RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Office of Compliance and Inspection 235 Promenade Street, Providence, RI 02908-5767
Telephone 401-222-1360 Fax 401-222-3811 TDD 401-222-4462

February 2, 2012

CERTIFIED MAIL

Rhode Island Resource Recovery Corporation
c/o Rodio & Ursillo, Ltd., Registered Agent
86 Weybosset Street, Suite 400
Providence, RI 02903

RE: **NOTICE OF VIOLATION**
File No.: AIR 11-24

Dear Sir or Madam:

Enclosed please find a Notice of Violation ("NOV") relating to air pollution violations at a facility/property located at 65 Shun Pike in the town of Johnston, Rhode Island.

PLEASE READ THIS DOCUMENT CAREFULLY. Pursuant to R.I. General Laws Chapters 42-17.1, 42-17.6, 42-17.7 and 42-35 each named Respondent is entitled to request an administrative hearing before the Director or his designee regarding the alleged violations, orders, and/or penalties set forth in this NOV. Further details regarding each Respondent's right to an administrative hearing are provided within the NOV.

If the Rhode Island Resource Recovery Corporation ("RIRRC") wishes to request an administrative hearing concerning this NOV, the request must **be made in writing and be received within twenty (20) days of your receipt of this NOV**. A written request for an administrative hearing must be submitted to:

Administrative Clerk
DEM-Administrative Adjudication Division ("AAD")
One Capitol Hill, 2nd Floor
Providence, RI 02903

A copy of the request for an administrative hearing must also be forwarded to:

Susan Forcier, Esquire
DEM - Office of Legal Services
235 Promenade Street, 4th Floor
Providence, Rhode Island 02908-5767

RIRRC may also wish to arrange for an informal meeting to discuss the NOV with representatives of the Office of Compliance & Inspection ("OC&I"). At that informal meeting, representatives of the OC&I will be prepared to discuss the facts set forth in the NOV, steps that may be necessary to comply with the orders contained therein, pertinent regulatory requirements, as well as issues related to the penalty assessed in this NOV. If agreement on resolution of the enforcement action can be reached, a Consent Agreement may be entered that both resolves the NOV and eliminates the need for an administrative hearing.

Representatives of the OC&I are prepared to discuss a resolution of this matter with RIRRC; however, please be advised that correspondence with the OC&I, including a request for an informal meeting to discuss this NOV, does not constitute a formal request for a hearing and will not protect RIRRC right to a formal hearing before AAD.

If RIRRC wishes to arrange for an informal meeting to discuss this NOV, please contact:

Christopher R. John, Supervising Air Quality Specialist
Office of Compliance and Inspection
235 Promenade Street, Room 220
Providence, Rhode Island 02908-5767
Telephone: (401) 222-1360, ext 7023
Or
Anna Maria Cole, Technical Staff Assistant
Telephone: (401) 222-1360, ext 7431

RIRRC has a right to be represented by legal counsel before AAD or in an informal meeting with the OC&I. RIRRC is not obligated to do so, but if RIRRC plans on having legal representation present at an informal meeting with the OC&I, please inform us at the time of the request for an informal meeting so that we can make arrangements to have legal counsel present.

Sincerely,

Terrence Gray for
David E. Chopy, Chief
Office of Compliance and Inspection

Enclosure: Notice of Violation

xc: Doug McVay, Acting Chief, DEM Office of Air Resources
Thomas McCusker, Environmental Protection Agency, Region I

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

OFFICE OF COMPLIANCE & INSPECTION

IN RE: Rhode Island Resource Recovery Corporation **FILE NO.: AIR 11 – 24**

BroadRock Gas Services LLC

NOTICE OF VIOLATION

A. Introduction

Pursuant to Sections 42-17.1-2(21) and 42-17.6-3 of the Rhode Island General Laws, as amended, ("R.I. Gen. Laws") you are hereby notified that the Director of the Department of Environmental Management (the "Director" of "DEM") has reasonable grounds to believe that the above-named parties ("Respondents") have violated certain statutes and/or administrative regulations under DEM's jurisdiction.

B. Administrative History

On 19 October 2011, the DEM issued an informal written notice to the Rhode Island Resource Recovery Corporation for objectionable odors emanating from the landfill on Shun Pike in Johnston, Rhode Island that were detected beyond the property line of the facility on 12 October and 17 October 2011. In response to the notice, the Corporation submitted a corrective action plan in a letter to the DEM dated 27 October 2011. The DEM concurred with the plan and has been monitoring its implementation.

C. Facts

(1) The subject facility is located at 65 Shun Pike in the town of Johnston, Rhode Island (the "Facility").

(2) The Facility includes a solid waste landfill (the "Landfill") and a landfill gas ("LFG") collection system, which includes gas collectors, two electrical generation plants and several flares (the "LFG Collection System").

(3) The Rhode Island Resource Recovery Corporation ("RRC") owns and operates the Landfill and owns the LFG Collection System.

(4) BroadRock Gas Services LLC ("BroadRock") installs, maintains and operates the LFG Collection System.

(5) The Facility is (and has been) subject to the DEM's Air Pollution Control ("APC") Regulations, including but not limited to DEM's APC Regulation No. 9, entitled *"Air Pollution Control Permits"* and DEM's APC Regulation No. 17, entitled *"Odors"*.

(6) On 18 April 1990, the DEM issued Approval Nos. 1035-1038 to the Rhode Island Solid Waste Management Corporation for the Facility (the "1990 Permit"). The 1990 Permit authorized the Facility to install and operate a 400 cubic feet per minute remote gas flare ("RF1").

(7) The 1990 Permit requires the RRC to notify the DEM of any breakdown or malfunction of RF1 resulting in the discharge of raw landfill gas to the atmosphere within one hour of its occurrence.

(8) The DEM received the following odor complaints concerning the Landfill in 2011: 2 (January); 4 (February); 3 (March); 1 (April); 2 (May); 0 (June); 1 (July); 8 (August); 9 (September); 46 (October); 95 (November); and 72 (December).

(9) The DEM inspected the area around the Facility on 12 October 2011, 17 October 2011, 4 November 2011, 17 November 2011, 25 November 2011, 28 November 2011, and 19 December 2011. On each date the DEM inspector detected a LFG odor from the Facility that was objectionable beyond the property line of the Facility.

(10) On 28 November 2011, the RRC notified the DEM that on 23 November 2011 RF1 became inoperable and did not become operational again until 25 November 2011

(11) On 16 December 2011, the RRC submitted to the DEM a report prepared by its consultant, SCS Engineers, entitled "Landfill Gas Collection System Evaluation, RIRRC Landfill" dated 16 December 2011 (the "SCS Report").

(12) The SCS Report included the following findings:

(a) LFG is delivered to seven (7) control devices located around the Landfill perimeter.

(b) These devices include RF1, remote flare 2 ("RF2") and remote flare 3 ("RF3").

(c) A review of the 2010 and 2011 monthly production reports prepared by Stantec, Inc. for BroadRock revealed the following:

(i) RF1 operated only in November 2011.

(ii) RF2 operated from January through June 2010; sporadically from January through March 2011; and again in October and November 2011.

(iii) RF3 operated from March 2010 through April 2011.

(iv) The average monthly flow of LFG decreased from about 12,300 standard cubic feet per minute ("scfm") in October 2010 to about 10,100 scfm in November 2011.

(v) The average monthly flow of LFG to RF1, RF2, and RF3, collectively was about 2,000 scfm from January 2010 through April 2010; decreased to 1,000-1,400 scfm from May 2010 through February 2011; and decreased to 0 cfsm from May 2011 through September 2011.

(vi) The reduction in site-wide LFG recovery is likely explained by a combination of several factors, which are as follows:

(1) Changes in the use and operation of control devices (specifically, the shutting off of RF2 and RF3).

(2) A reduction in the LFG collection efficiency within Phase V of the Landfill.

(3) Site-wide quantification and metering

(vii) LFG recovery site wide was observed to fluctuate significantly on a day-to-day basis.

(viii) LFG control devices were taken off-line and LFG flow was not increased at the remaining control devices on-line.

(ix) Several flow meter devices were not installed or maintained in accordance with manufacturer guidelines or typical industry standards.

(x) A constant vacuum is not being applied and maintained on the LFG Collection System header piping at all times.

(d) The LFG odors in September through December 2011 are the result of multiple contributing factors, related to both the Landfill operations and management of the LFG Collection System, which have been developing over a period of many months, if not years.

(e) The increase in LFG odors in September through December 2011 are the result of the following factors:

(i) Typical weather conditions present in Rhode Island during the Fall season.

(ii) An increase in the amount of odiferous compounds in the LFG, particularly from Phase V of the Landfill.

(iii) An increase in fugitive LFG emissions, due to a decrease in LFG collection, particularly from Phase V of the Landfill.

(iv) A decrease in LFG collection efficiency as a result of the gas collectors being partially or fully watered-in.

(v) Inadequate intermediate landfill cover in the inactive areas of Phase V of the Landfill.

D. Violation

Based on the foregoing facts, the Director has reasonable grounds to believe that you have violated the following statutes and/or regulations:

(1) **DEM's APC Regulation 9.6.8** – requiring any person who receives a permit to comply with all conditions in the permit.

(2) **DEM's APC Regulation 17.2** – prohibiting objectionable odors to travel beyond the property line of a facility.

E. Order

Based upon the violations alleged above and pursuant to R.I. Gen. Laws Section 42-17.1-2(21), the Respondents are hereby ORDERED to:

(1) **IMMEDIATELY** suspend further use of construction and demolition ("C&D") debris, including fines and Recovermat materials, as cover material on the Landfill. No use of this material is allowed without prior written approval of the DEM.

(2) **Within thirty (30) days of receipt of this Notice of Violation ("NOV")**, submit a plan and schedule to the DEM's Office of Compliance and Inspection ("OC&I") to implement recommendations 1, 2, 4, 5, 6, 8, 10, 11, 13, 14, 15, 16, 17, 18, and 19 as described in Section 6.4 of the SCS Report entitled "Summary of Recommendations". For recommendation 1, the plan must include the installation of an additional horizontal well above the perched water layer to apply collection system vacuum to this shallow area and additional cover to better seal the waste and enhance the effectiveness of the wells.

(3) **Within thirty (30) days of receipt of this NOV**, submit a plan and schedule to the OC&I to implement the recommendations described in a letter dated 17 January 2012 that was issued by SCS Engineers to RRC that evaluated the LFG header system in the Landfill.

(4) Submit written reports to the OC&I each month that includes the following information:

(a) For each day of the month, the average total flow of LFG (ft^3/min) to the

control devices for the day, the maximum flow of LFG (ft^3/min) for that day, and the minimum flow of LFG (ft^3/min) for that day.

(b) Identification of each vertical well and horizontal well where there were exceedances of the operating requirements described in Section C of Approval No. 1810 that was issued by the DEM to the RRC on 16 September 2004 (the "Phase V Permit") or Approval No. RI-PSD-10 that was issued by the DEM to the RRC on 16 December 2010 for landfill gas temperature, nitrogen or oxygen in the vertical wellheads and/or trench headers in the uncapped areas of Phase IV of the Landfill and all areas of Phase V of the Landfill.

(c) Identification of each vertical well or horizontal well where a positive pressure exists in the uncapped areas of Phase IV of the Landfill and all areas of Phase V of the Landfill.

The report for January 2012 is due by 15 February 2012. All subsequent reports are due by the 15th day of the following month.

(5) Submit written reports to the OC&I each week on the operation of the existing control devices described in Section 3.2.1 of the SCS Report. Specifically, the reports must include information on when a flare or engine went out of operation and when it came back into operation if the flare or engine was out of operation for greater than one hour. If no flare or engine went out of operation for greater than one hour, the report must state as such. The reports are due by the close of business on Monday.

(6) **Within thirty (30) days of receipt of the NOV**, submit a transition plan to the OC&I that describes the procedures or modifications to the landfill gas collection and control system or both that will be used to ensure that the transfer from the current gas collection system to the new gas collection system shall not cause any odor issues beyond the property line of the Facility.

(7) **Within three (3) days of receipt of written notification from the DEM to the RRC of a monitored exceedance of methane at any location on the Landfill**, implement the actions specified in Section D.2.e(2) of the Phase V Permit.

(8) **Within thirty (30) days of receipt of the NOV**, acquire and maintain the capacity to apply Posi-Shell as cover material on the Landfill. Posi-Shell shall be used if the reports required in Section E.4 above or the monitoring described in Section E.7 above indicate that application of Posi-Shell is necessary to provide an effective barrier to the migration of LFG to the atmosphere.

(9) **Within thirty (30) days of receipt of the NOV**, install and make available for use the landfill gas flare that was approved by the DEM under Approval No. 2141 that was issued to BroadRock on 23 December 2011.

F. Penalty

(1) Pursuant to R.I. Gen. Laws Section 42-17.6-2, the following administrative penalty, as more specifically described in the attached penalty summary and worksheets, is hereby ASSESSED, jointly and severally, against each named respondent:

(a) **RRC and BroadRock for Fifty Two Thousand Five Hundred Dollars ($52,500.00)**

(b) **RRC for Two Thousand Five Hundred Dollars ($2,500.00)**

(2) The proposed administrative penalty is calculated pursuant to the DEM's Rules and Regulations for Assessment of Administrative Penalties, as amended, and must be paid to the DEM within twenty (20) days of your receipt of this NOV. Payment shall be in the form of a certified check, cashier's check, or money order made payable to the "General Treasury - Water & Air Protection Program Account," and shall be forwarded to the DEM Office of Compliance and Inspection, 235 Promenade Street, Suite 220, Providence, Rhode Island 02908-5767.

(3) Penalties assessed against the respondents in this NOV are penalties payable to and for the benefit of the State of Rhode Island and are not compensation for actual pecuniary loss.

G. Right to Administrative Hearing

(1) Pursuant to R.I. Gen. Laws Chapters 42-17.1, 42-17.6, 42-17.7 and 42-35, each named respondent is entitled to request a hearing before the DEM Administrative Adjudication Division regarding the allegations, orders and/or penalties set forth in Sections B through F above. All requests for hearing MUST:

(a) Be in writing. See R.I. Gen. Laws Sections 42-17.1-2(21)(i) and 42-17.6-4(b);

(b) Be **RECEIVED** by DEM's Administrative Adjudication Division, at the following address, within twenty (20) days of your receipt of this NOV. See R.I. Gen. Laws Sections 42-17.1-2(21)(i) and 42-17.7-9:

Administrative Clerk
DEM - Administrative Adjudication Division
235 Promenade Street, 3RD Floor
Providence, RI 02908-5767

(c) Indicate whether you deny the alleged violations and/or whether you believe that the administrative penalty is excessive. See R.I. Gen. Laws Section 42-17.6-4(b); **AND**

(d) State clearly and concisely the specific issues which are in dispute, the facts in support thereof and the relief sought or involved, if any. See Rule 7.00(b) of the DEM Administrative Rules of Practice and Procedure for the Administrative Adjudication Division of Environmental Matters.

(2) A copy of each request for hearing must also be forwarded to:

Susan Forcier, Esquire
DEM - Office of Legal Services
235 Promenade Street, 4TH Floor
Providence, RI 02908-5767

(3) Each named respondent has the right to be represented by legal counsel at all administrative proceedings relating to this matter.

(4) Each respondent must file a separate and timely request for an administrative hearing before DEM's Administrative Adjudication Division as to each violation alleged in the written NOV. If any respondent fails to request a hearing in the above-described time or manner with regard to any violation set forth herein, then this NOV shall automatically become a Final Compliance Order enforceable in Superior Court as to that respondent and/or violation and any associated administrative penalty proposed in the NOV shall be final as to that respondent. See R.I. Gen. Laws Sections 42-17.1-2(21)(i) and (v) and 42-17.6-4(b) and (c).

(5) Failure to comply with this NOV may subject each respondent to additional civil and/or criminal penalties.

(6) This NOV does not preclude the Director from taking any additional enforcement action nor does it preclude any other local, state, or federal governmental entities from initiating enforcement actions based on the acts or omissions described herein.

If you have any legal questions, you may contact (or if you are represented by an attorney, please have your attorney contact) Susan Forcier at the DEM Office of Legal Services at (401) 222-6607. All other inquiries should be directed to Martha Mulcahey of DEM's Office of Compliance and Inspection at (401) 222-1360 ext. 7032.

Please be advised that any such inquiries do not postpone, eliminate, or otherwise extend the need for a timely submittal of a written request for a hearing, as described in Section G above.

FOR THE DIRECTOR

Terrence Gray for

David E. Chopy, Chief
DEM Office of Compliance and Inspection

Date: February 2, 2012

CERTIFICATION

I hereby certify that on the 2nd day of February 2012 the within Notice of Violation was forwarded to:

Rhode Island Resource Recovery Corporation
c/o Rodio & Ursillo, Ltd., Registered Agent
86 Weybosset Street, Suite 400
Providence, RI 02903

BroadRock Gas Services LLC
c/o CT Corporation System, Registered Agent
10 Weybosset Street
Providence, RI 02903

by Certified Mail.

Lynne T. DeBritto

ADMINISTRATIVE PENALTY SUMMARY

Program: *OFFICE OF COMPLIANCE AND INSPECTION, AIR*
File No.: *AIR 11 – 24*
Respondents: *Rhode Island Resource Recovery Corporation and BroadRock Gas Services LLC*

GRAVITY OF VIOLATION SEE ATTACHED "PENALTY MATRIX WORKSHEETS."					
VIOLATION No. & CITATION	APPLICATION OF MATRIX		PENALTY CALCULATION		AMOUNT
	Type	Deviation	Penalty from Matrix	Number or Duration of Violations	
D(1) – Failure to report flare outage	Type III *($ 2,500 Max. Penalty)**	Major	$ 2,500	1 violation	$2,500
D(2) – Objectionable odors	Type I *($ 10,000 Max. Penalty)**	Major	$ 7,500	7 violations	$52,500
				SUB-TOTAL	***$55,000.00***

Maximum Penalties represent the maximum penalty amounts per day, per violation.

TOTAL PENALTY PROPOSED UNDER PENALTY REGULATIONS = $ 55,000.00

PENALTY MATRIX WORKSHEET

CITATION: Failure to report flare outage
VIOLATION NO.: D (1)

TYPE		
___ *TYPE I* DIRECTLY related to protecting health, safety, welfare or environment.	___ *TYPE II* INDIRECTLY related to protecting health, safety, welfare or environment.	X *TYPE III* INCIDENTAL to protecting health, safety, welfare or environment.

DEVIATION FROM THE STANDARD

THE DEGREE TO WHICH A PARTICULAR VIOLATION IS OUT OF COMPLIANCE WITH THE REQUIREMENT VIOLATED.

FACTORS CONSIDERED:

Taken from Section 10 (a) (2) of the DEM *Rules and Regulations for Assessment of Administrative Penalties*

(A) ***The extent to which the act or failure to act was out of compliance:*** RRC failed to report a breakdown or malfunction of RF1 to DEM as required by condition 5 of its permit. This breakdown likely contributed to objectionable odors detected beyond the property line of the facility. RRC is a major stationary source of air pollutants subject to state air pollution control regulations. Compliance with permitting and operating requirements is of major importance to the regulatory program.

(B) ***Environmental conditions:*** Not utilized for this calculation.

(C) ***Amount of the pollutant:*** Unknown.

(D) ***Toxicity or nature of the pollutant:*** The nature of the pollutant is landfill gas, a mixture of pollutants.

(E) ***Duration of the violation:*** 5 days. RRC notified the DEM on 28 November 2011 that RF1 was inoperable from 23 November 2011 through 25 November 2011.

(F) ***Areal extent of the violation:*** Not utilized for this calculation.

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(G) ***Whether the person took reasonable and appropriate steps to prevent and/or mitigate the noncompliance:*** RRC failed to report the breakdown of RF1 within the timeframe required by the permit, which is 1 hour after the occurrence.

(H) ***Whether the person has previously failed to comply with any regulations, order, statute, license, permit or approval issued or adopted by the Department, or any law which the Department has the authority or responsibility to enforce:*** RRC has previously failed to comply with air pollution control regulations and other environmental regulations and has received enforcement actions and the assessment of administrative penalties.

(I) ***The degree of willfulness or negligence, including but not limited to, how much control the violator had over the occurrence of the violation and whether the violation was foreseeable:*** RRC had complete control over the violation since the RRC is the operator of the facility. The violation was foreseeable by the RRC.

(J) ***Any other factor(s) that may be relevant in determining the amount of a penalty:*** RRC has been previously cited for the failure to report flare breakdowns or malfunctions to the DEM.

X MAJOR	***MODERATE***	***MINOR***

Penalty Matrix where the applicable statute provides for a civil penalty up to $ 10,000		TYPE I	TYPE II	***TYPE III***
DEVIATION FROM STANDARD	***MAJOR***	$5,000 to $10,000	$2,500 to $5,000	$1,000 to $2,500 ***$2,500***
	MODERATE	$2,500 to $5,000	$1,000 to $2,500	$500 to $1,000
	MINOR	$1,000 to $2,500	$500 to $1,000	$100 to $500

PENALTY MATRIX WORKSHEET

CITATION: Objectionable odors
VIOLATION NO.: D (2)

TYPE		
___X___ ***TYPE I*** DIRECTLY related to protecting health, safety, welfare or environment.	_______*TYPE II* INDIRECTLY related to protecting health, safety, welfare or environment.	_______*TYPE III* INCIDENTAL to protecting health, safety, welfare or environment.

DEVIATION FROM THE STANDARD

THE DEGREE TO WHICH A PARTICULAR VIOLATION IS OUT OF COMPLIANCE WITH THE REQUIREMENT VIOLATED.

FACTORS CONSIDERED:

Taken from Section 10 (a) (2) of the DEM *Rules and Regulations for Assessment of Administrative Penalties*

(A) ***The extent to which the act or failure to act was out of compliance:*** The RRC and BroadRock failed to prevent objectionable odors from the facility from migrating beyond the facility's property line. The landfill is a major stationary source of air pollutants subject to state air pollution control regulations. Compliance with operating requirements is of major importance to the regulatory program.

(B) ***Environmental conditions:*** Not utilized for this calculation.

(C) ***Amount of the pollutant:*** Unknown. Not utilized for this calculation.

(D) ***Toxicity or nature of the pollutant:*** The nature of the pollutant is landfill gas, a mixture of pollutants. The pollutant that was primarily responsible for the odors was hydrogen sulfide.

(E) ***Duration of the violation:*** The facility emitted odors for sufficient duration beyond the property line of the facility to be objectionable to DEM's inspectors on seven (7) separate occasions.

(F) ***Areal extent of the violation:*** The objectionable odors were detected within approximately a 1 mile radius of the facility in neighborhoods within the town of Johnston.

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(G) ***Whether the person took reasonable and appropriate steps to prevent and/or mitigate the noncompliance:*** The RRC and BroadRock failed to take reasonable and appropriate steps to prevent the odors; however, both the RRC and BroadRock took reasonable and appropriate steps to mitigate the noncompliance.

(H) ***Whether the person has previously failed to comply with any regulations, order, statute, license, permit or approval issued or adopted by the Department, or any law which the Department has the authority or responsibility to enforce:*** The RRC has previously failed to comply with air pollution control regulations and other environmental regulations and has received enforcement actions and the assessment of administrative penalties.

(I) ***The degree of willfulness or negligence, including but not limited to, how much control the violator had over the occurrence of the violation and whether the violation was foreseeable:*** The RRC and BroadRock had complete control over the violations. The RRC is the owner and operator of the landfill and the owner of the gas collection system. BroadRock installs, maintains and operates the gas collection system. The violation was foreseeable by the respondents.

(J) ***Any other factor(s) that may be relevant in determining the amount of a penalty:*** Negligence is attributed to the respondents for the neglect of one or more aspects of the operation of the landfill and the gas collection system, thereby causing objectionable odors to travel beyond the property line of the facility.

X MAJOR	***MODERATE***	***MINOR***

Penalty Matrix where the applicable statute provides for a civil penalty up to $ 10,000		***TYPE I***	TYPE II	TYPE III
DEVIATION FROM STANDARD	***MAJOR***	$5,000 to $10,000 ***$7,500***	$2,500 to $5,000	$1,000 to $2,500
	MODERATE	$2,500 to $5,000	$1,000 to $2,500	$500 to $1,000
	MINOR	$1,000 to $2,500	$500 to $1,000	$100 to $500