



RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-831-5508

CERTIFIED MAIL

January 5, 2005

Ms. Sherry Mulhearn, Executive Director
Rhode Island Resource Recovery Corporation
65 Shun Pike
Johnston, Rhode Island 02919

Re: Rhode Island Resource Recovery Corporation (RIRRC) – Central Landfill Phase V
Notice of Intent to Issue

Dear Ms. Mulhearn:

The Office of Waste Management has completed its review of the information submitted to date in support of your Phase V landfill application for a license to operate a Solid Waste Landfill at RIRRC, 65 Shun Pike, Johnston, RI. As a result of our review, we have determined that the application materials submitted substantially comply with the requirements of the regulations. The Office of Waste Management is therefore providing, through this letter, its Notice of Intent to issue the license.

The purpose of this letter is to communicate the Department's intent to issue the license pursuant to R.I.G.L. 23-18.9-9 and is not the issuance of the facility license at this time. Rather, it is the result of a final review of your application and the initiation of the statutorily mandated hearing process.

The process following this Notice of Intent to issue the license provides an opportunity for the public to comment on the license application and for the Department and the applicant to address substantive comments received from the public. With your receipt of this letter, the Department will issue a Public Notice of this Notice of Intent to Issue. Within fifteen (15) days of the date of the Public Notice, the Department will hold an informal informational workshop for the public on the information submitted to date.

Between sixty (60) and seventy-five (75) days from the Public Notice, the Department will schedule a public comment hearing to formally receive verbal and written comments from all interested parties on the pending application and Notice of Intent to Issue. This hearing will be solely for the purpose of taking comments and compiling an administrative record on your application. The Department does not intend to present any further information at the hearing. We urge you to present any information at this public forum that you may have now or will have developed by that time.

Following the public comment hearing the Department will continue to accept written comments from all interested parties on the application and the comments received at the hearing for an additional thirty days. The applicant may also submit written comments or information that you feel will address any public concerns and your application. Once this post-hearing thirty (30) day comment period is closed, the Office of Waste Management will issue a final decision on the license application within ninety (90) days.

Attachment A contains the Department's final comments on the Phase V Landfill application. The Department shall receive responses to these comments by January 16, 2004.

The following requirements shall be completed prior to the Office of Waste Management issuing a final decision on the license application:

1. All outstanding compliance issues shall be resolved.
2. RIRRC shall submit a comprehensive RIPDES application to DEM-Office of Water Resources for their approval by January 30, 2004.
3. All comments submitted in Attachment A with this Notice of Intent to Issue shall be addressed.
4. RIRRC shall submit a supplemental geohydrologic report to DEM summarizing the groundwater elevation data compared to model predicted levels as of January 30, 2004. Geohydrologic reports shall be submitted on a monthly basis thereafter. DEM reserves the right to require a modification of the final construction drawings based on these reports.
5. RIRRC shall ensure that they meet their regulatory responsibilities for closure and post-closure financial assurance.

Attachment B contains conditions that are currently proposed as part of the license. Any concerns addressed during the comment period may result in the establishment of additional conditions in order to issue the license.

Please feel free to call Laurie Grandchamp or myself at (401) 222-4700 if you have any questions regarding this letter.

Sincerely,

Terrence D. Gray, Assistant Director for Air, Waste and Compliance
Rhode Island Department of Environmental Management

cc: L. Hellested, L. Granchamp, W. Ali, RIDEM OWM
J. Langlois, RIDEM OLS
C. Cote, RIRRC
E. Summerly, GZA

Attachment A

**Final Office of Waste Management Comments on the
Proposed Phase V Licensing Application
Central Landfill
Johnston, Rhode Island**

1. General Comment:

Please be advised that all outstanding compliance issues shall be resolved prior to the issuance of the Phase V Landfill License.

2. General Comment:

The Department is currently working with the Department of Administration on issues related to financial assurance that need to be resolved prior to the issuance of the Phase V Landfill License.

Rule 1.5.04 Certification:

3. General Comment:

Each revised document shall contain statements signed by an authorized representative or the person who prepared the application, and the facility owner or operator certifying to the best of their knowledge, the accuracy of the information contained in these submittals.

Rule 2.1.00 General Information and Required Plans – Insufficient information was submitted in the application to satisfy all requirements specified in the rules cited below:

Rule 2.1.02 (c) Engineering plans:

4. Engineering Drawing C-4.

Drawing C-4 of the licensing application does not delineate any proposed leachate and/or groundwater collection piping system beneath the Phase V subgrade to intercept the groundwater discharged from the existing piping that exits the stone trenches beneath Areas 1 & 2 of Phase IV.

5. Engineering Drawing C-9.

Drawing C-9 profile shows an existing man-hole at station 14+81.55, however, the diagram has a note stating, “install a man-hole if existing man-hole does not exist”. Please explain.

6. Engineering Drawings C-16 and C-18.

Drawing C-16 to C-18 used GZA (November, 2000) groundwater contours versus (May 1999) modeled predicted groundwater contours. Also, the legend should clearly delineate the different types of contours such as groundwater versus existing ground elevations.

7. Engineering Drawing C-19.

Drawing C-19 shows an existing and proposed gas monitoring well within pond #2. Please explain.

8. Engineering Drawings C-21 and C-22.

Drawings C-21 & C-22 do not depict the groundwater table. Please explain.

9. Engineering Drawing C-24.

This drawing shows the groundwater, based on projected high water table, at the bottom of the brook. Please clarify.

10. Engineering Drawing C-28.

Drawing C-28 shows existing drainage sand for OU1 Area 2 without indicating its hydraulic conductivity. In addition, please explain how this layer will act as a secondary leachate collection system.

11. Engineering Drawing C-33.

Drawing C-33 should show more details of the cap anchor trench. Also, the notes should contain the approximate locations for the gas extraction headers.

12. Engineering Drawing C-35.

The diagram that depicts the clay plug at the collector pipe detail on Drawing C-35 does not include a diversion mechanism to a proposed treatment system if the collected groundwater does not meet the acceptable criteria prior to its discharge into pond 2.

Rule 2.1.07 Contingency Plan:

**13. Page 8-47, Section 8.15.15 Leachate Spill or Leakage;
Second Paragraph, Last Sentence.**

“If the repair time is extended whereby it is necessary to drain the leachate from the landfill to prevent overflow of the berms, the leachate will be recirculated as described in section 8.13.13 above.”

It is OWM's understanding that the Phase V Application does not propose the use of a leachate re-circulation system. Also, Section 8.13.13 could not be found.

Rule 2.1.09 Closure and Post-Closure Plans and Financial Assurance:

**14. Page 9-7, Section 9.6 Closure Cost Estimate;
Fourth Paragraph.**

“The Phase V Landfill will be monitored and maintained for a period of 30 years following closure in accordance with the post closure maintenance and monitoring plan described in Section 9.6.”

This section did not include any details related to the post closure activities. A new section should be added to address the requirements of the post closure operational, monitoring and maintenance activities specified in Rule 2.1.09, including the proper maintenance of the leachate collection and disposal system and gas facilities and their components.

Rule 2.1.12 Landfill Recovery Facilities:

**15. Page 5-2, Section 5.2 Overview Of Operational Gas Collection System;
Second Paragraph, Second to Last Sentence.**

“The interceptor trench will consist of 14-inch perforated HDPE butt fused pipe as detailed on Drawing C-24.”

The diameter of the perforated HDPE in the abovementioned quote is not consistent with the diameter shown in Drawing C-24.

In addition, the interceptor trench shall be monitored via meter and sampling ports shall be installed at both ends to show its effectiveness.

**16. Page 5-2, Section 5.3 Overview of Operational Landfill Gas Destruction;
First Paragraph, Second and Third Sentences.**

“The RIRRC has finalized negotiations with CGLP and RPPP. The outcome is a unified operation of the multiple gas systems (CGLP's and RIRRC's) by one entity identified as Ridgewood Gas Services (RGS).”

Please elaborate more regarding this new entity and provide a detailed description of the tasks that RIRRC's staff will implement during operational and post-closure life of the landfill in regards to landfill gas. Also, details shall be included such as which entity, Ridgewood Gas Services or RIRRC, will be responsible for operating and maintaining the LFG system. Lastly, RIDEM should be provided with the contact phone number for the entity responsible in case we have questions or an emergency occurs.

Rule 2.1.12 (d) Construction and Engineering Plans:

17. General Comment.

Calculations pertinent to the gas collection pipe sizing shall be included, as well as condensate trap flow calculations.

Rule 2.3.00 Solid Waste Landfill Operating Standards – Insufficient information was submitted in the application to satisfy all requirements specified in the rules cited below:

Rule 2.3.04 (a) Initial Cover and (b) Intermediate Cover:

**18. Page 8-9, Section 8.7.3, Waste Placement and Cover;
Forth Paragraph, Third Sentence.**

“In all cases, cover material shall consist of soil free of rubble, stumps, brush, metal, cinders, trash, demolition debris, garbage, topsoil, organic soil, loam, sludge, and other deleterious materials (unless prior approval is given by RIDEM).”

Please include copies of all previous and current RIDEM approved Cover Material Policies in an Appendix.

Rule 2.3.25 Record Keeping Requirements for SWLF Units:

**19. Page 8-22, Section 8.8.6.6 Monitoring and Record Keeping;
Entire Section.**

The information to be recorded should also include any discovery of restricted materials at the tipping floor.

Attachment B

Proposed License Conditions - Phase V Landfill Central Landfill, Johnston, RI

- 1.** The City of Cranston and RIRRC shall submit applications to modify Order of Approvals Nos. 1087 and 1079 to DEM-Office of Water Resources prior to DEM issuing the Phase V Landfill License and must be issued modified Orders of Approval prior to conducting any landfilling activities at the Phase V baseliner.
- 2.** RIRRC must be issued a modified Pretreatment Permit, that includes the increased flow from Phase V, prior to conducting any landfilling activities at the Phase V baseliner.
- 3.** RIRRC must upgrade and maintain the leachate pretreatment facility to comply with the City of Cranston's pretreatment requirements.
- 4.** RIRRC shall comply with the applicable terms and conditions of the Wetlands Permit No. 01-0289, in particular, conditions 21, 22.
- 5.** RIRRC shall submit a comprehensive RIPDES application to DEM-Office of Water Resources by January 30, 2004 and must be issued a modified RIPDES permit prior to conducting any Phase V landfilling activities.
- 6.** RIRRC shall comply with the terms and conditions as set forth in the Minor Source Air Permit for Phase V Landfill.
- 7.** RIRRC shall comply with the requirements of the Federal New Source Performance Standards (40 CFR Part 60), Subpart A, "General Provisions" and Subpart WWW, "Standards of Performance for Municipal Solid Waste Landfills". Compliance with all applicable provisions of these regulations is required.
- 8.** RIRRC shall provide a minimum of five (5') feet of separation between the highest groundwater table and the lowest level of the liner system, as required by Rule 2.3.05 (c) (1).
- 9.** RIRRC shall begin submitting supplemental geohydrologic monthly reports to DEM summarizing the groundwater elevation data compared to model predicted levels as of January 30, 2004. DEM reserves the right to require a modification of the final construction drawings based on these reports.
- 10.** RIRRC shall comply with all pollution prevention practices described in the "RIPDES Permit Application for Discharges of Stormwater Associated with Industrial Activity at the Johnston Landfill" as revised and thereafter approved.

- 11.** The Phase V landfill shall be constructed and operated in accordance with the “Rules and Regulations for Composting Facilities and Solid Waste Management Facilities, January 1997 and amended December 31, 2001.
- 12.** The facility shall be operated in accordance with the approved operating plan, and in accordance with any subsequent amendments to said operating plan approved by the DEM. Any modifications to the facility’s operation, and/or addition of equipment, must be approved by the DEM prior to installation or implementation.
- 13.** RIRRC shall ensure that they meet their regulatory responsibilities for closure and post-closure financial assurance.
- 14.** RIRRC shall comply with the Sedimentation and Erosion Control Plan for Phase V landfill, as revised and thereafter approved.
- 15.** RIRRC shall submit final construction drawings and specifications, in conformance with the final approved application.
- 16.** RIRRC shall submit a post-closure monitoring and maintenance manual to DEM.
- 17.** RIRRC shall submit a Revised Environmental Monitoring Plan to DEM.
- 18.** RIRRC shall submit a leachate report that describes the quantity of the flows in the secondary system prior to and after waste placement. Said report shall clearly indicate if an exceedance of the ALR has occurred. If the ALR has been exceeded, DEM shall be notified immediately and the necessary remedial steps as described in the operating plan shall be taken.
- 19.** RIRRC shall provide the DEM, its authorized officers, employees, and representatives, and all other persons under DEM oversight, an irrevocable right of access to the facility at all reasonable times for the purposes of performing inspections, investigations, testing, and examining records. The DEM or other authorized designated personnel shall have the right to access the facility at all reasonable times for the above-stated purposes without prior notice. Refusal to permit reasonable inspections, tests and investigations shall constitute valid grounds for denial, revocation or suspension of a license; and/or issuance of a Notice of Violation with Administrative Penalty.