured product;
- Tier 2 For a beneficial use of a solid waste that contains hazardous substances significantly exceeding the concentration in a comparable raw material or commercial product, or involves application on the land;
- Tier 3 For a beneficial use of a solid waste that requires research, such as a literature review or risk assessment, or for a demonstration project to demonstrate compliance with this rule.

I am applying for a Tier 1 Tier 2 Tier 3 determination.

C. DOES THIS PROPOSED BENEFICIAL USE INVOLVE LAND APPLICATION OF ANY MATERIAL?

Yes No

D. SIGNATURE I hereby certify by my signature below that the information contained in this application, and the documents I have attached, are true and correct to the best of my knowledge and belief.

Clifford Richmond
Signature of legally authorized representative

Clifford (JR) Richmond Plant Manager
Print name Title

7-18-13
Date

RECEIVED
JUL 23 2013
DEQ-SALEM OFFICE

E. REQUIRED ATTACHMENTS TO THIS APPLICATION *(For an application to be complete, it must provide the required information for each listed item of the tier which is being applied for.)*

Tier 1

- A description of the material, manner of generation, and estimated quantity to be used each year;
- A description of the proposed use;
- A comparison of the chemical and physical characteristics of the material proposed for use with the material it will replace;
- A demonstration of compliance 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; and
- Any other information that DEQ may require to evaluate the proposal.

Tier 2

- The information required for a Tier 1 application;
- Sampling and analysis that provides chemical, physical, and biological characterization of the material and that identifies potential contaminants in the material or the end product, as applicable;
- A risk screening comparing the concentration of hazardous substances in the material to existing, DEQ approved, risk-based screening level values, and demonstrating compliance with acceptable risk levels;
- Location or type of land use where the material will be applied, consistent with the risk scenarios used to evaluate risk;
- 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); and
- A description of how the material will be managed to minimize potential adverse impacts to public health, safety, welfare, or the environment.

Tier 3

- The information required for a Tier 1 & 2 application;
- A discussion of the justification for the proposal;
- An estimate of the expected length of time that would be required to complete the project, if it is a demonstration; and
- If it is a demonstration project, the methods proposed to ensure safe and proper management of the material.

F. PERFORMANCE CRITERIA *(For all tiers - An application for a beneficial use determination must demonstrate satisfactory compliance with the following performance criteria.)*

The use is productive, including:

- ◆ There is an identified or reasonably likely use for the material that is not speculative;
- ◆ The use is a valuable part of a manufacturing process, an effective substitute for a valuable raw material or commercial product, or otherwise authorized by DEQ, and does not constitute disposal; and
- ◆ The use is in accordance with applicable engineering standards, commercial standards, and agricultural or horticultural practices.

The use will not create an adverse impact to public health, safety, welfare, or the environment, including:

- ◆ The material is not a hazardous waste under ORS 466.005;
- ◆ Until the time the material is used in accordance with a beneficial use determination, the material will be managed, including any storage, transportation, or processing, to prevent releases to the environment or nuisance conditions;
- ◆ Hazardous substances in the material do not significantly exceed the concentration in a comparable raw material or commercial product, or do not exceed naturally occurring background concentrations, or do not exceed acceptable risk levels, including evaluation of persistence and potential bioaccumulation, when the material is managed according to a beneficial use determination.

The use will not result in the increase of a hazardous substance in a sensitive environment.

The use will not create objectionable odors, dust, unsightliness, fire, or other nuisance conditions.

The use will comply with all applicable federal, state, and local regulations.

G. FEES (Must accompany the application for it to be considered complete)

<input type="checkbox"/>	Tier 1 beneficial use determination	\$1,000
<input checked="" type="checkbox"/>	Tier 2 beneficial use determination	\$2,000
<input type="checkbox"/>	Tier 3 beneficial use determination	\$5,000

Make checks out to: **Oregon DEQ**

Total fees included: \$2,000

H. APPLICATION PROCEDURE

Step 1

Contact a DEQ staff person for assistance with the preparation of the application. DEQ staff will help with: 1) Determination of the eligibility for a beneficial use determination of a particular waste or process; and, 2) If eligible, establish the tier of beneficial use determination review required and associated fee to submit with the application.

Step 2

Mail the original signed application, all attachments, including the fee payment plus one extra copy to the appropriate regional office (see listing below.) Note that DEQ review work will not begin until a complete application packet is received. Incomplete applications may be returned. DEQ recommends the applicant keep a full copy of all application materials to guard against possible loss in transit.

Step 3

DEQ will contact the applicant, acknowledging receipt of the application, and will identify the staff person assigned to carryout the review. This staff person will contact the applicant if any additional information is needed.

Region	Counties Served	Address & Phone
Eastern Region	Baker, Crook, Deschutes, Gilliam, Grant, Harney, Hood River, Jefferson, Klamath, Lake, Malheur, Morrow, Sherman, Umatilla, Union, Wallowa, Wasco, and Wheeler	Eastern Region Department of Environmental Quality 400 E Scenic Drive, Ste 2.307 The Dalles, OR 97058 (541) 298-7255 ext. 221
Northwest Region	Clatsop, Clackamas, Columbia, Multnomah, Tillamook, and Washington	Northwest Region DEQ Solid Waste Programs 2020 SW Fourth Ave. Ste 400 Portland, OR 97201 (503) 229-5353
Western Region	Benton, Coos, Curry, Douglas, Jackson, Josephine, Lane, Lincoln, Linn, Marion, Polk, and Yamhill	Western Region DEQ Solid Waste Programs 750 Front St. NE Suite 120 Salem, OR 97301 (503) 378-5047

Tier 1

- A description of the material, manner of generation, and estimated quantity to be used each year;

Unused manufacturing waste concrete siding and tile backer material composed of sand (silica) 20% to 30%, Portland cement 25% to 40%, coal derived fly ash 30% to 40%. Included is unprimed / primed, primed & painted, air cured and autoclave cured materials. The material is cured fiber cement product that fails to meet product specifications in various ways, including: physical characteristics, damage in process, dimensional specs, aesthetic flaws, etc. Also included are discontinued or past date materials that are scrapped.

Maximum annual production of this material is estimated to be 6,000 tons.

- A description of the proposed use;

Materials to be beneficially used as construction fill, utility trench fill or road base material. Some of the material will be mixed with recycled concrete and ground before use.

- A comparison of the chemical and physical characteristics of the material proposed for use with the material it will replace;

This material has been recognized as a functional and cost effective substitute for crushed natural rock and is physically similar to crushed recycled concrete. The raw materials used in manufacturing this product are all common to concrete typically used in construction, with the addition of cellulose fiber for reinforcement.

Chemical properties are similar to concrete. The attached lab analysis shows that trace amounts of elements of concern are similar to levels measured in soils found throughout Oregon (based on USGS professional paper 1270). Lab analysis further indicates that harmful leachate is negligible.

- A demonstration of compliance 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; and

This material is not a hazardous waste under ORS 466.005.

Established storage and handling practices, i.e. outdoor storage piles contained on site where access can be controlled, are sufficient to prevent harmful releases to the environment.

Transportation, delivery, and application at the point of use can be safely accomplished using the same equipment and methods that are common to the comparable natural quarry materials and recycled concrete.

Potentially hazardous substances in this material have been the subject of laboratory analysis (discussed below).

The proposed uses will not result in the increase of a hazardous substance in a sensitive environment. The proposed uses will not include placement in waterways, wetlands, or other sensitive environments.

The proposed uses will not create odors, dust, unsightliness, fire hazards, or other nuisance conditions.

The proposed uses will comply with applicable federal, state, and local regulations, as well as standard practices in the construction industry. In many cases, the uses will be subject to inspection as part of a building permit.

- Any other information that DEQ may require to evaluate the proposal.

Tier 2

- The information required for a Tier 1 application;
- Sampling and analysis that provides chemical, physical, and biological characterization of the material and that identifies potential contaminants in the material or the end product, as applicable;

Laboratory analyses have been performed and reports are attached. Chemical properties are similar to typical concrete. The attached lab analysis shows that trace amounts of elements of concern are similar to levels in the typical crushed natural stone or crushed recycled concrete. Lab analysis further indicates that harmful leachate is negligible.

- A risk screening comparing the concentration of hazardous substances in the material to existing, DEQ approved, risk-based screening level values, and demonstrating compliance with acceptable risk levels;

Raw materials used are consistent with materials used in production of Portland cement and concrete for general construction, with the addition of cellulose fiber for reinforcement.

- Location or type of land use where the material will be applied, consistent with the risk scenarios used to evaluate risk;

The materials will be used in applications consistent with current uses of recycled concrete products

- 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); and

This is not a site specific proposed use.

- A description of how the material will be managed to minimize potential adverse impacts to public health, safety, welfare, or the environment.

Established storage and handling practices, i.e. outdoor storage piles contained on site where access can be controlled, in place at the CertainTeed plant site are sufficient to prevent harmful releases to the environment.

Transportation, delivery, and application at the point of use can be safely accomplished using the same equipment and methods that are common to the comparable natural quarry materials and recycled concrete. Once in place at the construction site, the material will be covered with asphalt, concrete, soil, natural rock or sand, or similar materials to minimize exposure to ecological receptors.

Attached lab analyses:

The attached analytical report includes analyses of three raw materials samples in addition to finished product samples from the White City plant. The report originally included analyses of the same materials for two additional plants (in North Carolina and Indiana) - these non-applicable analyses have been removed for clarification. Analyses are identified with the prefix "WC-" and suffixes; FP1 for finished product, FA1 for fly ash, S1 for silica, and C1 for Portland cement.