



## **Rhode Island Department of Environmental Management Office of Waste Management**

### **Guidelines on Beneficial Use Determinations (“BUDs”) for Source Segregated Solid Waste**

#### **1.0 Purpose**

In an effort to promote the recycling of appropriate solid wastes, the Rhode Island Department of Environmental Management (DEM) Office of Waste Management has developed this policy to establish guidelines for evaluating whether specific source segregated solid waste materials<sup>1</sup> which are not already defined as “recyclable material”<sup>2</sup> may be recycled. The beneficial reuse and recycling of source segregated solid wastes, where appropriate, prevents the unnecessary waste and depletion of the natural resources of the State and preserves the limited and finite capacity of the State’s solid waste landfills. The Rhode Island General Assembly has recognized that an environmentally acceptable and economically sound solid waste management system must incorporate recycling in addition to source reduction and disposal. The General Assembly has also established specific goals for the percentage of solid waste generated in the State that should be recycled.

The process by which the DEM will review a request to recycle a specific source segregated solid waste not already defined as “recyclable material” is referred to as a Beneficial Use Determination (BUD). In order to determine if the proposed reuse of a source-segregated solid waste should be permitted, the Director will consider environmental benefits and impacts, new technologies, economic conditions, waste stream characteristics, etc. The Director must determine that the proposed use of solid waste is beneficial and will not harm public health or the environment.

Requests for BUD’s shall typically be considered for the facilities that propose to accept certain wastes for reuse and recycling (i.e. creation of a saleable product). The source of that waste stream will be examined as part of the review. BUDs may also be requested by entities that generate the waste that is proposed to be reused, provided they are also the facility that will recycle the waste and make it directly available for beneficial reuse. If sufficient documentation is provided to support the recycling and reuse of a particular solid waste material industry wide, the DEM may consider a conditional declassification of the material. However, the Department

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<sup>1</sup> The term “source-segregated” refers to the separation of the proposed “useful” materials from waste stream at the point of generation.

<sup>2</sup> “Recyclable materials” refers to the recyclable components of solid waste that are specifically defined in the *Rules and Regulations for Reduction and Recycling of Municipal Solid Waste*, March 1997, and the *Rules and Regulations for Reduction and Recycling of Commercial and Non-Municipal Residential Solid Waste*, September 1996.)



reserves its right to limit approvals to only the generators of the material or the facilities processing the material, and/or to licensed or registered solid waste management facilities.

BUD reviews will be conducted by the DEM Office of Waste Management on a case-by-case basis. If approved, the proposed reuse of solid wastes will be permitted for an initial period of one (1) year and may be renewed for a period of three (3) years, unless otherwise stated in the approval or in separate correspondence from the Department. The approval may limit use of the material to a specific location or to a specific application of the material, or both.

## 2.0 Authority

The authority for this policy is provided by Rhode Island General Laws Chapter 23-18.9, entitled “Refuse Disposal,” the *Rules and Regulations for Composting Facilities and Solid Waste Management Facilities*, January 1997, (Solid Waste Regulations), the *Rules and Regulations for Reduction and Recycling of Municipal Solid Waste*, March 1997, and the *Rules and Regulations for Reduction and Recycling of Commercial and Non-Municipal Residential Solid Waste*, September 1996 (Recycling Regulations). The Solid Waste Regulations are intended to minimize the environmental hazards associated with the management of solid waste. The primary function of these regulations is to ensure the proper operation and construction of solid waste management systems. The Recycling Regulations establish requirements for the reduction and recycling of municipal and commercial solid waste and establish the list of materials which must be recycled.

To allow the reuse and recycling of solid waste materials not listed in the Recycling Regulations, the Director may grant a variance from the provisions of the Solid Waste Regulations. This policy shall establish guidelines for the information and data which must be provided to the Director in an application for such a variance from the Solid Waste Regulations.

## 3.0 Guidelines for Variance Application

All BUD requests shall be submitted to DEM as part of an application for a variance from the Solid Waste Regulations. Before filing a variance application containing a BUD request, DEM recommends that the applicant meet with DEM to discuss each specific proposal for the beneficial reuse and recycling of solid waste. To streamline the review process, DEM strongly recommends that the applicant prepare a material characterization plan for DEM’s review and comment prior to performing any sampling and analysis. All variance applications requesting a BUD shall, at minimum, address the following considerations: factors list of information constitutes the minimum requirements for the DEM to evaluate a variance application:<sup>3</sup>

1. How will any environmental hazards associated with the proposed recycling of solid waste will be minimized or eliminated?

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<sup>3</sup> To expedite the review, the variance application should be formatted such that a response is provided for each of the specified considerations. If a particular requirement is not applicable, this should be stated with a supporting explanation.



2. To what degree will the recycled solid waste material be analogous to commonly used raw materials and how will the use of this material result in a viable and beneficial substitution of a discarded material for a commercial product or raw material?
3. How will the proposed recycling and reuse of the solid waste in question protect the natural resources of the State? In addition to discussing how and to what extent the reuse of the solid waste in question will conserve the limited and finite capacity of the State's solid waste landfills, your response must also address why the proposed use of the recycled solid waste will not present a threat to public health or the State's groundwater, surface water, air, or other environmental resources.
4. To what extent is there a guaranteed end market for the recycled solid waste material to be produced?
5. Why will the proposed recycling and reuse of solid waste not degrade the environment.
6. Identify and discuss the controls (e.g. environmental, engineering, institutional ... etc.) that will be used to properly and safely recycle and reuse the solid waste. This discussion should include, but not be limited to, information regarding the following:
  - a. The quantity of solid waste material to be received and recycled, and the maximum quantity of solid waste material to be stored at the site at any one time;
  - b. The maximum quantity of solid waste material to be stored at the site at any one time;
  - c. The source of the solid waste, including the name and address of the generator;
  - d. A detailed narrative and schematic diagram of the production, manufacturing, and/or residue process by which the waste material is produced;
  - e. The expected consistency of the waste material;
  - f. How the generator has minimized the quantity and toxicity of the waste material;
  - g. Adequate and regular inspection of the waste material upon receipt;



- h. Adequate site controls relating to the storage, handling and processing of the waste material, including the extent to which the recycled solid waste material will be handled to minimize loss;
  - i. Adequate controls for handling and disposing of any residual solid wastes, including the location of final disposal for any residual solid wastes;
  - j. Appropriate odor, sediment, stormwater (runoff), and erosion control measures, etc.
7. Explain why the proposed recycling of solid waste is not simply an alternate method of disposal. The Director may require information regarding the estimated value of the solid waste material both before and after it is recycled.
8. What degree of processing has the solid waste material undergone and degree of further processing is required, if any? The applicant must demonstrate that any mixing of different types of material improves the usefulness of the recycled solid waste material.
9. Where the project in question includes the reuse of any soil impacted by known or suspected contamination, or the use of any recycled solid waste as a “manufactured soil product” (i.e.: solid waste that is or has been altered or rendered into a material with soil type properties), the applicant must demonstrate the use of these materials at the location in question:
  - a. Is compliant with the Residential Direct Exposure Criteria for soils listed in Rule 8.02 of the *Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases*;
  - b. Is compliant with the Compost Quality and Distribution Standards listed in Rule 8.8.00 (Compost Product Requirements and Distribution) of the Solid Waste Regulations.; and
  - c. Will not result in degradation of the environment.
10. Whenever the proposed end use for a recycled product involves land application, the applicant shall address the need for applicable engineering standards and controls in accordance with the Solid Waste Regulations(e.g. final cover systems, leachate collection and removal systems, and gas control and recovery systems) to provide for the safe land application end use of BUD materials. End uses involving land application shall be presumed to be low utility uses subject to heightened scrutiny as to whether the use constitutes beneficial reuse or is simply an alternative means of disposal.
11. Provide a characterization plan that includes protocols for sample collection and analyses designed to provide a representative characterization of the waste material. The characterization plan shall address:



- a. How the samples will be collected (i.e. locations, times, frequency per volume etc.).
  - b. The types of samples to be collected (i.e., discrete, grab, composite, etc.).
  - c. How substances in the solid waste will be identified.
  - d. The physical and chemical analyses to be performed (i.e. size, density, percent solids, liquid content, pH, reactivity, leachability [TCLP test], etc.).
  - e. Analysis for biological properties of the waste (i.e. pathogens).
  - f. The variability of the substances present in the solid waste.
  - g. The number of samples required (grab and/or composite) to be collected and analyzed in order to adequately determine the physical, chemical, and biological properties of the waste.
  - h. The human health and ecological risks associated with the proposed reuse of the solid waste in the proposed manner and location.
  - i. Verification that the sampling and analytical methods used have identified all constituents present in the waste, and a detailed written report describing the concentration and distribution of all substances which may be contained in the waste material.
12. Any person involved in the storage, handling, processing or use of solid waste for beneficial reuse shall be required to provide financial assurance that:
- a. The project approved in the BUD will be completed; and/or
  - b. Any unused solid waste/beneficial reuse material will be properly removed and disposed of upon completion of the project or if project operations cease for any reason.
13. Additional information, as required, at the discretion of the Department.
14. Certify that the applicant, the facility(ies) where the solid waste is processed for reuse and the facility(ies) where the processed material is to be used are not the subject of any actual or potential statutory or regulatory environmental violations (state or federal), or, if actual or potential violations exist, that the processing of the waste or its use are part of a final settlement or remedy approved by DEM.



#### 4.0 Review of Variance Application

Upon receipt of the variance application, the DEM Office of Waste Management will review the submitted application materials for completeness. Once the application is deemed complete, the actual review of the variance application will begin. The Office of Waste Management will make every effort to expedite this review process, however the review process may take approximately 3 months to 1 year to complete dependent upon staff resources and other program commitments. The length of the review period will also be dependent upon the complexity of the technical, environmental and economic issues regarding the variance application. All applicants that propose the use of more than three (3) cubic yards of solid waste in one location shall also forward a copy of their application to the municipality where the beneficial use material will be used.

Prior to rendering its' final decision on any application, the Department shall require the applicant to post public notice in a newspaper of general circulation regarding the proposed BUD and to hold a public hearing, in the municipality where the beneficial use material is stored, handled, and/or processed, to allow public participation. The applicant shall also provide such public notice to the manager or mayor and council of the municipality in question. The applicant may also be required to provide additional notification to abutters of the applicant's property, as appropriate. All costs incurred via these requirements shall be the responsibility of the applicant.

If granted, the variance approval will expire one (1) year from the date of issue unless otherwise stated in the approval or unless renewed by the Director in writing. The applicant must request renewal of the variance in writing at least sixty (60) days prior to the expiration of the variance approval.

#### 5.0 Denial, Suspension, or Revocation of Variance Approval

In submitting an application in accordance with this policy, the applicant acknowledges the Director's right, after proper notice, to deny, suspend, or revoke a variance approval.

The approval of a request for a BUD shall be at the discretion of the Director. The Director expressly reserves the right to refuse to issue or renew any request for a BUD or revoke any existing BUD where the applicant, the processing facility, the facility where the material is proposed for use or the owner(s) or operator(s) of those facilities have any existing violations of the rules and regulations established by the DEM relating to the storage, handling, transportation or disposal of solid wastes or hazardous materials.

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Leo Hellested, Chief  
Office of Waste Management

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Date