

CERTIFIED MAIL

July 29, 2004

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

Re: Central Landfill Phase V Approval
Rhode Island Resource Recovery Corporation (RIRRC)

Dear Ms. Mulhearn:

The Rhode Island Department of Environmental Management (the "Department") 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. We have also completed our review of the comments submitted by the public at the public hearing on March 16, 2004, and during the public comment period.

As a result of our review, we have determined that the application materials submitted comply with the requirements of the regulations. The Department is therefore approving your application for a license to operate a Solid Waste Landfill at Rhode Island Resource Recovery Corporation.

Attachment A contains conditions that the Department is imposing as part of the license. Many of the conditions were contained in the Notice of Intent to Issue (NOI), however, several of the conditions were created based on comments received during the public comment period, as well as, the Department's review of information submitted by RIRRC after the NOI was issued.

Please feel free to call Leo Hellested 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, RIDEM OWM
D. Russell, RIDEM OWM
W. Ai, RIDEM OWM
J. Langlois, RIDEM OLS
C. Cote, RIRRC
E. Summerly, GZA

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

July 2004

The following documents, submitted by the Rhode Island Resource Recovery Corporation (RIRRC), constitute the license application to operate a Solid Waste Landfill, known as the Phase V Landfill, at Central Landfill located at 65 Shun Pike in Johnston, Rhode Island. The Phase V Landfill shall be constructed and operated in accordance with the following approved application, any subsequent amendments to the operating plan approved by the Department of Environmental Management (DEM), subject to the terms and condition contained herein.

License Application Documents:

- Responses to RIDEM's May 14, 2003 Supplemental Comments on the Proposed Phase V Landfill Permit Application, Landfill Gas Management Plan and Geohydrologic Study dated August 13, 2003.
- Proposed Phase V Landfill Revised Geohydrologic Study Report – Volumes 1 and 2, Central Landfill dated September 2003.
- Proposed Revised Phase V Permitting Application – Volumes 1 and 2 Central Landfill Johnston, Rhodes Island dated October 2003, and revised pages dated January 19, 2004.
- Responses to RIDEM's October 7, 2003 Comments on the Revised Proposed Phase V Landfill Geohydrologic Study Report dated November 7, 2003.
- Response to RIDEM's January 6, 2004 Comments on the Proposed Phase V Landfill Permit Application dated January 19, 2004.
- Revised Environmental Monitoring Plan Central Landfill dated March 2004.

Additional Permits, Licenses, and Approvals Incorporated herein by Reference:

The terms and conditions of the following permits, licenses and approvals are incorporated by reference. In the event of inconsistencies or conflicts, the Director shall decide which requirements govern. Perceived inconsistencies should be raised, in writing, to the Director.

1. RIRRC must upgrade and maintain the leachate pretreatment facility to comply with the City of Cranston's pretreatment requirements.
2. RIRRC shall comply with the terms and conditions as set forth in any Permit applicable to the Phase V Landfill issued in accordance with the Regulations for the Rhode Island Pollutant Discharge Elimination System (RIPDES).

3. 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.
4. RIRRC shall comply with the Sedimentation and Erosion Control Plan for Phase V landfill, as revised and thereafter approved.
5. RIRRC shall comply with the terms and conditions as set forth in any Permit applicable to the Phase V Landfill issued in accordance with APC Regulation No. 9.

Additional Terms and Conditions of Approval:

The following terms and conditions were developed in response to DEM’s review of the Phase V Permitting Application and comments received during the public hearing process:

6. 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”, as is or as amended.
7. Any modifications to the facility’s operation, and/or addition of equipment, shall be approved by the DEM prior to installation or implementation.
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). The five-foot minimum separation shall only be achieved using additional subgrade materials.
9. RIRRC shall submit supplemental geohydrologic monthly reports to DEM to verify field groundwater elevation data until landfilling commences for each of the Phase V areas. DEM reserves the right to require a modification of the final construction drawings based on these reports.
10. RIRRC shall ensure that the liner system is built on a slope of no less than two percent (2%) in order to promote positive drainage across the liner surface in accordance with Rule 2.2.06 (b)(1).
11. RIRRC shall submit final construction drawings and specifications, in conformance with the final approved application. All areas of the Phase V Landfill shall be built in accordance with the final construction drawings and specifications. Construction Certification Reports shall be submitted to DEM for review and approval at least 30 days prior to the commencement of landfilling in each Phase V area.
12. Financial Assurance
 - a. RIRRC shall ensure that they meet their regulatory responsibilities for closure and post-closure financial assurance.

- b. RIRRC shall be allowed to make financial deposits into the closure and post-closure funds at the end of each fiscal year.
- 13.** RIRRC shall submit a proposed post-closure monitoring and maintenance manual, in accordance with Rule 2.1.09(c), to DEM for review and approval by July 1, 2005.
- 14.** RIRRC shall comply with the Environmental Monitoring Plan dated March 2004, subject to the following conditions:
- a. Air
 - i. The Acceptable Ambient Levels (AALs) in Table 1 of APC Regulation No. 22 are herein incorporated into the Environmental Monitoring Plan for comparison purposes. All pollutants shall be compared, by RIRRC, to the 1-hour, 24-hour and annual average AALs. If the measured concentration of a pollutant in any sample (including those taken onsite) exceeds an AAL, RIRRC shall, by comparing the upwind, downwind and onsite concentrations and by using other available data, determine whether emissions from the landfill or from landfill operations cause or contribute to the exceedance. If emissions from the landfill and/or from landfill operations cause or significantly contribute to an exceedance of an AAL, RIRRC will immediately notify DEM, take immediate measures to stop or control said emissions, and prepare and submit a summary report outlining the investigation and response to the problem within fifteen (15) days of the date of identification.
 - ii. RIRRC shall utilize EPA and RIDEM approved air sampling and analytical methodology that is capable of detecting the target pollutants at the concentrations corresponding to the AALs for those pollutants.
 - iii. Surface Emissions Monitoring shall be incorporated into the Environmental Monitoring Plan.
 - b. RIPDES
 - i. The monitoring requirements from the Phase V RIPDES permit shall be incorporated into the Environmental Monitoring Plan, once approved by the DEM Office of Water Resources.
 - ii. Should monitoring conducted at new sampling station SW-4R indicate that the applicant's action of relocating the brook has caused or contributed to a violation of water quality standards in waters of relocated Cedar Swamp Brook (such as by intercepting a greater amount of contaminated groundwater recharge from off-site sources), RIRRC shall submit a plan within fifteen (15) days outlining proposed actions to halt such contamination and prevent or limit any potentially harmful human, environmental, or natural resource exposure. This condition shall not be construed to compromise or limit the applicant's rights to pursue legal action against other responsible parties in accordance with applicable law for any harm caused. Any change in the

location of proposed sampling station SW-4R shall require the prior written approval of DEM.

- c. All Method Detection Limits used in the analysis of groundwater and surface water samples shall be lower than the applicable State and Federal standards.
 - d. RIRRC shall update and resubmit the Environmental Monitoring Plan to the DEM Office of Waste Management, incorporating any amendments approved by DEM, within ninety (90) days of DEM approval(s) of said proposed changes. The updated Environmental Monitoring Plan shall also incorporate all of the above conditions.
 - e. RIRRC shall submit Environmental Monitoring Reports to the DEM on a quarterly basis.
- 15.** RIRRC shall submit a leachate report for Phase V within one hundred and twenty (120) days after landfilling activities begin 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 Action Leakage Rate (ALR) has occurred. RIRRC shall notify DEM immediately if an exceedance of the ALR is detected and shall implement the remedial activities as described in Section 8.15.10 of the approved Operating Plan.
- 16.** Leachate recirculation activities shall not be performed by RIRRC. Any future amendments to the Operating Plan proposing leachate recirculation shall be submitted in accordance with Rule 1.7.13 and subject to DEM review and approval.
- 17.** The gas collection system for the Phase V Landfill shall consist of the design as described in the October 2003 Proposed Phase V Permitting Application document. Specifically, RIRRC shall install horizontal gas collection trenches while the Phase V landfill is actively being filled. Once the Phase V Landfill reaches final grade elevations, RIRRC shall install a network of vertical gas extraction wells to supplement the horizontal gas collection trenches. Any future amendments to the landfill gas system shall be submitted in accordance with Rule 1.7.13 and subject to DEM review and approval.
- 18.** The final cap shall consist of the design as described in the October 2003 Proposed Phase V Permitting Application document. Specifically, the bedding layer shall consist of “*6 inches of gravel borrow with a maximum particle size of 1.5 inches ... placed over the filter fabric to protect the flexible membrane liner (FML) above*”. Any future amendments to the final capping system shall be submitted in accordance with Rule 1.7.14(c) and subject to DEM review and approval.
- 19.** RIRRC shall comply with all approved sedimentation and erosion control measures, including but not limited to, construction of temporary 10’ wide diversion benches while waste is being placed in the Phase V landfill in order to limit slope length and divert surface water to acceptable sedimentation pond locations in accordance with the October 2003 Proposed Phase V Permitting Application. The maximum elevation intervals between benches shall be no greater than forty (40) feet.

20. RIRRC shall comply with the cover material requirements described in Rule 2.3.04 of the Solid Waste Regulations, and the requirements set forth below:

a. RIRRC shall cover the working face of Phase V Landfill with six (6) inches of earthen cover material, or alternative daily cover as specified in the approved Operating Plan, at least at the end of each working day, or at more frequent intervals if necessary, to control disease vectors, fires, odors, blowing litter or scavenging.

b. RIRRC shall place and maintain intermediate cover (an additional six (6) inches of earthen cover material at a minimum or Posi-Shell as specified in the approved Operating Plan) on any area of the Phase V Landfill within one week of disposal of refuse when an additional lift in that area is not to commence within six (6) months.

c. RIRRC shall place and maintain final cover (an additional twelve (12) inches of earthen cover material at a minimum) on any area of the Phase V Landfill, for a total thickness of twenty-four (24) inches of cover material, when an additional lift in that area is not to commence for one year.

d. RIRRC shall begin closure of the Phase V Landfill within thirty (30) days of the final receipt of waste or within one year of the most recent receipt of waste, if there is remaining landfill capacity and RIRRC expects to dispose of additional waste in Phase V. RIRRC may request an extension beyond the one year deadline for beginning closure, if RIRRC demonstrates that the Phase V Landfill has the capacity of receive additional waste and RIRRC has taken and will continue to take all measures necessary to prevent threats to human health and the environment from the unclosed Phase V Landfill.

21. All incoming loads of solid waste shall be screened for any radioactive material, utilizing the screening equipment specified in the approved Operating Plan.

22. Community Communications.

a. Within ninety (90) days of the close of the fiscal year, RIRRC shall complete and distribute an Annual Report which includes the following information:

i. An updated System Development Plan (SDP) consistent with the format outlined in Appendix A of the Rhode Island Comprehensive Solid Waste Management Plan (RICSWMP), November 1996. The updated SDP shall include such information necessary to satisfactorily address the purposes as defined in Appendix A.

ii. The amount of capacity utilized during the fiscal year calculated by both volume and by tonnage.

iii. A comparison of the amount of capacity used during the prior fiscal year with the predicted levels. The approved RICSWMP projected a capacity need of

750,000 tons per year. The Phase V License Application projected a need of approximately 1.1 million tons per year. The above comparison shall include, at a minimum:

- a. An explanation of any deviations from these predicted levels.
 - b. A corrective action plan that includes proposed measures to bring future capacity use back in line with predicted levels.
 - c. The impact of out-of-state waste on the facility, and efforts taken during the prior fiscal year to prohibit out-of-state waste disposal, if applicable.
- iv. Status of efforts to maintain and/or revegetate the buffer zone in accordance with, but not limited to, R.I.G.L. 23-18.9-9.1(b) (1) and 23-19-40.
- b. The Annual Report described in section “a.” above shall be posted on the RIRRC web site and distributed to the following parties:
- i. Mayor of the Town of Johnston
 - ii. All State Senators and Representatives whose districts include part of Johnston
 - iii. Johnston Town Council members
 - iv. Department of Environmental Management
 - v. Citizens Advisory Board, established per R.I.G.L. 23-19-23
- c. RIRRC shall hold quarterly meetings, which are open to the public, to discuss the status of the facility and any residents’ concerns. At a minimum, notice of the meetings shall be posted on the RIRRC web site and at the Johnston Town Hall, and provided to the parties listed in section “b” above, at least 14 days in advance.
- 23.** 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.
- 24.** Issuance of this Solid Waste License does not relieve RIRRC from complying with all applicable local, state, and federal laws and regulations.

APPENDIX A

**Summary of Public Comments
And
Reference Guide to Department Responses**

**REFERENCE GUIDE TO DEPARTMENT RESPONSES AND SUMMARY OF
PUBLIC COMMENTS RECEIVED DURING THE PUBLIC HEARINGS AND
THE PUBLIC COMMENT PERIOD FOR THE LICENSING OF THE
CENTRAL LANDFILLPHASE V LANDFILL FACILITY**

APRIL 2004

General Introduction

On January 5, 2004, the Department of Environmental Management (“DEM” or “Department”) issued a Notice of Intent to Issue a Landfill License to the Rhode Island Resource Recovery Corporation (“RIRRC”). Specific regulatory requirements that shall be completed by the applicant prior to the Department issuing its final decision on the license application were cited by the Department in the “Notice of Intent to Issue” letter. The Letter also listed a number of conditions proposed as part of the license. Two informational workshops were held on the license application on January 20, 2004 at the DEM headquarters building, 235 Promenade Street, Providence RI, and on February 10, 2004 at the Johnston Public High School Auditorium in Johnston, RI. Public hearings on the license application were held on March 16, 2004 at the DEM headquarters building and in the Johnston Municipal Court Building in Johnston. The public comment period remained open for an additional thirty (30) days beyond the hearings to receive any additional written comments from the public and applicant. This response summary was prepared after complete review of all submitted materials to provide a Department response to all relevant and substantive comments.

Public Comment Period Summary

At the public hearing, and during the public comment period, the Department received a number of technical and general comments from public officials, area residents, and the applicant. Below is a listing of those citizens who provided comments with a summary of the issues raised by each. Copies of the actual transcript of the hearings, and the comments provided to the Department in writing are available at the Department’s Office of Waste Management, 235 Promenade Street, Providence, RI.

In preparation of the response to each comment, the Department grouped/categorized related comments according to the regulatory issues raised to provide a concise detailed response. Below each citizen’s name, therefore, is a summary of the regulatory issues raised in the comment and a reference to the prepared responses. Comments are listed below in the order in which they were received.

Comments from the March 16, 2004 Hearing (in the order of appearance)

1. **Greg Gerritt:** (Green Party).

- a. Understands the State's need for more landfill space but wants to increase trash reduction and the level of recycling and composting at the residential level. – See response #1.

2. **Sarah Kite:** (RI Sierra Club). Also includes written comments submitted on 03/22/04 by **Harold Ward** (Brown University), **Carole Bell**, and **Eugenia Marks** (RI Audubon Society).

- a. Not opposed to the Phase V Landfill expansion but requests DEM place strict limitations on the license including requiring RIRRC to adhere to the solid waste hierarchy: source reduction first, recycling and composting second, and disposal third. – See response # 1.
- b. RIRRC should create a statewide Source Reduction Program, hire a Source Reduction Coordinator, and reconvene the Source Reduction Taskforce. – See response # 1.
- c. DEM and RIRRC should enforce the state law making recycling mandatory for businesses. – See response # 1.
- d. RIRRC should be actively working with the business community to implement product stewardship and business recycling. Assistance in the form of cooperative agreements, recycling education, contract negotiations and hauler mediation should be provided by RIRRC staff. – See responses # 1 and 2.
- e. As a condition of the license DEM should require RIRRC to create a “Pay as You Throw Program” and provide reasonable start up costs for any community instituting such a program. Improve public education concerning source reduction and recycling. – See responses #1 and 2.
- f. Conditions of the license should also require RIRRC to take following steps to maximize source reduction and recycling: enforce the ban on disposal of recyclables; reduce the municipal cap by 5% of the total allocated to a community each year, beginning in 2005, and increasing annually up to 35%; raise the commercial tipping fee to approximately \$65/ton; and establish funding for a comprehensive waste prevention and recycling program to reduce solid waste by 10% by 2009 and 20% by 2015. – See responses # 1 and 2.
- g. RIRRC should exhaustively implement source reduction and recycling strategies to dramatically reduce waste destined for disposal and extend the life of the landfill. – See responses # 1 and 2.
- h. RIRRC should also be required to report annually to the DEM and the public on compliance with the above license conditions. – See responses # 1 and 2.

3. **Alan Bridgman:** (RI Audubon Society) (also includes written comments submitted on 03/22/04, Eugenia Marks). Provided written comments only and stated that the RI Audubon Society would provide written comments later.

- a. The State Guide Plan Element 171 indicates that the generation of waste in the state is increasing while the recycling rate is still very low (9% in Providence). The Phase V Landfill should be delayed until the RIRRC demonstrates an ability to reduce, not increase, the amount of waste. – See responses #1 and 2.

- b. Evidence of waste reduction should be a condition of the issuance of a permit at a later date. – See responses #1 and 2.

4. Jeff Pearson: (Resident of Johnston).

- a. What is the process from this point forward? – See response #3.
- b. What is the base elevation at the center on the Phase V Landfill? – See response #3.
- c. What is done to channel underlying streams that cross the Phase V Landfill? – See response #3.
- d. Are their groundwater monitoring wells offsite, and if so where? – See response #3.
- e. Concerned about quality of his well water and the watershed. – See response # 3 and #9.
- f. States he has seen things done by RIRRC that are not responsible (economically) and hopes they will not exercise that same poor management environmentally. – See response # 18.

5. Mary Cerra: (Representative RI House District 55, Johnston).

- a. Does the proposed landfill configuration meet the vegetative buffer requirements? – See response # 4.
- b. Expressed concerns about the past disposal of infectious waste. – See responses # 6 and # 9.
- c. Expressed concerns about the handling, storage and disposal hazardous materials (including cyanide by Bostitch and asbestos waste) brought to the site in the solid waste stream. – See response # 6.
- d. Concerned about air quality and asked if current air controls at the facility meet Best Available Control Technology (BACT) standards. – See response # 7.
- e. States that EPA supports residential property buyout and expanding the buffer zone as noted in the Central Landfill Action Committee (CLF) findings. Acquisition of homes and redefining the buffer around the landfill would be protective of the health of the area residents. – See response # 4.

6. Bruno Tassoni: (Resident of Johnston).

- a. Expressed concern regarding the proximity of the proposed Phase V Landfill with respect to the Scituate Reservoir. – See response # 10.
- b. Expressed concern over the possible disposal of out of state waste at the facility. – See response # 2.
- c. Opposes Phase V, wants Town Tax bills paid for all Johnston residents by RIRRC. – See response # 15 and 18.
- d. Inquired as to the State’s Plan for relocating the landfill after Phase V Landfill is full. – See responses # 15 and # 18.
- e. Indicated that Johnston residents should have final say regarding landfill expansion. – See response # 18.

7. Ernest Pitochelli: (Councilman, Town of Johnston).

- a. Expressed concern over the landfill siting process, specifically the four sites identified in at RIRRC's property in Johnston. – See response # 15.
- b. Asked if required onsite monitoring plan for air and water is in place. – See response #11.
- c. Inquired about the Power Plant fine by EPA and what DEM's role in the action was. – See response # 8.

8. James Cipriano: (Resident of Johnston).

- a. Expressed concerns regarding air quality and odors in the area particularly at night. – See response # 5.
- b. Asked if RIRRC was in compliance with all current requirements, and if not could the Phase V license be granted. – See response # 6.
- c. Why isn't a DEM staff person assigned to be on site at the landfill every day? – See response # 16.
- d. Concerned that the current landfill was supposed to have lasted a couple of more years before Phase V was needed. – See response # 2.

9. Jeanette Fontaine: (Resident of Johnston).

- a. Concerned about landfill odors at her house and its effect on their health. – See responses # 5 and # 9.
- b. Concerned about the seagull problem and its affect on water ways, cited Oak Swamp Reservoir and polluted water in the Simmonsville area. – See response # 14.
- c. Wants DEM to watch landfill closely. – See response # 16.
- d. Says out of state dumping has been occurring for years and has used valuable landfill space. – See response # 2.

10. Ronald Tanguy: (Resident of Johnston).

- a. Cited problem with odors from landfill and wants DEM to take enforcement action. – See responses # 5, # 6 and # 16.
- b. Expressed health concerns and cited ATSDR Study that indicated higher levels of Carbon monoxide when no significant odors were present. – See response # 9.
- c. Opposes landfill expansion. – See response # 15.
- e. Would like State to consider incinerators. – See response # 13.
- f. Believes the flares are not properly designed to handle the gas generated. – See responses # 5, and # 7.

11. Bob Sandberg: (Resident of Johnston).

- a. Stated that the landfill has been mismanaged throughout its entire history and is filling up too fast. – See response # 2.
- b. Expressed concerns regarding DEM oversight of waste management facilities. Should have DEM staff at landfill. – See response # 16.

- c. Believes that NEED was doing a great job of recycling and wants to know why DEM shut him down. – See response # 18.
- d. Opposes re-licensing of landfill. – See response # 15.
- e. Would like State to consider incinerators. – See response # 13.
- f. Does not believe that RIRRC is truly recycling. – See response # 1.

12. Richard Sorensen: (Resident of Johnston).

- a. Opposes landfill expansion. – See response # 15.
- b. Concerned about increased taxes and that landfill expansion to the west and south will negatively affect property values on Peck Hill Road and Shun Pike. – See responses # 15, and # 18.

13. Gerard DiSanto: (Resident of Johnston, also submitted written comments).

- a. Are there any additional conditions that will be part of the license? – See response # 3.
- b. Would like to see landfill tipping fees increased to support a bond for better equipment at the landfill and revenue for the Town of Johnston. – See responses # 1 and # 2.
- c. Concerned about odors and asked if current air controls at the facility meet Best Available Control Technology (BACT) standards as required by EPA and recent court decision. – See response # 8.
- d. Concerned about recycling. – See response # 1.

14. Louis Vinagro: (Resident of Johnston)

- a. Opposes landfill expansion. – See response # 15.
- e. Would like State to consider incinerators. – See response #13.
- f. Concerned about the landfill causing his health problems. – See response # 9.
- g. Concerned about the landfill taking out of state waste. – See response # 2.

Additional Written Comments Submitted During the Public Comment Period Ending April 15, 2004:

1. Sherry Mulhearn: (Executive Director, Rhode Island Resource Recovery Corporation – Received 04/07/04).

Comments support issuing license. No response required.

- a. Provided an overview of the statutory authority of the Department and the State Planning Council in selecting landfill sites and evaluating permit applications.
- b. Provided a summary of issues affecting the 1996 Comprehensive Solid Waste Plan projections of waste disposal.
- c. Described the statutory limits to RIRRC’s authority with respect to enforcement of bans on disposal of recyclables or out of state materials.

2. **William Anderson:** (Director of Engineering, Rhode Island Resource Recovery Corporation – Received 04/15/04).

Comments support issuing license. No response required.

- a. Provided specific input on each of the Departments 19 proposed solid waste disposal license conditions. The Department will take these into consideration and modify conditions, as it deems appropriate.

3. **J. Richard Ratcliffe:** (On behalf of Johnston Residents G. and M. Disanto – Received 04/09/04).

- a. Stated that they live within the 200 foot buffer – we presume that this is meant to say the 2000 foot buffer. See response # 4.
b. Expressed concern over air quality and the application of Best Available Control Technologies by RIRRC. See responses # 5 and # 8.

4. **Grant Dulgarian:** (Providence resident – Received 04/14/04).

- a. Agrees with Providence Journal Opinion/Editorial article by C. Bell, E. Marks, S. Kite and H. Ward (04/07/04) regarding tipping fees, out of state waste and recycling. See responses # 1 and # 2.

5. **Austin and Fleurette O’Toole:** (Received 04/9/04).

- a. Agrees with Providence Journal Opinion/Editorial article by C. Bell, E. Marks, S. Kite and H. Ward (04/07/04) regarding tipping fees, out of state waste and recycling. See responses # 1 and # 2.

6. **C. Bell, E. Marks, S. Kite and H. Ward:** (Received 03/22/04).

- a. Expresses comments similar to the Sierra Club oral comments above and specifically requests that they be made conditions of the license. See responses # 1 and # 2.

7. **Lois E. Sorensen:** (Johnston resident - Received on or about 04/14/04).

- a. Concerned about odors and believes landfill expansion will increase the odor problem. See response # 5.
b. Opposes a westward expansion of the landfill and suggests that this violates the RIRRC’s Comprehensive Plan and host community agreement. See responses # 12 and # 15.
c. RIRRC’s Comprehensive Plan prioritizes recycling and reduction of waste, not increased landfilling. See response # 1.
d. Requests a reduction in landfilling, increases in recycling and requests incineration to reduce the need for landfilling. See responses #1, # 2 and # 13.
e. Opposes expansion of landfill to future phases beyond Phase V. – See responses # 15.

8. Akshay K. Talwar, JD, CPA, LL.M.: (Owner/President Briarcliff Manor Johnston - Received on 03/29/04).

- a. States that the Central Landfill has not been a good neighbor, has not fulfilled its obligations under federal and state law and has a long record of infractions and violations. – See responses # 6.
- b. Concerned about noxious odors and potential health impacts to residents of the nursing home facility and its neighbors. - See responses # 5 and # 9.
- c. Opposes expansion of landfill to Phase V and future phases. – See responses # 15.

9. Lois A. Christy: (Received on 04/15/04).

- a. Agrees with Providence Journal Opinion/Editorial article by C. Bell, E. Marks, S. Kite and H. Ward (04/07/04) including a “pay as you throw” plan for communities and banning the disposal of leaf and yard waste at the landfill. – See responses # 1 and # 2.
- b. Opposes the selling of landfill space at bargain prices. – See response # 2.

10. Elizabeth Cameron: (Received on 04/14/04).

- a. Agrees with Providence Journal Opinion/Editorial article by C. Bell, E. Marks, S. Kite and H. Ward (04/07/04) regarding tipping fees, out of state waste and recycling. – See responses # 1 and # 2.

11. Linda and David Weremay: (Received on 04/15/04).

- a. Agrees with Providence Journal Opinion/Editorial article by C. Bell, E. Marks, S. Kite and H. Ward (04/07/04) regarding tipping fees, out of state waste and recycling. – See responses # 1 and # 2.

12. Bill and Patti Major: (Johnston Resident - Received on 04/13/04).

- a. Concerned about potential health and environmental impacts from odors and gas to residents living in close proximity to the landfill facilities. – See response # 9.
- b. Believes issuing a license is a violation of the Clean Air Act. – See responses # 5 and 8.
- c. Questions the validity of the ATSDR Exposure Investigation and claims the report is seriously flawed. – See response # 9.
- d. They and their neighbors experience odors from the Central Landfill and believe this will increase with the licensing of Phase V. – See response # 5.
- e. States that DEM is not doing enough odor inspections, investigating odor complaints, or enforcing the regulations. – See responses # 5, # 6, and # 16.
- f. Concerned about particulate matter and its potential impact of human health. – See responses # 5, # 8 and # 9.
- g. Believes that they and their neighbors are being subjected to unequal exposure to public health hazards. – See responses # 5, # 8 and # 9.
- h. Concerned about the potential impact of landfill to surrounding wetlands, waterways, and reservoirs. – See responses # 10.

- i. Questions the difference between a landfill license and a permit and if there are any conditions to the license. – See response # 2.
- j. Questions the validity of the 1996 host community agreement between the RIRRC and the Town of Johnston and believes it fails to protect the citizens around the landfill. – See response # 18.
- k. Opposes RIRRC’s plans to expand the landfill through future phases. – See response # 15.
- l. Believes land acquisitions by RIRRC and its planned expansions of the landfill have been driven by financial conflicts of interests. – See responses # 18.
- m. Opposes the issuance of the license without an additional buy-out of residential properties around the landfill. – See response # 18.
- n. Believes increased tipping fees will help prevent out-of-state waste from being disposed of at the landfill and could help provide for a buy-out. – See responses # 1, and # 2.

APPENDIX B

PHASE V LANDFILL SOLID WASTE MANAGEMENT FACILITY LICENSE APPLICATION

RESPONSE TO PUBLIC COMMENTS

JULY 2004

1. Waste Hierarchy, Recycling, Composting and Public Education;

A number of comments were received regarding improving the levels of recycling, source reduction, composting, and associated public education in Rhode Island.

The Rhode Island Resource Recovery Corporation (RIRRC) is currently in the process of re-writing and updating the Rhode Island Comprehensive Solid Waste Management Plan. This plan was last updated in 1996, and is the guiding policy document for managing the State's solid waste. This policy document best addresses the issues involving improving recycling rates in the State (both municipal and commercial), source reduction activities, etc., and efforts to protect the future capacity of the Phase V Landfill. It is anticipated that the draft document will be released by RIRRC before the end of this calendar year. Final approval of the new Rhode Island Comprehensive Solid Waste Management Plan is subject to public comment/input, and approval by Statewide Planning - R.I. Department of Administration.

RI General Laws regulating solid waste disposal (RIGL 23-19-3 et. seq.) also lays out, as a matter of public policy, the waste hierarchy. The ultimate objective is to maximize recycling and reuse of solid waste. The primary goals of the Rhode Island Resource Recovery (RIRRC) Waste Reduction and Recycling Programs are to implement initiatives that divert material from disposal in the landfill and educate the public about the importance of doing so. These goals are in keeping with the Corporation's enabling legislation and the EPA's Solid Waste Hierarchy which both identify waste reduction and recycling as a priority above disposal. Based on the above mandates, therefore, and on the public comments received during the public hearing process for the license, DEM has included conditions in the Phase V Landfill License for RIRRC to report on the effectiveness of its current and future programs and efforts preserve landfill capacity.

The reporting conditions added to the license require that:

- a. Within ninety (90) days of the close of the fiscal year, RIRRC shall complete and distribute an Annual Report which includes the following information:
 - i. An updated System Development Plan (SDP) consistent with the format outlined in Appendix A of the Rhode Island Comprehensive Solid Waste Management Plan (RICSWMP), November 1996. The updated SDP shall

- include such information necessary to satisfactorily address the purposes as defined in Appendix A.
- ii. The amount of capacity utilized during the fiscal year calculated by both volume and by tonnage.
- iii. A comparison of the amount of capacity used during the prior fiscal year with the predicted levels. The approved RICSWMP projected a capacity need of 750,000 tons per year. The Phase V License Application projected a need of approximately 1.1 million tons per year. The above comparison shall include, at a minimum:
 - a. An explanation of any deviations from these predicted levels.
 - b. A corrective action plan that includes proposed measures to bring future capacity use back in line with predicted levels.
 - c. The impact of out-of-state waste on the facility, and efforts taken during the prior fiscal year to prohibit out-of-state waste disposal, if applicable.
- iv. Status of efforts to maintain and/or re-vegetate the buffer zone in accordance with, but not limited to, R.I.G.L. 23-18.9-9.1(b)(1) and 23-19-40.
- b. The Annual Report described in section “a.” above shall be posted on the RIRRC web site, and distributed to the following parties:
 - i. Mayor of the Town of Johnston,
 - ii. All State Senators and Representatives whose districts include part of Johnston,
 - iii. The Johnston Town Council members,
 - iv. Department of Environmental Management
 - v. Citizens Advisory Board, established per R.I.G.L. 23-19-23
- c. RIRRC shall hold quarterly meetings, which are open to the public, to discuss the status of the facility and any residents’ concerns. At a minimum, notice of the meetings shall be posted on the RIRRC web site, and provided to the parties listed in section “b” above, at least 14 days in advance.

The DEM believes that the above requirements create an effective way for RIRRC to report on their efforts, and to have information easily and periodically made available to local citizens and their elected representatives.

According to the RIRRC, the Central Landfill currently has sufficient excess capacity to handle segregated recyclables, compostable materials and other recyclables such as white goods, tires, mattresses, construction and demolition debris (C&D), etc. As a facility, however, RIRRC claims it does not have the ability to affect up-stream conduct by third parties. However, maintaining sufficient capacity to handle and recycle these materials is an important part of RIRRC’s legislative charge. The facility’s operating plans for Phase V and related on-site waste management activities (e.g., the Composting Facility, Eco Depot, etc.) indicate that RIRRC should be able to maintain adequate capacity to handle and process these materials. The Corporation can also reject loads of commercial waste that contain over 20% recyclables.

The following paragraphs contain information provided by RIRRC, and provide a general overview of the recycling programs/operations that the RIRRC runs at their Johnston and Cranston Facilities. According to RIRRC, during the 2003 calendar year approximately 1.42 million tons of total waste entered the landfill for recycling, reuse or final disposal. Graphs 1 and 2, attached, provide an overview of the waste diversions rate as a function of this total tonnage. More detailed information on recycling efforts, etc. will be part of the revised Rhode Island Comprehensive Solid Waste Management Plan. The public is encouraged to review that document, once it becomes available, and participate in the public hearing process required by statute.

Commercial Recycling Center

RIRRC owns and operates a commercial recycling facility at the Johnston landfill. This facility has the ability to remove recyclables from the waste stream before it is taken for disposal at the working face. This facility handles white goods (appliances like refrigerators, freezers and stoves), residential Construction and Demolition debris, tires, computers and other consumer electronics, waste oil, and other goods, all of which are processed and shipped off-site for recycling/reuse. White goods present a particular problem because they may contain Freon (a significant greenhouse gas). Before the metals and other materials from white goods can be recycled, the Freon and transformers must be removed. The Freon is also recovered for reuse.

Leaf and Yard Waste Composting

RIRRC promotes diversion of Leaf & Yard waste through composting by employing various measures. Beginning in FY 2004, RIRRC eliminated the \$17/ton municipal tip fee for Leaf & Yard (L & Y) Waste. By doing so, RIRRC provided an economic incentive to the municipalities to increase diversion of L & Y from the waste stream. In addition, effective 7-1-04, RIRRC will be reducing the municipal cap for solid waste by 5%, thus requiring municipalities to divert 20% of their waste to recycling and composting operations annually to avoid exceeding their preferred rate cap. RIRRC staff also meets with municipal representatives to increase diversion of L & Y from the municipal waste stream. The RIRRC is currently engaged in a project with the City of Providence to improve the performance of their L & Y collection program.

As a consequence of increases in their total incoming tonnage, RIRRC has increased composting capacity from approximately 17,000 to 25,000 tons per year and currently maintains this capacity.

RecoverMat

In order to reduce costs and save on the amount of virgin gravel placed in the landfill, an alternative daily cover material was developed, called RecoverMat. It is made by grinding construction and demolition debris (C&D) into a pulp. C&D is made up of wood, brick, drywall, and other non-putrescible waste resulting from residential and commercial construction and building demolition. RecoverMat restricts airflow, which

aids in odor control. It is non-porous and aids in erosion prevention by absorbing and retaining water. 76,375 tons of RecoverMat material was taken out of the incoming waste stream, accounting for 5.4 percent of the total waste tonnage received at RIRRC facilities in 2003. Of that amount, 89% was processed into useable landfill cover while only 11 percent was landfilled. RIRRC could charge the full commercial rate for all waste entering the Recover Mat facility, thereby encouraging more recycling of this material prior to receipt by RIRRC, which could save additional landfill space.

Materials Recycling Facility (MRF)

The MRF facility handles household and commercial recyclable goods like plastics, cardboard, aluminum, steel, newspaper, etc. In the facility the materials, which are collected in bulk, are segregated by type and packaged for shipment to off-site facilities where they are used as the raw materials for new goods. In the 2003 calendar year approximately 6.5% of the total RIRRC waste stream was sent to the MRF for recycling. A total of 93% of the material received by the MRF was processed and sold. The remaining residue was landfilled.

Tipping Facility

RIRRC operates a facility that provides for the ability to inspect waste for inappropriate materials, as well as cull additional recyclable materials from the waste stream prior to landfilling. This facility has the ability to remove recyclables from the waste stream before it is taken for disposal at the working face (and could do more recycling). RIRRC has indicated that three waste inspectors are currently employed to remove recyclable and/or inappropriate waste materials from incoming loads, and as much as 82 tons per day of recyclables have been removed from the incoming waste stream. As is indicated in the Tip Facility Operating Plan, however, the incoming waste stream removal rate is at or approaching the practicable limits based upon its current design, and additional waste-end recycling may be of marginal utility.

Public Education

Although not properly within the ambit at the Phase V license, RIRRC does conduct educational outreach programs, particularly school-based education. The thrusts of the program are in the classroom, local and municipal outreach, and tours of RIRRC Facilities. Three contracted educators were engaged and/or a second tour guide engaged to increase the number of school children reached with Environmental Education on solid waste handling and recycling. These programs seek to increase awareness of and encourage recycling and source reduction.

Continued Improvement in Recycling

There is an intrinsic challenge to significantly increasing the volume of material diverted from disposal for recycling at the residential, municipal and commercial levels. Without a direct economic incentive, the majority of residents will not dramatically alter

their behavior to minimize waste generation. At the municipal and commercial levels an economic incentive is required at a minimum and should be coupled with enforceable contractual and regulatory requirements. DEM believes additional improvements could be made by the RIRRC towards increasing commercial recycling through more effective inspections of waste entering the facility and rejection of waste loads that do not meet recycling standards.

Despite the full implementation of the Maximum Recycling Program statewide, the volume of material diverted by the municipalities from disposal for recycling has not attained levels expected from a program targeting 35% of the residential waste stream. RIRRC believes there are several potential reasons for this, not the least of which is that the municipal solid waste tip fee has remained at \$32/ton since 1993, and is well below prevailing disposal rates in the region. Even with municipalities able to deliver recyclables to RIRRC at no charge, the low municipal tip fee does not provide a significant economic incentive for them to divert materials from disposal when the cost of the additional collection vehicles and labor is considered.

Other Alternatives

How much does a typical Rhode Island resident spend for its waste disposal-related services? Unless a household contracts privately with a commercial waste hauler for its waste disposal service, the per-household cost for the service is essentially hidden in the local property tax. In addition, residents have no control over how much they pay for this service. There are several variations of volume or unit-based variable-rate pricing for residential solid waste disposal. The most common is known as Pay-As-You-Throw (PAYT).

PAYT is an alternative mechanism to fund waste collection and disposal services. PAYT programs can be structured in different ways. In some programs, residents pay different fees for different sizes of trash containers. In other PAYT communities, it works on a per-container basis: households are charged for each bag or can of waste they generate, usually managed by selling bags for a fixed price. A few communities bill residents based on the weight of their trash. "Two-tiered programs" offer residents one can of trash for a flat fee. Additional trash is then only collected if placed in specially marked or tagged bags provided by the municipality. A common element of all PAYT programs is that unlimited quantities of recyclables and leaf & yard waste are collected at no extra charge.

There presently are two communities in Rhode Island with successful PAYT programs, North and South Kingstown. Both these communities have implemented PAYT unit-based pricing for refuse at their transfer stations (which is used by approximately 50% of their residents). North Kingstown implemented unit-based pricing for trash and began collecting recyclables at curbside at no charge in July of 1999. South Kingstown charges residents according to the amount of waste delivered to their Rose Hill Regional Transfer Station. Residents have access to unlimited recycling at no charge for a wide variety of materials.

Implementation of PAYT programs may present the greatest potential to increase diversion of Municipal Solid Waste from disposal by cities and towns. Given this, beginning in fiscal year 2004, RIRRC made available \$240,000 for two municipalities that had expressed interest in implementing PAYT to defray start-up costs. RIRRC plans to continue to offer a minimum of \$100,000 annually in grant funding to offset start up costs for municipalities seeking to implement PAYT programs. Additional efforts, however, are still needed to increase the State's commercial recycling rates.

2. Waste Capacity

Comments were received indicating that waste in Rhode Island is being generated at a rate well in excess of projections provided in the State Guide Plan (Element 171).

As stated above, the Rhode Island Resource Recovery Corporation (RIRRC) is currently in the process of re-writing and updating the Rhode Island Comprehensive Solid Waste Management Plan. The current plan was last approved in 1996, and included disposal capacity projections for the State at that time. The disposal needs at RIRRC in recent years, however, has continued to increase.

It is the position of the Rhode Island Resource Recovery Corporation that it met the objectives and requirements of Rhode Island General Laws 23-19-4 (b). The Corporation disputes that the projections incorporated into the 1996 Plan were inaccurate. RIRRC has argued that for many reasons, outside the control of RIRRC, the projections did not hold true. The newly amended Draft Comprehensive Solid Waste Management Plan should address the changes in circumstances, which RIRRC has argued include that several additional municipalities began bringing waste to the RIRRC which was not anticipated at the time of adoption of the 1996 Plan. Further, the transportation and disposal of Rhode Island municipal waste in neighboring Massachusetts's facilities ceased and that material, which was expected to continue to be disposed of outside Rhode Island, in fact came to the Central Landfill. All of the above changes in circumstances should be detailed in the new plan, along with new projections of future capacity needs. The new Plan will be subject to public review and comment, and approval by DOA Statewide Planning.

As part of the Phase V License approval, DEM has included conditions that require RIRRC to report out periodically to both the public and local elected representatives, on the effectiveness of their efforts moving forward. These reporting requirements are new, and should provide a framework to continue interaction and dialog between RIRRC and interested parties on this critical subject. DEM is concerned with the increase in disposal rates in recent years, and the potential for out-of-state waste to be disposed of at RIRRC, and believes every effort must be made to preserve landfill capacity.

3. Specific comment on public hearing process, baseliner elevations, wetland issues, and residential well studies.

After the formal hearing Mr. Jeff Pearson was given the following information orally by Mr. Hellested (DEM), and Mr. Summerly (a consultant for the RIRRC). The responses are as follows:

1. Following the public workshop a public hearing will be held on March 16, during which the Department will accept both written and verbal comments from the public. The hearing begins a 30-day public comment period. Following the end of the comment period the Department has 90 days in which to respond to the public comments and address any substantive and relevant comments to the proposed Phase V Landfill permit application.
2. The baseliner sub-grade elevation at the approximate center of the proposed Phase V Landfill cell is 325 feet with respect to the National Geodetic Vertical Datum (NGVD). Figure 1 shows the locations of the existing and proposed Phase V landfills with respect to local features.
3. The southern/downstream reach of the Cedar Swamp Brook was relocated in accordance with a wetlands permit issued by the Department. Relocation began in the summer of 2002 and was completed (open for flow) in May 2003
4. Yes, there have been numerous studies of offsite residential water supply wells. Between 1980 and 1988 RIDOH sampled 274 offsite wells on numerous occasions resulting in 600 total samples taken. The EPA and GZA also sampled and tested a number of these residential wells for a broader set of parameters. In addition, GZA installed one deep (greater than 300 feet below ground surface) multi-level well and one standard monitoring well through the dam separating the Upper and Lower Simmons Reservoir. Data from each of these studies has been evaluated and incorporated into the human health and ecological risk assessments conducted as part of the Operable Unit 2 Superfund study of Central Landfill and the surrounding area.

4. **Buffers:**

A number of comments were received by the Department regarding the establishment and maintenance of buffer zones between the landfill facilities and surrounding residential and industrial/commercial properties.

The Phase V Landfill, as proposed, does have the minimum 600' buffer zone required by the Solid Waste Regulations. Many comments were received, however, that related to property buyout provisions and other legislative mandates that go beyond the specific regulatory authority of the DEM as part of this licensing process. DEM has supported many of these legislative efforts, and believes that maintaining an adequate buffer around the facility is critical to community.

As a condition of the Phase V license, an Annual Report is required to be prepared and distributed by the RIRRC that will include a description of efforts to maintain and/or revegetate the buffer zone in accordance with applicable statutes.

Prior to permitting of the Phase V Landfill, RIRRC expended on the order of \$23,000,000 to acquire residentially zoned property located within 2,000 feet of the Central Landfill. R.I. Gen. Laws 23-19-34 and 23-19-35 mandated this action. Specifically, in accordance with R.I. Gen. Law 23-19-34, RISWMC, on October 6, 1989, RIRRC (then the Rhode Island Solid Waste Management Corporation – RISWMC) acquired by eminent domain all of the residentially zoned property located within 1,000 feet of the facility as well as all residentially zoned property located on Simmons Lake Drive in Johnston, Rhode Island ("Eminent Domain Property"). The R.I. General Assembly authorized this eminent domain taking for the stated purpose of creating a buffer zone around the operational portion of the CLF. General Law 23-19-34 prohibits the use of the Eminent Domain Property for any type of residential purpose. In accordance with R.I. Gen. Laws 23-19-35, the RIRRC completed an optional purchase of residentially zoned property, located between 1,000 and 2,000 feet of the landfill (Optional 2000' Property).

The acquisition of the Eminent Domain Property as well as the Optional 2,000 Foot Property was funded, pursuant to R.I. Gen. Law 23-19-36, solely "...from revenues generated by use of the Central Landfill and from other such sources as may be available, including proceeds from the sale of houses, structures and land under Sections 23-19-34.1 and 23-19-35.1.1."

Within the Eminent Domain Property, General Law 23-19-34.1 intends that: 1) at least part of this property be utilized as a buffer zone; 2) that all houses and structures acquired by the RIRRC must be removed from the Eminent Domain Property; and 3) that all undeveloped property not utilized for the buffer zone may be sold, but only for industrial uses. The language of R.I. Gen. Laws 23-19-34 through 23-19-35.1 is strongly suggestive of a legislative intent to eliminate all residential use and residential structures within the Eminent Domain Property. General Law 23-19-35 allows residential property owners within the Optional 2,000 Foot Property the choice of: 1) exercising the option to sell their residential property to RIRRC; 2) electing to remain on their property; or 3) exercising any other option that any other landowner possesses such as selling to a third party.

Copies of each of the General Laws relating to creation of these buffers are attached as Exhibits 1 through 5.

5. Odors:

Numerous residents complained about odors, particularly at night and in the early morning when the air is still.

RIDEM has received numerous complaints about odors from the landfill from area residents. When a complaint is received, a follow up inspection is required to determine if the odor violates the "objectionable odor" standard specified in the regulations. Rule

1.4.03(c) of the Solid Waste Regulations specifically states “*Odors: a solid waste management facility or composting facility, whether licensed or unlicensed, shall not emit or cause to be emitted into the atmosphere any air contaminant or combination of air contaminants which creates an objectionable odor beyond the property line of said facility. Odor evaluations shall be conducted by Department personnel to determine if an odor is objectionable by taking into account its nature, concentration, location, duration, and source.*” In the past the Department has conducted inspections both during and after normal working hours in response to odor complaints received. Formal Notices of Violation and Penalties (NOVAP) have also been issued against RIRRC for cases when the inspector verified an “objectionable odor” beyond the property line of the facility. As a result of the issuance of these NOVAP’s, penalties have been assessed and collected from RIRRC, and more importantly, corrective actions have been required and implemented at the facility.

To control refuse odors, the active portions of the landfill are required to be covered on a daily basis with a minimum of 6 inches of soil, or RIDEM approved alternative cover such as RecoverMat. Inactive areas of the landfill are also required to be covered with 12 to 24 inches of soil; depending on the length of time the area is to be dormant. When not covered properly, these inactive areas may cause odor problems. The RIRRC is required to maintain proper coverage of these areas, as well as implement effective and consistent sedimentation and erosion control measures to prevent erosion/washouts. Exposure of the waste can lead to escape of gas, which causes odors. Areas of the landfill that are full and at final grade are capped with 36 inches of soil and a 60 mil. thick plastic membrane. As a result of public comment, new conditions have been added to the License, to ensure the cover applied by RIRRC meets or exceeds the minimum regulatory requirements.

In addition to applying appropriate cover to the landfill; controlling odors at a landfill such as Central Landfill also requires gas collection and treatment. Soil cover alone is not generally an effective barrier against the migration of landfill gas (gas produced by the decomposition of organic matter by bacteria that generally contains 40 to 50% methane, 40 to 50% carbon dioxide and traces of odor causing compounds such as hydrogen sulfide, mercaptans and volatile organics), which can carry odors significant distances. That is because landfill gas is generated at significant positive pressures within the waste. The most effective way to control the migration of landfill gas odors is to collect and destroy or reuse the gas. According to information provided by RIRRC, the Corporation has spent well in excess of \$15 million on landfill gas collection systems and control devices in the last four years. Improvements to the landfill gas control systems include: 1) the drilling of more than 30 new gas collection wells bringing the total to 144; 2) installation of two portable landfill gas destruction flares, each capable of burning 2,000 standard cubic feet per minute (scfm) of gas; 3) construction of a 6,000 scfm ultra-low emission fixed ground flare; 4) installation of two new landfill gas-fired electrical generators, bringing the total to 11, each capable of destroying approximately 500 scfm of gas; 5) construction of 4,000 scfm gas booster station to facilitate moving gas from the flares to the generators for beneficial reuse; and 5) approximately 70,000 linear feet of gas collection pipe installed in Phase IV Landfill. These activities were

conducted in addition to the daily maintenance and routine upgrades that are part of the landfill gas control system operation and maintenance.

Planned improvements for the next 12 to 24 months include: 1) the drilling of 30 to 40 more gas collection wells; 2) the installation of more than 20,000 feet of gas collection pipe; and 3) the addition of 4 to 6 more landfill gas-fired electrical generating engines.

To ensure odors are controlled at the facility, effective implementation of the above measures is required by RIRRC. The RIRRC is also responsible for ensuring proper erosion control at the landfill (to avoid exposure of previously covered waste), and the maintenance and upgrade of gas services at the landfill. Should the above measures not be effectively implemented by RIRRC, and odors result beyond the facility property line, the DEM will continue to follow up on any complaints received, and use the enforcement authorities available to it to compel RIRRC to fix the problem.

6. Compliance Issues:

A number of comments were received about the myriad of historic compliance issues at Central Landfill.

A number of formal enforcement actions (e.g. Notice of Violations and Penalties - NOVAP's) have been issued against RIRRC over the past several years, for both permitting and operational issues at the facility. The settlement of these actions has resulted in the assessment and collection of substantial environmental penalties, as well as corrective actions being required and implemented at the facility. A complete listing of all the formal enforcement actions issued and resolved by DEM can be found on the DEM website at www.state.ri.us/dem, under the Office of Compliance and Inspection section entitled "Monthly Enforcement Action Summaries". These summaries are kept up to date, and are meant to communicate to the public what violations have been cited by DEM against a facility, and how the issues were resolved.

The DEM inspects all solid waste management facilities throughout the state. Given the size of the RIRRC operation, and complexity of its many permits, the Central Landfill is inspected at a much higher frequency than any other facility. Minor deficiencies are not uncommon at many solid waste management facilities throughout the State. Often when inspectors observe such deficiencies at a facility, they are noted in the inspection reports and the facility owner/operator is required to correct them. Routinely, the Department initiates the enforcement process by issuing informal enforcement actions (i.e. no penalties), including Notices of Intent to Enforce (NOIs), which identify apparent violations and describe the steps necessary to come into compliance. If the deficiencies are corrected in a timely manner to the satisfaction of the Department, formal enforcement actions (e.g., a NOVAP) with penalties may not be necessary. Formal enforcement actions with penalties are issued for cases of "significant non-compliance", and/or recalcitrant non-compliant activities.

A number of comments were made during the public comment period regarding the timeliness with which alleged violations are resolved. Once alleged violations are discovered and a formal enforcement action is issued by DEM, the recipient of the notice is entitled to appeal that action as part of their “due process” rights associated with the adjudication process. That process can be complicated and extensive, but is designed to protect the rights of all parties involved. DEM, however, is committed to continue responding to citizen complaints, and enforcing the environmental regulations with the resources available to it. A copy of DEM’s enforcement response policy can be found on line at “www.state.ri.us/dem”, under the Office of Compliance and Inspection section entitled “Enforcement Response Options Memo”. This memo outlines in detail how the DEM utilizes its enforcement authorities.

7. Best Available Control Technologies (BACT):

A number of comments were received by the Department regarding the applicability of Federal BACT requirements to landfill gas control devices at the facility.

RIRRC currently uses best available control technology (BACT) criteria in its open flares. EPA and RIDEM regulations require that open, or utility flares, obtain a 98% destruction efficiency for non-methane organic compounds (NMOC). RIRRC has recently constructed a 6,000 standard cubic foot per minute (scfm) ultra-low emissions flare that meets Lowest Achievable Emissions Rate (LAER) criteria, which is a destruction level better than BACT. This enclosed flare should achieve a NMOC destruction efficiency of 99% or better. Emissions testing of this new equipment, required by regulation, is to be conducted in early June to confirm the design destruction efficiency.

The RIRRC is responsible for the maintenance and upgrade of gas services at the landfill.

8. USEPA Enforcement Actions of the Clean Air Act:

A comment was received stating: “Three EPA press releases show recent major violations by Ridgewood of the Clean Air Act, including the fact that in January 2000 EPA ordered several owners and operators of the Central Landfill, including Ridgewood, to comply with the New Source Performance Standards for Municipal Solid Waste Landfills, and EPA specifically found that the Central Landfill has not rigorously evaluated the efficiency of the gas collection system, as is required by law; in March 2000 Ridgewood failed to notify DEM about the existence of its emergency generator, or to even keep monthly records of generator use, both required by law; and in August 2000 EPA had to order Ridgewood to improve its gas collection system to reduce the amount of gas leaking into the atmosphere and surrounding neighborhoods, by these repeated, recent violations of important environmental laws Ridgewood has demonstrated that it is an inveterate polluter, and it is not an applicant that has demonstrated sufficient responsibility to be worthy of the issuance of a DEM permit for this facility “.

Response: The above enforcement actions cited by the commenter were initiated by USEPA in January 2000 and issued to RIRRC, LKD Central Limited Partnership, Central Gas Limited Partnership, Central Gas Corporation and Ridgewood maintaining that all are owners or operators of the Central Landfill.

These enforcement actions were resolved in three separate actions, a July 2003 Consent Decree between the RIRRC and USEPA, a July 2003 Consent Agreement and Order between LKD Central Limited Partnership, LKD Energy Corporation, Central Gas Limited Partnership, Central Gas Corporation (collectively known as the Gas Companies) and the USEPA and a August 2001 Consent Agreement and Order between Ridgewood and the USEPA.

In resolving these enforcement actions the USEPA found Ridgewood to be in violation of the requirement to conduct emissions tests of its engines only in the August 2001 Consent Agreement and Order. The violations cited by the commenter were attributable to either RIRRC or the Gas Companies.

As stated earlier, the RIDEM Office of Air Resources maintains that the facility is presently in compliance with applicable state and federal air pollution requirements.

9. Health Issues:

The Department received a number of comments from the public regarding the potential impact of the existing and proposed facilities on the health of residents living in close proximity to the landfill.

The potential health impacts of the landfill on the surrounding community have been evaluated by a number of studies conducted under the direction of the Department, the Environmental Protection Agency (EPA), and/or the Rhode Island Department of Health. The following paragraphs provide a brief summary of the work conducted for each study and the relevant findings. The full documents are available for review at RIDEM's office in Providence, RI, at the EPA document repository in Boston, MA and the Marian Mohr Library in Johnston, RI.

Operable Unit 1 Superfund Study

The Operable Unit 1 (OU1) Superfund evaluation was conducted in the late 1980s and early 1990s. A great deal of field exploration and chemical testing was conducted in order to provide information to conduct a risk assessment (a conservative mathematical evaluation of the potential health effects to humans and the environment based on conditions at and around a facility), including:

- Bedrock fracture trace analyses,
- Drilling 70 boreholes with monitoring wells,
- Test pit explorations,
- Surficial and borehole geophysical analysis,

- Collection and analysis of approximately 1250 groundwater, surface water, soil, sediment, air, landfill gas and waste samples for more than 68,100 parameters,
- Detailed studies were undertaken to evaluate the potential for cross watershed groundwater flow,
- Surface water samples were taken from on and off site water bodies, including Upper Simmons Reservoir, Almy Reservoir, and Cedar Swamp Brook.

The RI report was reviewed by both the RIDEM and EPA and was formally accepted in June 1993.

CDM Federal Programs Corporation (CDM) conducted the Operable Unit 1 risk assessment on behalf of the EPA. They looked at a number of potential human-contaminant exposure pathways including: soil exposures to site workers and trespassers; groundwater use by on-site and off-site individuals; recreation by area residents in the Upper Simmons and Almy Reservoirs and associated contact with surface water and sediment; and air inhalation by on-site and off-site individuals. The two exposure pathways identified as warranting further evaluation were groundwater use as a potable source and recreation in area surface water bodies.

CDM identified 26 contaminants as posing a potential concern to public health. The human health risk assessment completed for the 26 contaminants under the two potentially complete exposure pathways showed that:

- The ingestion of on-site groundwater from areas downgradient of the landfill posed an unacceptable risk to human health; and
- The use of off-site area ponds for recreational purposes posed no unacceptable risk to human health.

As a result of the risks posed by the use of on-site groundwater a remedial plan was developed for the landfill following the EPA's Feasibility Study (FS) process. This study evaluated a range of remedial activities applicable to both a landfill and site conditions. The presence of dense non-aqueous phase liquids (DNAPLs) in the bedrock and more than 17 million cubic yards of refuse in the landfill favored waste containment techniques. Capping of the wastes, groundwater extraction and treatment, and innovative techniques to address chemical sludges in a "Hot Spot" (area where liquid industrial chemical waste was disposed of between 1976 and 1979) were considered. Ultimately, the EPA and RIDEM selected a remedy that consists of capping the landfill with a synthetic membrane and low permeability soils, pumping and treating contaminated groundwater from the ½ acre Hot Spot, supplying clean drinking water to all area residents and limiting future use of the aquifer beneath the landfill property and limiting access to the site. The EPA issued the Record Of Decision for OU1 remedy in June 1994.

Operable Unit 2

The Operable Unit 2 (OU2) Superfund evaluation was conducted between 1995 and the early 2000s. The focus of this study was the evaluation of offsite contaminant migration

via surface water movement and groundwater flow in soils and bedrock, and the resultant public health and ecological impacts to receiving water bodies and wetlands. OU2 RI studies have included additional geophysical studies, the installation of more than 20 new overburden and bedrock monitoring wells, completion of long term aquifer pump tests, sampling of numerous residential water supply wells, extensive surface water and sediment sampling and analysis, wetlands delineation and characterization of terrestrial and aquatic communities.

A baseline Human Health Risk Assessment was completed for the OU2 study by GZA following guidance developed by the EPA. This study evaluated potential impacts to off-site residents via groundwater use and on-site and off-site impacts to ecological receptors. GZA also conducted an additional evaluation of the potential risks associated with the recreational use of off-site area waters. The study found that existing and foreseeable future conditions pose no unacceptable risks to human health or the environment.

Based on these findings an additional FS was not warranted; however, the zone of groundwater use limitations was extended off-site to the shores of the Upper Simmons Reservoir and the area between the landfill and the Almy Reservoir.

ATSDR Study

The Agency for Toxic Substances and Disease Registry (ATSDR) performed a health consult at the request of the Rhode Department of Health. This consisted of an analysis of potential adverse health effects due to air emissions from the landfill. Hydrogen sulfide was monitored in residential areas to the north, northeast, and east of the landfill. The monitoring sites were all within 1 km of the landfill. Volatile organic compounds (VOC) were also monitored for at these sites during odor episodes. Air samples taken at these sites were analyzed for sulfur compounds. Levels of NO₂ and SO₂ were measured outside two residences and a municipal building. In addition, an air monitoring station was installed at Wood Lake Park to measure products of landfill gas combustion (NO₂, SO₂, and aldehydes). The station was operational from March 22, 2001 until May 10, 2001.

Because the long-term effects of odor exposure are unknown, ATSDR classified the emissions as an Indeterminate Public Health Hazard. However they concluded that for current conditions, levels of hydrogen sulfide, NO₂, and aldehydes present No Public Health Hazard, and that levels of SO₂ are below levels expected to cause adverse health effects and concluded SO₂ levels pose No Apparent Public Health Hazard.

Environmental Compliance Monitoring

The Environmental Monitoring Program (EMP) for Central Landfill was prepared by RIRRC to address three specific needs.

1. To document in one place all environmental monitoring programs (12) which currently are required at the site. These programs are;
 - Operable Unit 1 post-closure groundwater monitoring,
 - Phase II/III Landfill post closure groundwater leachate monitoring,
 - Phase IV Landfill groundwater/leachate monitoring,
 - Surface water monitoring,
 - Sediment monitoring,
 - Air monitoring,
 - Methane monitoring,
 - Industrial Storm water monitoring (RIPDES),
 - Industrial waste water monitoring,
 - Liquid waste/sludge monitoring,
 - Interior radon monitoring,
 - And compost monitoring.
2. To address the OU-1 Superfund site environmental management program (with guidance for USEPA and RIDEM). The Statement of Work (SOW) to the Consent Decree (CD) outlines requirements for monitoring and reporting, measure effects of the installation of the landfill cap on concentrations of contaminants migrating beyond the landfill boundary and to ensure that contaminant concentrations are not increasing with time and/or have an adverse impact of human health and the environment.
3. To address the Environmental Management District Regulation (EMD), which is designed to mitigate potential impacts to the environments of Cranston and Johnston from land filling and materials recycling operations.

Environmental sampling and analysis includes:

- Quarterly sampling and analysis of samples from 36 groundwater monitoring wells for a list of 76 parameters,
- Annual sampling and analysis of samples from 44 groundwater monitoring wells for a list of 76 parameters,
- Quarterly sampling and analysis of samples from 8 surface water sampling locations, within Cedar Swamp Brook and sedimentation ponds, for a list of 72 parameters,
- Annual sampling and analysis of samples from 7 sediment sampling locations, within Upper Simmons Reservoir, for a list of 75 parameters,
- Quarterly sampling and analysis of samples from 7 leachate sampling locations for a list of 139 parameters,
- Quarterly air sampling and analysis of samples from 4 locations for a list of 61 parameters,
- Quarterly methane monitoring of 6 monitoring wells and 24 locations within on-site buildings,
- Quarterly storm water sampling and analysis of samples from 9 discharge locations for total suspended solids (TSS) and bi-weekly monitoring of 2 locations for turbidity,
- Monthly industrial wastewater monitoring for various parameters (varies by month),

- Six individual sampling and analysis rounds of sludge or stock piles (for 43 parameters),
- Interior radon monitoring of on-site buildings every 3 years, and
- Quarterly compost monitoring of leaf and yard waste for 23 parameters.

In total, this results in the collection and analysis of samples from over 130 sampling locations for over 140 different parameters on an annual basis. From these programs we have developed the following general conclusions:

1. Degradation of groundwater and surface water quality down gradient of the 121 acre unlined Phase I Landfill has occurred. The major contaminants of concern are benzene, chlorobenzene, 1,2-dichlorobenzene and 1,4-dichlorobenzene, which are likely sourced by wastes disposed of in the Hot Spot prior to RIRRC's purchase of the facility.
2. Inorganic contamination is present at lower concentrations over a wider area likely due to the presence of landfilled materials as well as metals occurring naturally in the granitic bedrock underlying the area.
3. No significant migration of methane has been observed.
4. No significant off-site migration of airborne contaminants has been observed.
5. Low concentrations of organic and inorganic contaminants are present in Upper Simmons Reservoir sediment samples.

The current remediation under Superfund of the Hot Spot area within the unlined Phase I Landfill will address a portion of the down gradient migration of volatile organic compounds from the site.

The proposed Phase V Landfill design meets all current regulatory standards

10. Threats to Scituate Reservoir:

A number of comments were received by the Department regarding the potential for the proposed landfill to affect surface water quality within the Scituate Reservoir.

Based upon a number of geological studies performed to date, the area around Central Landfill is generally made up of a layer of glacial till covering granitic bedrock. The bedrock dominates the topography, causing hills and valleys in the landscape. When combined with the relatively wet climate in New England, this results in a relatively shallow groundwater table and causes groundwater divides to generally follow surface water divides.

The current licensed landfill has a total area of 199 acres, of which, 195 acres (98%) lie in the watershed of the Upper Simmons Reservoir. The remaining 4 acres lie in the watershed of the Almy Reservoir. The divide that separates the groundwater flow is at the northeast corner of the landfill site. As shown on Figure 2, the proposed Phase V Landfill will lie entirely within the watershed of the Upper Simmons Reservoir. Flows south and west feed the Upper Simmons Reservoir directly, or flow into streams, which

then feed the Upper Simmons Reservoir. Flows north and east of the divide feed the Almy Reservoir. The divide is somewhat variable, changing with the amount of recharge to the watershed. Due to the size of the Upper Simmons and Almy Reservoirs and the estimated depth of the groundwater flow field, water is not expected to pass under either reservoir; rather it up-wells and discharges into the surface water bodies.

Figure 1 shows inferred groundwater contours and flow directions for the Central Landfill area. The arrows show that groundwater flows radial toward the landfill, away from the Scituate Reservoir watershed, and into the Upper Simmons and Almy Reservoirs. Inter-watershed flow can occur, through manmade alteration of groundwater flows, or through fractures in bedrock. However, numerous studies have shown that this is not the case for this site. Based on all available data, we believe that the RIRRC has demonstrated that the Scituate Reservoir is not a receptor of groundwater that emanates from the Central Landfill. The United States Geological Survey (Johnson, 1986), the Army Corps of Engineers (Dept. of the Army Corps of Engineers, 1992), consultants for the Providence Water Supply Board (CH₂M Hill, 1988), and the US Environmental Protection Agency (USEPA) have reviewed this same issue and have reached the same conclusion. The hydrologic evaluation, of the Phase V area has also concluded that the proposed cell will have no impact on the Scituate Reservoir or its watershed.

Environmental monitoring of groundwater and surface water conditions between the landfill and the reservoir is conducted on a regular basis to provide an early warning of unforeseen problems. This monitoring has not provided any evidence of contaminant migration into the Scituate Reservoir watershed.

11. Environmental Monitoring Plan (EMP) Monitoring Issues:

The Department received a number of comments from the public regarding the status of environmental monitoring programs at the facility.

Environmental monitoring has been ongoing at the facility since 1981. Monitoring programs have been upgraded and expanded with time to address changes in regulations, monitoring technologies and facility expansions. The environmental monitoring programs conducted currently include sampling and analysis of groundwater, surface water, air, soil, sediments, leachate, methane, radon. These monitoring programs are performed in accordance with an Environmental Monitoring Program (EMP) plan that is approved by both the Department and EPA. This plan is updated on a regular basis and was most recently revised in February 2004 to address the addition of the Phase V Landfill.

12. Host Community Agreement:

The Department received comments concerning the prohibition on westward landfill expansion contained in the Host Community Agreement.

The DEM is not a party to the Host Community Agreement between the RIRRC and the Town of Johnston. Enforcement of the Agreement, therefore, is the responsibility of the document signatories. The Phase V Landfill does expand the existing footprint to the south, which may or may not be allowed by the current Agreement. Figure 1, attached, shows the relative locations of the new and existing landfill cells and the access route to the landfill from Interstate 295. The granting of this license by DEM shall in no way affect the applicant's responsibility to meet all zoning and other local ordinances, nor the applicant's responsibility to obtain any local permits, except as provided by Rhode Island general Laws.

13. Incineration of Refuse:

The Department received several comments regarding the use of incineration of refuse instead of landfilling.

RI General Law 23-19-3 restricts the use of incinerators by RIRRC because of the perceived health hazards and elevated cost associated with the incineration of solid waste. A copy of Rhode Island General Law 23-19-3 is attached as Exhibit 6. The Department has no authority to change the law, which requires the approval of the Legislature.

14. Seagull Issues:

The Department received a comment regarding seagulls in nearby waterways.

Seagulls can be a major problem at landfills and other solid waste disposal sites. Bird control may also be needed at airports, golf courses and other sites. Control measures help to reduce the number of seagulls present at landfills. Standard control measures are harassment through noise and visual means, and limited lethal control. Harassment through noise includes bird distress calls, fireworks and propane cannons. Visual harassment is done using objects made to look like the gull's natural predators, such as birds of prey. Lethal control is done only on a limited basis due to restrictions on the number of birds that can be killed in one year.

However, gulls can become accustomed to harassment if it is not variable. The presence of humans has been found to increase the effectiveness of harassment measures. A number of harassment measures enacted together stand a better chance of significantly reducing gull numbers, rather than a single measure enacted on its own. State of the art control measures involve use of dogs or falcons for seagull control. Dogs have been used successfully to control geese on golf courses and they may find use at landfills. Falcons have been used for bird control at airports and falcons are presently being used, with some success, at Red Deer Landfill in Alberta, Canada ("Licensed to Harass", 26). Elimination of seagull populations at landfills may be the goal of seagull control, but this may not be practical. Successful control measures should reduce the population of seagulls visiting the landfill site.

RIRRC uses explosive noisemakers as their primary control mechanism. They also have a Federal and State permit to cull the seagull population, which by permit must be used as a last resort. RIRRC can kill up to 500 gulls (depending on the exact species) per year under their current permit.

RIRRC is required to implement a combination of measures, to ensure effective control of vectors, and the seagull population.

Section 14 References:

Baxter, Andy. "Evaluation of Bird Control Landfill Sites: Case Studies from the UK." Bird Management Unit Central Science Laboratory UK,
http://www.icao.int/icao/en/ro/nacc/acilac/11_baxter_csl_landfillbirdcontrol.pdf.

Colman, James C. "Gull Controls at Landfills and Other Solid Waste Management Facilities Policy # BWP-98-003". November 2001,
<http://www.mass.gov/dep/bwp/dswm/files/gull.htm>.

"Licensed to Harass". Western Report, Vol. 25, issue 45, page 26, October 26, 2003

Metropolitan District Commission, Division of Watershed Management et al. "Manual for Gull Control at Massachusetts Landfills". May 1998,
<http://www.mass.gov/dep/bwp/dswm/files/gulmanl.pdf>.

Walker, Cameron. "Falconry used to Secure North American Airports." for National Geographic News, March 25, 2003,
http://news.nationalgeographic.com/news/2003/03/0325_030325_falconry.html.

Winnipeg Airports Authority, Wildlife Management Program,
http://www.waa.ca/waa_programs_enviro_EMS_wildlife.htm.

15. Location and "Siting" of the Phases of the Central Landfill:

A number of comments and questions were received about the location and "siting" of the various phases of the landfill.

Response: The locations for all phases of the landfill require review and approval by the State Planning Council. That approval must comply with all statutorily mandated public hearing requirements. The siting approval by the Statewide Planning Council is required **prior to** submission of the licensing application to DEM. The Rhode Island Comprehensive Solid Waste Management Plan, State Guide Plan Element 171 (November 1996) states that the Phase V Landfill is located largely within generic landfill sites CNW and CSW, which have been certified by the State Planning Council. See attached diagram.

16. RIDEM oversight of the RIRRC and Central Landfill:

A number of comments were received concerning the role and effectiveness of DEM in regulating the Central Landfill. Several comments also questioned why the DEM does not have an inspector onsite at all times.

Response: DEM is required by statute to review the landfill license application and all associated plans and documents, conduct public hearings on the license application, issue or deny the license, conduct inspections of the facility, and enforce the requirements in the statutes and regulations for the license and the operation of the facility.

Given the size of the RIRRC operation, and complexity of its permitted activities, the Central Landfill is inspected by DEM at a much higher frequency than any other solid waste management facility in the State. The DEM, however, does not have an inspector onsite during all operational hours. DEM believes the current frequency of inspections is the best use of the resources presently available to it, and it is enforcing the regulations consistent with the intent and limits of its legislative authority. (See also response #6 above regarding enforcement and compliance issues).

17. Public Notice and Public Hearing Process:

Comments were received on the adequacy and effectiveness of the public involvement process.

Response: R.I. State Law mandates the minimum public participation requirements that DEM must adhere to for licensing solid waste management disposal facilities, such as the Phase V Landfill. In accordance with RIGL, Chapter 23-18.9-9, the Department reviewed the license application materials and gave public notice of its intention to issue or deny this license prior to the public hearing process. The Department gave public notice of its intent to issue this license on January 06, 2004. An informational workshop was held on the license application on January 20, 2004, at RIDEM Headquarters, 235 Promenade Street, Providence, RI in accordance with the above statute. A second, additional informational workshop was also held for the public at the Town of Johnston High School, Johnston, RI. A public hearing was held on March 16, 2004 in at RIDEM Headquarters, 235 Promenade Street, Providence, RI and also at the Municipal Court, Johnston, RI in accordance with the above statute. In addition, written comments were received for another thirty (30) days following the close of the public hearing.

18. Unrelated Comments:

There were some comments received by the Department during the public comment period that were not related to the licensing of the Phase V Landfill at the Central Landfill. Those comments are outside the scope of the Department's regulatory authority relative to the licensing of solid waste management disposal facilities.