

SOLID WASTE BENEFICIAL USE DETERMINATION (BUD)

CONDITIONS FOR REUSE OF DRINKING WATER RESIDUALS RICHMOND SAND AND GRAVEL, INC. SEPTEMBER 2002

Drinking water residuals are regulated as a solid waste in Rhode Island (unless analytical results demonstrate them to be a hazardous waste.) Richmond Sand and Gravel, Inc. (RS&G) has submitted for approval a beneficial use determination request for the conditional reuse of drinking water residuals at its facility on Stilson Road in Richmond, Rhode Island. Based upon the representations made in the application, the Department hereby grants approval for the reuse of these wastes at the facility under the following conditions:

1. Drinking water residuals shall mean the sludge produced at a drinking water processing plant when an aluminum sulfate salt or ferrous salt is added to the drinking water for the purpose of removing color and turbidity.
2. Drinking water residuals must be received, handled, and processed in accordance with this approval and in accordance with the operating plan submitted by RS&G, dated July 23, 2002, including the site plan (Drawing Number CE136D, dated February 1, 2002), which is incorporated herein.
3. Drinking water residuals must be reused/recycled in accordance with this approval.
4. The required frequency of the QA/QC sampling and testing and the required information and testing parameters for all sources of drinking water residuals, as specified in the July 23, 2002 operating plan, may be modified as required by the Department.
5. Prior to reuse, the blended mixtures of drinking water residuals and virgin soil, as provided in the July 23, 2002 operating plan, shall meet the following criteria:
 - a. The Residential Direct Exposure Criteria for soils listed in Rule 8.02 of the *Rules and Regulations for Investigation and Remediation of Hazardous Material Releases, and*
 - b. The Class "A" Compost Quality Standards listed in Rule 8.8.00 of the *Rules and Regulations for Composting Facilities and Solid Waste Management Facilities.*
 - c. Where a particular parameter has both a Direct Exposure Criterion and a Compost Quality Standard, the lower standard shall govern.The Department reserves all rights to review and modify the above criteria based upon future information and experience.
6. The drinking water residuals must be blended with virgin (natural) soils at a minimum ratio of 5:1 (5 parts virgin soil to 1 part residuals), prior to reuse, unless otherwise specified by the Department.

7. The blended mixture of drinking water residuals and virgin soils may be used as a "top soil" product to be marketed in bulk quantities, as proposed by RS&G, provided the material satisfactorily supports vegetative growth, and meets the analytical criteria in condition #5.
8. The drinking water residuals must be transported and blended in a manner so as not to cause any dust or odor problems.
9. No drinking water residuals received by RS&G shall contain free liquids.
10. Drinking water residual material shall be blended with virgin soils immediately upon receipt, and in no case greater than 72 hours after receipt.
11. Record keeping Requirements:
 - a. Record keeping on incoming loads of drinking water residuals shall include, at minimum:
 - * The source of the residuals (generator's name and address);
 - * The name of the transporting company;
 - * The transporting vehicle registration number;
 - * The weight of residuals in the transporting vehicle;
 - * The signatures of the vehicle driver transporting the load and of the RS&G representative accepting the load and
 - * The date the residuals are received by RS&G.
 - b. Record keeping for each batch of drinking water residuals utilized shall include, at minimum:
 - * The quantity of residuals utilized and the quantity of virgin soils blended with the residuals;
 - * The application or end use of the blended residuals and virgin soils;
 - * The date the mixture is blended, and
 - * The date the blended mixture is shipped off-site.
 - c. The following records are required to be maintained by the facility and shall be available to RIDEM personnel during site inspection:
 - * Analytical results and information on proposed drinking water residuals proposed to be shipped to RS&G, by source, generated per the requirements of the July 23, 2002 RS&G operating plan.
 - * Analytical results on virgin (native) soil to be used for blending purposes, per the requirements of the July 23, 2002 RS&G operating plan.
 - * Analytical results on blended mixtures of drinking water residuals and virgin soils, per the requirements of the July 23, 2002 RS&G operating plan.
 - * All information required regarding incoming loads of drinking water residuals, per 11(a) above.
 - * All information required regarding drinking water residuals utilized, per 11(b) above.
 - * Records shall also identify mixtures that fail final testing criteria, per condition 5, and steps taken prior to re-testing mixture for re-use.

12. There shall be no mixing of drinking water residuals with foundry sands, biosolids, or materials from the registered Putrescible Waste Composting Facility at this site.
13. This approval expires on December 31, 2003. RS&G may request an annual renewal of this approval that may be granted with the approval of the Director.
14. With acceptance of this approval, RS&G agrees that all costs associated with any Department verification or testing of the drinking water residuals shall be reimbursed by RS&G.
15. The Department's granting of this approval to reuse drinking water residuals does not affect the responsibility of RS&G to meet all zoning and other local ordinances and comply with any other State or Federal requirements or approvals.
16. This approval may be modified, amended, suspended, or revoked at the discretion of the Department.
17. This approval supercedes the RS&G BUD for drinking water residuals, approved and signed by RIDEM on September 13, 1999. The September 13, 1999 BUD is voided.



Leo Hellested, Chief
Office of Waste Management

10/1/02
Date