



RHODE ISLAND

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

CERTIFIED MAIL

March 11, 2011

Mr. Arthur Palmer
AP Enterprises, LLC
28 Teal Drive
Wakefield, RI 02879

RE: Beneficial Use Determination Amendment Approval
Former Portsmouth Landfill Plat 20 Lots 1,2,13 and Plat 25- Lot 2
Portsmouth, Rhode Island

Dear Mr. Palmer:

The Department of Environmental Management, Office of Waste Management is in receipt of the request submitted by VHB on A.P. Enterprises' behalf to amend the Beneficial Use Determination Approval to allow for the acceptance of soils with naturally occurring arsenic above 7 mg/kg at the Former Portsmouth Landfill site. The December 2010 BUD Amendment proposes to allow for the acceptance of soils to be used for grading and shaping purposes with an average arsenic level of 20 mg/kg and a maximum level of 40 mg/kg. No less than ten (10) samples will be collected from each source and the arsenic will be identified as naturally occurring by the absence of any other contaminants (organic or inorganic) within the samples.

Public Notice in the Providence Journal occurred on January 5, 2011 with a Public Meeting on January 18, 2011. Public comments and the Department's responses are attached along with related documents.

Based on the Department's review of the proposed modification, we hereby approve the BUD amendment with the following conditions:

- ◆ This approval is only for soils with naturally occurring levels of arsenic and shall not include media that has been contaminated from a release as defined in the Department's *Remediation Regulations*.

- ◆ As described in your request of December 2010, all sources will have at least 10 samples collected during the assessment. No sample shall exceed 40 mg/kg of arsenic and the average arsenic level shall not exceed 20 mg/kg. The soils shall contain only naturally occurring arsenic and will be identified as such by the absence of any other contaminants above Residential Direct Exposure standards (organic or inorganic) within the sample.
- ◆ As described in the attached “Elevated, Naturally Occurring Arsenic Soil Handling Plan”, of 3/1/2011, A.P. Enterprises shall execute the following:
 - A) Within 14 days of receiving elevated arsenic soils, the soils will be covered with at least 6 inches of soil cover with arsenic levels below 7 mg/kg; or
 - B) If the soils are not covered within 14 days, APE shall post financial assurance in the amount of two (2) dollars for each ton accepted in a mechanism as described in Solid Waste Regulation 1.5.10. Said assurance shall be required to ensure funds are available to complete the work in a timely manner.
- ◆ Regardless of any reclassification of the aquifer below the landfill in the future, in accordance with the Groundwater Regulations and the Department’s Non-Degradation Policy, any soils accepted must be compatible with the area’s GA classification.
- ◆ Soils approved under this BUD amendment shall only be delivered to the site between 7:30 am and 3:30 pm, Monday through Friday.
- ◆ Dust and odor control measures (i.e. wetting down or covering piles) shall be implemented in order to prevent any dust or odors from migrating beyond the property boundary.
- ◆ The Department reserves the right to split samples of any material received and A.P. Enterprises shall be obligated to reimburse the Department for any costs incurred.
- ◆ All other conditions of the previous BUD approval of September, 2010 are still in effect. (see attached)
- ◆ This or any previous approval shall in no way be construed to override or in any way modify other local, state or federal regulatory requirements. We would emphasize this includes ordinances of the Town of Portsmouth and regulations of the Coastal Resource Management Council.
- ◆ A.P. Enterprises shall provide the DEM, its authorized officers, employees, representatives and all other persons under DEM oversight, an irrevocable right of access to the Site at all reasonable times for the purposes of performing inspections, investigations, and testing to accommodate the DEM’s Oversight Plan. The DEM or other authorized designated personnel shall have the right to access the Site 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

revocation of this BUD approval; and/or issuance of a Notice of Violations with Administrative Penalty.

Please notify this office at least forty-eight (48) hours prior to accepting soils under this BUD amendment approval. If you have any questions or comments regarding this letter, please contact me by telephone at (401) 222-2797 ext. 7112 or by e-mail at mark.dennen@dem.ri.gov.

This approval shall be recorded in the land evidence records of the Town of Portsmouth as required by law and a recorded copy returned within ten (10) days of the above date.

Sincerely,



Leo Hellested, P.E.

Chief, Office of Waste Management

cc: T. Gray, L. Grandchamp, M. Dennen, S. Forcier, RIDEM

Laurie Grandchamp, Supervising Engineer OWM/WFM

Mark Dennen, Principal Scientist, OWM/WFM

Terry Gray, Assistant Director



RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

September 20, 2010

Mr. Arthur Palmer
AP Enterprises, LLC
28 Teal Drive
Wakefield, RI 02879

CERTIFIED MAIL

RE Beneficial Use Determination Approval
Former Portsmouth Landfill Plat 20 Lots 1,2,13 and Plat 25- Lot 2
Portsmouth, Rhode Island

Dear Mr. Palmer:

Enclosed please find the Beneficial Use Determination Approval (BUDA) for the above listed property. Please review the stipulations of this BUD thoroughly to ensure your compliance with the requirements.

Please notify this office at least 72 hours prior to the beginning of any work related to the remediation of the property. If you have any questions or comments regarding this letter, please contact me by telephone at (401) 222-2797 ext. 7421 or by e-mail at james.wilusz@dem.ri.gov

This approval shall be recorded in the land evidence records of the Town of Portsmouth as required by law and a recorded copy returned within ten (10) days of the above date.

Sincerely,

Mark M. Dennen
Principal Environmental Scientist
Office of Waste Management

cc: Laurie Grandchamp, Supervising Engineer OWM - Solid Waste program

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

In the matter of the application for
Beneficial Use Determination Approval at:

Office of Waste Management

Former Portsmouth Landfill
Plat 20 Lots 1,2,13 and Plat 25- Lot 2
Portsmouth, Rhode Island

Beneficial Use Determination Approval

In the above entitled matter wherein AP Enterprises LLC as owner of the former Portsmouth Landfill located north of Park Avenue in Portsmouth, filed with the Rhode Island Department of Environmental Management (RIDEM) the following document which fulfill the requirements of the Guidelines on Beneficial Use Determinations ("BUDs") for Source Segregated Solid Waste:

1. Beneficial Use Determination Application- Former Portsmouth Landfill, Plat 20, Lots 1,2,13 and Plat 25 Lot 2, Portsmouth, RI, submitted by VHB, received 8/11/2010.

This document answers and discusses the questions put forth in the application process, in order to ensure compliance with the requirements pursuant to the Department's Remediation Regulations, as amended February 2004, and the Rules and Regulations for Composting Facilities and Solid Waste Management Facilities (Solid Waste Regulations) dated January 1997 in accordance therein.

Upon consideration thereof, the Department of Environmental Management's Office of Waste Management (OWM) approves the Beneficial Use Determination Application through this Beneficial Use Determination Approval (BUDA) provided that:

1. The Department shall receive notification 72 hours prior to the commencement of closure construction activities.
2. All work must be performed in accordance with all applicable regulations and the Department approved Remedial Action Work as modified by the Response to Comments dated July 8, 2010- Portsmouth Landfill, submitted by VHB received 8/11/2010 and must be consistent with Section 11.00 (Remedial Action) of the Remediation Regulations.
3. Grading and shaping material shall consist of soils meeting the method 1 RIDEM Industrial Commercial Standards shall be managed in accordance with the Remedial

Action Work Plan and will be sampled at a frequency of once every 2,500 cubic yards as detailed in your response to comments referenced above. These will be covered with a landfill cap as described below:

4. AP Enterprises will construct a landfill cap within the defined limit of waste to close the landfill in accordance with the Solid Waste Regulations and the Remediation Regulations. The source of the cover material will be evaluated to demonstrate that it does not contain contaminants at concentrations above Method 1 Residential Criteria.

All clean fill imported to the site shall be sampled prior to delivery and placement. Clean fill and loam shall be sampled for arsenic at a minimum frequency of one sample per 1000 cubic yards. One-quarter of the total number of compliance samples of clean fill and loam shall be sampled for total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and 13 priority pollutant metals. All clean fill utilized onsite shall be compliant with the Department's Method 1 Residential Direct Exposure Criteria (RDEC) pursuant to the Remediation Regulations. The Closure Report shall include all original laboratory analytical sampling results from the fill demonstrating compliance with the RDEC and either a statement from the facility that provides the clean fill attesting to the materials origin and suitability or written certification by an Environmental Professional that the fill is not jurisdictional and is suitable for the cap.

5. Placement of the final landfill cap shall commence not later than 90 days after final receipt of the grading and shaping material and finish within one year.
6. Results of all environmental sampling shall be sent to Mark M. Dennen, Office of Waste Management (OWM), 235 Promenade Street, Providence, RI 02908.
7. The OWM shall be immediately notified of any Site or operation condition that results in non-compliance with this BUDA.
8. Any interruptions of the remedial action shall be reported to Mark M. Dennen at the Office of Waste Management by telephone within one (1) working day and in writing within seven (7) days of occurrence.
9. All waste derived from the implementation of the Remedial Action Work Plan / Closure Plan shall either be managed in accordance with the approved Beneficial Use Determination Variance Application, or disposed of in accordance with the Department's Rules and Regulations for Hazardous Waste Management, and the Solid Waste Regulations. In the event waste is disposed of off-site, documentation of proper disposal shall be provided to the Office of Waste Management.
10. The BUDA does not remove AP Enterprises of their obligation to obtain any necessary permits from other state, local, or federal agencies, including the Rhode Island

Coastal Resources Management Council.

11. This BUDA shall be recorded in the Town of Portsmouth Land Evidence records and a recorded copy forwarded back to RIDEM within ten (10) days.
12. This BUDA shall expire two years from the date of issuance and may be renewed yearly after that.
13. AP Enterpirises shall submit quarterly updates to the Department with the following information:
 - Name, address, and quantity received of each source of material
 - An explanation and photographs of construction activities and sedimentation control measures that have been done at the site
 - Sampling that has been done on material received
 - An explanation of any complaints that have been received
 - An updated schedule of timelines to completion of project
14. No Hazardous waste shall be accepted from any off-site sources for treatment, storage or disposal at the Site.
15. An Institutional Control in the form of an Environmental Land Use Restriction (ELUR) for the Site will be recorded in the Town of Portsmouth Land Evidence Records at the time of this projects completion and will specify all the site conditions, restrictions and emergency provisions in order to meet the appropriate Remedial Objectives as defined in the Remediation Regulations and Solid Waste Regulations. Be advised that, because the ELUR is part of the remedy, the Department will require (as will be stated in the ELUR) that the property owner submit an annual inspection report by a qualified environmental professional. This report will be subject to review by the Department. A recorded copy of the Department approved ELUR must be forwarded back to the Office of Waste Management (OWM) prior to issuance of the Interim Letter of Compliance.

This BUDA shall remain in full force and effect provided said Remedial Action Work Plan / Closure Plan is implemented in a manner satisfactory to the Department of Environmental Management. Failure to comply with all points stipulated in this BUDA shall result in the issuance of a Notice of Violation and against the responsible parties.

This BUDA shall be subject to modification or revocation in accordance with the law.

Entered as the Approval of the Department of Environmental Management this 20th day of September, 2010.

By:

A handwritten signature in black ink, appearing to read "Leo Hellested", written over a horizontal line.

Leo Hellested, P.E.
Chief, Office of Waste Management
Department of Environmental Management

Elevated, Naturally Occurring Arsenic Soil Handling Plan

AP Enterprise LLC ("APE") shall give the Rhode Island Department of Environmental Management ("RIDEM") advance notice of all elevated Arsenic soils to be received at the Former Portsmouth Municipal Landfill ("Landfill") under this BUD amendment. The notice shall include all laboratory test data provided to APE by the soil suppliers and copies of all approval documentation submitted by the soil suppliers to APE as part of APE's contractual requirements for acceptance of soils at the Landfill. The notice shall also identify the locations of generation and all data pertinent to acceptance.

Within 14 days of APE receiving elevated Arsenic soils from a particular source covered by this BUD amendment, APE shall submit to RIDEM a drawing showing the location(s) where the elevated Arsenic soils have been placed. APE shall simultaneously submit a statement declaring that the soils have been properly covered by 6 inches of soils meeting the Industrial Direct Exposure Criteria. Alternatively, APE shall be required to establish and maintain an escrow account and deposit in that account an established dollar amount per ton of soils received under this BUD amendment. The escrow funds shall remain in the account until the soils received under this BUD amendment are covered as set forth above. At that time, the escrow funds shall be released to APE. The amount per ton required in the escrow account shall be determined by RIDEM in its reasonable discretion, but shall not exceed \$2 per ton.

APE will place the soils in areas of the Landfill which will be clearly defined in the drawing submitted to RIDEM in a grid pattern using stakes as boundaries to the areas. The stakes will be labeled at 6 inches and 12 inches above elevated Arsenic soil grade as a guide to verify a minimum of 6 inches cover. In the case of large shipments of elevated Arsenic soils, APE will report the receipt of these soils to RIDEM periodically and often enough to ensure that no elevated Arsenic soils remain uncovered for more than 14 days. In all cases, if the elevated Arsenic soils are not covered within 14 days of receipt, the escrow account alternative shall be initiated.

Rhode Island Department of Environmental Management

Former Portsmouth Landfill

Oversight Plan for Acceptance of Amended BUD Material Containing Naturally Occurring Elevated Levels of Arsenic Above 7 mg/kg March 2011

The former Portsmouth Town Dump, also known as the Island Park Landfill, is a privately owned 18 acre site, 14 acres of which was leased as a landfill between 1954 and 1974 by the Town of Portsmouth. The Department's Landfill Closure Program became involved with the site in 2003 when Art Palmer (owner of AP Enterprise "APE") approached the Department about his desire to acquire the site. His original plan was to clean up the site and create a recreational volleyball facility at the site. AP Enterprises has since decided to no longer develop a volleyball complex.

A.P. Enterprises submitted an initial BUD Application in August 2010 requesting to accept soils that were above the Rhode Island Department of Environmental Management's Residential Direct Exposure Criteria and below the Industrial/Commercial Direct Exposure Criteria. The proposed soils would be used for grading and shaping of the landfill contours prior to placement of the final cap.

In December 2010, AP Enterprises submitted a request to modify the Beneficial Use Determination Approval. The proposal is to accept, in addition to other soils already approved, soils containing naturally occurring arsenic above the RIDEM Direct Exposure Criteria of 7 mg/kg (ppm), with an average arsenic level below 20 mg/kg and a maximum level of 40 mg/kg.

Due to public concern and comments received at the January 18, 2010 public hearing and subsequent public comment period, the Department has developed the following Oversight Plan for the Former Portsmouth Landfill. The Department will execute the plan while acceptance of soils containing Naturally Occurring, Elevated Arsenic Levels occurs at the Site.

- The Department will conduct **unannounced** site visits and inspections on a regular basis. The frequency of the site visits and inspections will be based on the progress taking place at the site and the amount of soils that are being brought to the site.
- The Department will verify that the naturally occurring, elevated levels of arsenic soils are covered by six (6") inches of soil containing less than 7 mg/kg of arsenic within fourteen (14) days. If the soils are not covered within the fourteen (14) day time frame, AP Enterprises shall establish and maintain an escrow account and deposit monies into the escrow account on a two (2) dollar per ton basis.
- The Department may collect samples for analysis, if deemed necessary, of any materials received at the site.
- The Department has placed a condition in the BUD Amendment approval limiting delivery of soils containing elevated, naturally occurring levels of arsenic to occur

between the hours of 7:30 am and 3:30 pm, Monday through Friday.

- AP Enterprises shall submit quarterly updates to the Department with the following information:
 - A) Name, address, and quantity received of each source of material
 - B) An explanation and photographs of construction activities and sedimentation control measures that have been done at the site
 - C) Sampling that has been done on material received
 - D) An explanation of any complaints that have been received
 - E) An updated schedule of timelines to completion of project

**DEPARTMENT GENERAL RESPONSES TO COMMENTS RECEIVED
FOR THE LICENSING OF THE APPLICATION TO MODIFY THE
BENEFICIAL USE DETERMINATION OF 9/20/2010**

REGARDING THE FORMER PORTSMOUTH TOWN LANDFILL

March 2011

TABLE OF CONTENTS

1. Project History and Regulatory Approvals	4
2. The Relationship of Regulatory Standards to the Proposal	6
3. Adequacy of Public Notice	7
a) Notification of Abutters	7
b) Notifications in Providence Journal	8
c) Notification to Town	8
4. Purpose of the Cap	9
5. Storm Surge and Flooding Issues	9
6. Inclusion of Comments from Question and Answer Session as Formal Comments	12
7. Comments Not Considered Substantive	12
Attachment A	13
COMMENT SUMMARY AND GUIDE TO DEPARTMENT RESPONSES FOR DECISION ON THE MODIFICATION OF BENEFICIAL USE DETERMINATION AT THE FORMER PORTSMOUTH TOWN DUMP APPLICATION	13
1) Michael McArdle- Portsmouth	13
2) Peter Roberts- Portsmouth	13
3) Donna Farrea- Portsmouth	13
4) Arlene Goddu- Portsmouth	14
5) Theresa Barretto- Portsmouth	14
6) Joseph Barretto- Portsmouth	14
7) Claudette Weissinger- Portsmouth	14
8) Brian Whittier- Portsmouth	14
9) Carl Schloemann- Portsmouth	15
10) Donna Roberts- Portsmouth	15
11) Judi Staven- Portsmouth Town Council	15
12) Laura Rogers- Portsmouth	16
13) Robert Gilstein- Portsmouth Town Planner	16
14) Peter Roberts- Portsmouth	17
15) Steven Destefano- Portsmouth	17
16) Donna Farrea- Portsmouth	17
17) Mark Dennen- RIDEM	17
18) Representative J. Patrick O’Neil, Rhode Island House of Representatives Majority Whip	17
19) Petition signed by 228 Residents submitted by Debra Cardoza and Island Park Community. Petition was also received by email.	18
20) Gary and Janice Gump- Portsmouth	18
21) John G. McDaid-Portsmouth	19
22) Lisa Whittier-Portsmouth	19
23) Michael Sousa-Portsmouth	19
24) Lisa Whittier-Portsmouth	19
25) Debra Cardoza-Portsmouth	20
26) Marcie Martin-Portsmouth	20
27) Denise Francz-Garceau -Portsmouth	20
28) Donna Farrea-Portsmouth	21
29) Laura Rogers-Portsmouth	22
30) Teresa Binette-Portsmouth	22
31) Pauline Mello-Over-Portsmouth	22
32) Teresa Barretto-Portsmouth	23

33) Charles N. Morin-Portsmouth.....	23
34) Debra Cardoza -Portsmouth.....	23
Attachment B: Transcript of Public Hearing of 1/18/2011	25
Attachment C: Comments Received by Mail, Fax or in Person	26
Attachment D: Comments Received by Email	
Attachment E: Press Release of Public Hearing held on 1/18/2011	27
Attachment F: Finding and Recommendations of the Special Legislative Commission to Study Naturally Occurring Arsenic in Soils	29
Attachment G: 2006 Notification of Abutters.....	30
Attachment H: Approval of 6/8/2010 from Town of Portsmouth.....	31

1. Project History and Regulatory Approvals

The former Portsmouth Town Dump, also known as the Island Park Landfill and Kidd Disposal Area, is a privately owned 18 acre site, 14 acres of which was filled between 1954 and 1974 by the Town of Portsmouth. It was leased and operated by the Town while owned by, Gerald Kidd, a private owner. Encroachment of landfilling operations onto a neighboring property (owned by Thomas Levesque) also occurred. It is believed that both household and industrial waste was disposed on the property. The Department has been involved with the site since 1989 when it performed a Preliminary Assessment of the site under the Federal CERCLA program and has been involved with other assessments for the site under that program since. The Landfill Closure Program became involved with the site when Art Palmer (owner of AP Enterprise "APE") approached the Department about his desire to acquire the site. His plan was to clean up the site and create a volleyball facility at the site.

In November of 2003, a Site Investigation Report was submitted to the Department. It found the following regulatory issues at the site:

- Trash and refuse is present near the surface with minimal or no cover
- Existing soils exceed the RIDEM Residential and Industrial/Commercial Direct Exposure Criteria for the following hazardous substances: arsenic, lead, benzo (a) pyrene, benzo (b) fluoranthene, and chrysene.
- Soil sampling showed existing soil exceeds the RIDEM GB leachability criteria for trichloroethene. The GA leachability criteria were also exceeded for the following hazardous substances: trichloroethene, tetrachloroethene and cis-1,2-dichloroethene.
- Groundwater sampling of on-site wells shows it exceeds the GA criteria for barium, benzene, cis-1,2-dichloroethene, tetrachloroethene, trichloroethene, and vinyl chloride. The area is classified as GA.
- Soil gas results indicate elevated levels of trichloroethene, 1,1,1-trichloroethane, toluene, 1,1-dichloroethene and 1,1,2-trichlorotrifluoroethane on the central portion of the landfill, however, these concentrations decrease to non-detectable levels on the southern and northern portions of the Site.
- Sediment and surface water sample results do not indicate exceedences.

The proposed remedy for the Site consisted of the following elements:

- A final cap consisting of two feet of soils meeting the RIDEM Residential Direct Exposure Criteria.
- The use of shaping and grading soils under the final cap.
- Deed restriction (an Environmental Land Usage Restriction or ELUR).
- Monitoring of groundwater and soil gas.

In the Remedial Action Work Plan submitted in March of 2010, APE kept the elements of the remedy above but no longer included the proposal to build a recreational complex.

Important project milestones are listed below:

- 11/2003- APE submits Site Investigation proposing soil cap as part of recreational use
- 12/2003 Department Comments on Site Investigation Report requiring additional investigation.
- 2/2004 Letter of Non-Compliance sent to Property Owners and Town requiring additional investigation as indicated in letter of 12/2003
- 8/2004 AP Enterprise LLC enters agreement to purchase property.

- 6/2005- Bona Fide Prospective Purchaser Agreement between APE Enterprise and the Department. APE agrees to implement remedy in Site Investigation Report.
- 1/2006- Submission of the Supplemental Site Investigation Report containing additional data required by the Department
- 6/2006 After review and correspondence, RIDEM issues Program letter considering SIR complete. Begins public notice which included notification of all abutters and the Town of Portsmouth by mail.
- 9/2006 Public notice complete, response to public comments is sent.
- 11/2006 APE submits a response to the outstanding public comments for OWM review and approval
- 11/2006 APE Submits Remedial Action Work Plan with Recreational Complex.
- 12/2006 Remedial Decision Letter issued by RIDEM
- 2/2008 RIDEM issues Notice of Intent to Enforce to Responsible Parties after progress stalls on remedy.
- 3/2010 APE submits revised Remedial Action Work Plan without recreational use and pavement and submits detailed criteria for grading and shaping materials.
- 5/2010 APE submitted Category B Assent Application to CRMC
- 6/2010 APE submits Soil Erosion and Sediment Control Ordinance Application to Portsmouth Building Official
- 6/2010 Town of Portsmouth approves Soil Erosion and Sediment Control Ordinance Application
- 6/2010 Army Corps of Engineers determines no permit is required from that agency.
- 8/2010 Department. submits comments to RAWP and requires submission of Beneficial Use Determination (BUD) application
- 8/2010 APE submits BUD Application
- 9/2010 Following public hearing on 9/8/2010, Department approved the BUD
- 9/2010 CRMC unanimously approves of Application. The Town Manager of Portsmouth was present for the meeting and is on the CRMC Board. He voted to approve the AP Enterprises's Application. (9/28/2010).
- 12/2010 APE asks for modification of BUD
- 1/5/2011 Public Notice of request for modification
- 1/18/2011 Public Meeting on BUD modification

As explained above, abutter notification, public notice of the Site Investigation Report, and public notice of the Beneficial Use Determination Application have already taken place. Written approvals and public notice (as required) by other regulatory entities (such as the Army Corps of Engineers, Town of Portsmouth and Coastal Resources Management Council) have already taken place prior to this modification request. It is also important to note that of these agencies **only** RIDEM required notification of abutters (2006).

The matter under consideration now (modification of the BUD to include soils with elevated levels of naturally occurring arsenic) relates only to acceptance criteria of soils, makes absolutely no changes to landfill contours, volume of material accepted or any other aspect of the approved remedy. It is also important to note that APE is not requesting to replace the approved BUD material with the arsenic containing soils but merely to add them to the other types of soil.

Following the final approval (CRMC) in October of 2010, some soil has already been accepted that meets the standards in the original BUD approval.

Therefore the Department is **only** considering the matter of the 12/5/2010 modification request, as other reviews and approvals have already taken place.

2. The Relationship of Regulatory Standards to the Proposal

The proposal is to accept, among other soils already approved, soils containing naturally occurring arsenic. Levels proposed are similar to naturally occurring levels in Aquidneck Island. Aquidneck Island is characterized by high arsenic levels relative to most of the state due to the fact that it is underlain by metasedimentary rocks of the Rhode Island Formation as opposed to the felsic igneous rocks that underlie most of the rest of the state. Therefore the characterization of the soils as "contaminated" is not accurate as the arsenic was the result of natural deposition processes several hundred million years ago.

The Rhode Island House of Representatives "Special Legislative Commission to Study Naturally Occurring Arsenic in Soil", as reported in May 2008 dealt with the issue of naturally occurring arsenic, particularly on Aquidneck Island. A number of the members and those who gave testimony, including the Town of Middletown, took issue with the Department's Remediation standard of 7 mg/kg (parts per million). They felt in addition to being inconsistent with other standards (as discussed below) they were unrealistic and unreasonable. The commission found that the cleanup standard of 7 mg/kg had a negative economic, environmental and quality of life impact that disproportionately affected the residents of Aquidneck Island. The report is contained in [Attachment F](#). As a result of the Commission's findings, the Department proposed revised standards in its Remediation Regulations that were released for public comment in December of 2010. These allow for the presence of arsenic in residential soils (either naturally occurring or from man-made sources) at a level of 43 mg/kg with very minimal standards as explained in Rule 12.04 of the draft regulations (6" of clean soil and some notification- though not necessarily an Environmental Land Use Restriction or soil blending). Levels above 43 mg/kg are considered acceptable with 2 feet of cover and an Environmental Land Use Restriction.

Given the proposed regulations above, the Department spoke in the workshop for this site of its concern of being consistent. It is very hard for the Department to argue that 43 mg/kg is safe in a residential setting with 6" of cover but that a landfill next to that resident with an average of 20 mg/kg, mixed with other soils and covered with 2 feet of fill and an Environmental Land Use Restrictions (ELUR), represents a danger to the health of residents nearby. The Department went so far as to read the upcoming public hearing on the Draft Remediation Regulations into the administrative record of the hearing. This was so commenters could either object to the new standards or explain why that regulatory standard, and the findings of the Commission it was based on, should not apply to this site. The only comment received on this issue was from Representative O'Neil (District 59), Co-Chair of the Special Legislative Commission to Study Naturally Occurring Arsenic in Soil. Representative O'Neil made it very clear that the Department's consideration of the BUD did not deviate from

the recommendations of the Commission except to the degree that it is more stringent than what the Commission recommended. This was because the Department required type 3 standards (2 feet of soil with and ELUR) while only allowing the applicant to bring in soils that meet the type 2 contaminant levels (15-43 mg/kg).

Other important regulatory standards are the Compost regulations (Solid Waste Regulation #8). These set a limit of 41 mg/kg in Class A compost which its uses are unrestricted. Class A compost is considered safe enough that it can be (and is) sold or given to homeowners for gardening, lawn application and landscaping, as well as, applied to public parks. Class B compost, with levels of arsenic up to 75 mg/kg can be used in more limited applications such as agricultural uses or public lands, provided certain time limits are met between application and public access

In summary, many commenters have concluded, that soils with arsenic levels of 20 mg/kg, underneath a 2 foot cap are a threat to human health and the environmental. The Department has already promulgated standards to allow unrestricted residential use of compost with 41 mg/kg and has proposed standards to allow levels up to 43 mg/kg in residential soils with only 6 inches of cover

3. Adequacy of Public Notice

The Remedial Action Work Plan was submitted to the Department in March of 2010, the Site Remediation Regulations do not require public notice or public hearing at this stage. However, the Department felt that a BUD application, and subsequent public notice and public hearing prior to approval, was warranted. The public notice for the original BUD was published in the Providence Journal on August 27, 2010 and the public hearing was held at the Portsmouth Town Library on September 8, 2010.

The Refuse Disposal Act and the BUD Policy do not address the issue of BUD modifications and whether or not a public notice and public hearing is required. In reviewing the modification request, however, the Department felt that although it was not beyond the bounds of what could be considered, it was beyond what had been approved. To that end, the Department felt that the modification should go through a public notice similar to that of the original Beneficial Use Application. Including a public hearing if there were an interest expressed in the community.

Therefore, as discussed above, the Department feels that it has fulfilled the public hearing/public notice requirements for the activities at the site and furthermore, has required an additional a public notice and hearing that is above and beyond those required by statute and regulation. Many comments, however, have been received from residents and Town Officials that public notice was inadequate. Alleged shortcomings in this area fall into 3 categories:

a) Notification of Abutters

As per the Site Remediation Regulations, the Department performed notification of abutters by mail in July of 2006 (see [Attachment G: 2006 Notification of Abutters](#)) informing them of the results of the investigation and the preferred alternative of a soil cap. Several residents commented on the remedy and their comments were addressed. We feel that this is very significant because out of the 4 agencies involved in this permit (RIDEM, Town of Portsmouth, CRMC and Army Corps of Engineers) the Department is the only agency that required abutter notification.

Also, as per Site Remediation Regulations several other public notices and public meetings occurred as explained in the Project History section above.

Some commenters feel the Department should have subsequently personally notified all the residents around the site at the subsequent decision points such as the approval of the Site Investigation and Beneficial Use Determination. As has also been explained above, the Department has gone above and beyond public notice

requirements, and personally notifying all the residents in the area is not among them.

b) *Notifications in Providence Journal*

The Public Notice was published on January 5, 2011 in the Providence Journal as a legal advertisement. The Department uses the authority of The Refuse Disposal Act 23-18.9-16 (a)(1) requires “Public notice in a newspaper of general circulation”

Many commenters have claimed that the Providence Journal does not meet the requirement of this statute because it does not have extensive circulation and does not cover events in the Aquidneck Island Area. The Providence Journal has submitted a comment letter as well on this issue. Providence Journal comment letter includes the following information:

- The Providence Journal has over 4,600 subscribers in the Aquidneck Island area and is available for sale at 45 retail locations in the area.
- They have a distribution center on the island.
- Over 591,000 Rhode Island adults or 72% of all Rhode Islanders get their news from us in print or online each week.
- Projo.com is the most visited local Website in the region.

The Department believes the Providence Journal makes a compelling case that not only do they have significant circulation on Aquidneck Island but that they are the only newspaper of general circulation statewide. If an advertisement were made in a strictly local paper, environmental groups and others interested in environmental regulations that frequently scan the Providence Journal for issues of interest would never receive notification. As these issues have statewide implications, either directly or by the precedent that they set, they would be denied access to the information.

As stated above, the statute requires that the public notice be advertised in a paper of general circulation. The public notice was advertised in the Providence Journal, therefore the Department complied with the statute. We realize that the public notice could have been advertised in other papers as well, and will consider that option in the future.

c) *Notification to Town*

Notification to the Town did not occur until January 6, 2011. Normally, the Department sends notification prior to the publication of the notice in the paper. This is important because citizens often call the town first. It is particularly important in this case as the town in a Responsible Party. The Department was under the impression the notification had already occurred. This was an oversight on the part of the Department, but was in no way a violation of the RIGL or RIDEM regulations which do not require any notification or hearing for a proposed BUD modification.

APE has submitted their own response on the notification issue quoted below:

APE Responses on Public Notice Issues

Section 23-18.9-16(a) of the Rhode Island General Laws requires that an applicant seeking a BUD provide the following: (1) public notice in a newspaper of general circulation; (2) a notice to the Manager or Mayor and council of the municipality in question; and (3) a hearing to be held in the municipality affected. All of these steps were followed for APE’s initial BUD application. RIDEM scheduled a public hearing at the Portsmouth Town Library for September 8, 2010. Notice of the application and the hearing was published in the Providence Journal on August 27, 2010. Copies of the BUD application were sent to the Town. The September 8, 2010 hearing proceeded as scheduled at the library. There were no comments received either at or before the hearing and no members of the public appeared at the hearing.

In contrast to the initial application for the BUD, the BUD modification application was not required to go through the same public process. Section 23-18.9-16(a) of the Rhode Island General Laws does not expressly require notice or a hearing for subsequent modifications. Nevertheless, RIDEM exercised its discretion to request notice and hold a public informational meeting. RIDEM scheduled a public informational meeting for January 18, 2011 at the Portsmouth Town Hall. APE published notice of the BUD modification and informational meeting in the Providence Journal on January 5, 2011. Under decisions of the Rhode Island Supreme Court, the Providence Journal has been deemed to be a newspaper of “general circulation.” In that notice, RIDEM also invited public comments on the proposed modification through January 12, 2010.

The Town Manager and Town Council received timely and actual notice of the BUD modification almost two weeks before the January 18, 2011 public meeting in Portsmouth. The Town Planner and Town Manager received a copy of the Providence Journal notice by electronic mail on January 6, 2011. The same day, the entire Town Council was copied on an electronic mail message indicating that the BUD modification was being placed on the January 10, 2011 Town Council meeting agenda. These e-mail communications demonstrate that the Town Manager, Town Planner, and Town Council all had actual notice of the proposed BUD modification on January 6, 2011 – one day after the actual public notice was published in the Providence Journal. Thereafter, RIDEM consulted with Town officials, who were active in the selection of January 18, 2011 as the date for the informational meeting.

RIDEM held a public meeting on January 18, 2011 at the Portsmouth Town Hall. A stenographer was present to record public comments and RIDEM invited the public to submit comments for another week after the meeting until January 25, 2011. Out of an abundance of caution, RIDEM subsequently extended the period for submitting comments to February 4, 2011.

4. Purpose of the Cap

The remedy that was approved in 2006 required a soil cap to be placed over waste at the site. This soil cap served two main functions:

- To establish a minimum of 2 feet of cover meeting residential direct exposure criteria to prevent human exposure to soils that had contamination exceeding the direct exposure criteria in the Site Remediation Regulations and;
- To establish a minimum slope of 3-5 % after allowing for settling and subsidence in accordance with the Department’s Solid Waste Regulations to promote drainage and minimize infiltration.

There have been a number of comments that say a cap is not allowed by the regulations or is not desirable at this site. As per the Department’s Remedial Decision Letter of 12/2006, and other decisions since then, the Department firmly disagrees. The Department will not consider a remedy that does not include a cap to prevent exposure and promote drainage as described above.

5. Storm Surge and Flooding Issues

In reviewing the project, the Office of Waste Management’s team of scientists and engineers tried to ensure that it met the minimum engineering standards regarding storm water flow, flooding and other coastal issues. We would not allow the application to continue if it did not. The Department went through a series of back and forth correspondences with APE to ensure that the project met those standards. However, as some of these issues are outside the Office’s area of expertise/jurisdiction, subsequent approval was also required by the following agencies:

- RIDEM/Office of Water Resources for Water Quality Certification (9/21/2010)

- Coastal Resources Management Council approval (10/14/2010)
- Army Corps of Engineers Determination a permit was not required for the project (8/9/2010)
- Town of Portsmouth Soil Erosion and Sediment Control Ordinance Application Approval (6/8/2010)

Commenters have stated that the area is prone to flooding. Based on the topography and water table, the Department has every belief this is the case. The plan has been designed to not adversely impact neighbors. However, quarterly monitoring of groundwater is being done so that both the level and quality of groundwater can be monitored. The Department has the right to require additional steps should they be necessary.

We have received comments that flooding has gotten much worse this year as a result of the project. In the spring of 2010 the State of Rhode Island experienced water levels in excess of 100 year flood levels. Also this winter has seen extraordinary amounts of snow. Given that no site work began until after the final (CRMC) approval in October of 2010 and only 1,130 yards of soil, spread out upon the southern portion of the site has been placed on the site, it is not reasonable to believe the increase in flooding in 2010 and January of 2011 has any relationship to site work.

There have been comments of concern that by creating this large mound of soil, it will lead to catastrophic consequences for the neighborhood in the event of a hurricane. Furthermore, the claim is that the slope will worsen a hurricane impact by its physical presence. The Department's disaster debris coordinator was also part of the review team for this application. We have also discussed the issue with the Rhode Island Emergency Management Agency. The drainage plans for the proposed work have undergone extensive review and received approvals from CRMC, the Town of Portsmouth, as well as DEM. Storm event and drainage calculations are required a part of these reviews. As it is within the 100 year coastal flood plain, the tidal surge of a category 3 hurricane could be devastating for the residents of the area. Even if the landfill did not exist, the catastrophic wind and flooding from such an event could result in the release of a large volume of other hazardous materials to the area; oil (from heating oil tanks), gasoline (from cars, mowers, boats and gas cans) and household chemicals (pesticides, herbicides, paints, and cleaners). Based on the technical review, a 3-5% slope on the landfill will not make a discernable difference to the flooding pattern associated with such an event. Furthermore, having a cap on the landfill, as compared to its current condition, would lessen the effects of a hurricane spreading contamination that already exists at the site.

Finally, APE provided their own response and analysis to the issue that is quoted below:

APE Response on Localized Flooding

As detailed below, VHB/APE evaluated the potential storm water runoff associated with the project. No impervious surface areas are proposed as part of this project and, as such, the results of our analysis show that there will not be any significant increase in post-construction storm water runoff associated with this project. We expect a slight increase in runoff towards the adjacent surface water and a decrease in storm water infiltration on Site. While the project is in its construction phase, it is expected to drain in a manner consistent with pre-construction conditions.

During the preparation of submittals to the CRMC and the Corps, VHB studied pre and post-construction conditions. Pre-construction conditions at the Site consisted of unimproved, relatively flat land that was overgrown with vegetation. Under these conditions, storm water runoff from the Site flowed from four micro-watersheds to one of four design points. These four design points are described as follows:

- *Design Point 1 – The tidal salt marsh located on the north side of the Site.*
- *Design Point 2 – The southwestern corner of the Site adjacent to Park Avenue.*
- *Design Point 3 – The intersection of Park Avenue and Mason Avenue.*

- *Design Point 4 – The freshwater wetland on the east side of the Site adjacent to Mason Avenue.*

VHB used a HydroCAD model, utilizing the Natural Resource Conservation Service’s TR-20 Model for Project Formulation Hydrology, to evaluate the existing and proposed drainage conditions from the Site at the four Points of Analysis (POA). The pre- and post- peak discharge rates are presented in the following table:

Peak Discharge Rates (cfs*)				
Design Point	2-year	10-year	25-year	100-year
<u>POA 1 (tidal salt marsh)</u>				
<i>Pre-Development</i>	9.07	16.77	22.05	30.46
<i>Post-Development</i>	13.41	27.78	36.12	51.31
<u>POA 2 (Park Avenue)</u>				
<i>Pre-Development</i>	4.22	7.02	8.85	11.71
<i>Post-Development</i>	0.98	1.84	2.32	3.19
<u>POA 3 (freshwater wetland)</u>				
<i>Pre-Development</i>	2.07	4.56	6.34	9.30
<i>Post-Development</i>	1.33	4.05	5.82	9.17
<u>POA 4 (Park and Mason Ave)</u>				
<i>Pre-Development</i>	0.28	0.96	1.51	2.49
<i>Post-Development</i>	0.10	0.30	0.43	0.68

* expressed in cubic feet per second

The results of the analysis indicate that there is no increase in peak discharge rates between the pre- and post-development conditions for the 2, 10, 25, and 100-year storm events to the abutting residential properties or the roadways. The capping of the landfill will alter the grading and surface conditions of the Site resulting in an increase in the rate and volume of storm water runoff to tidal areas, however, this increase is insignificant in relation to tidal fluctuations. The completed project will also result in a decrease in storm water runoff towards the inland area.

APE Response on Storm Surge/Flooding Comments

Coastal surges caused by hurricanes can affect Island Park due to its location on the Sakonnet River. The Island Park section of Portsmouth proximate to the Site is partially protected by seawalls. The seawalls have been overtopped during some of the more severe storms, but usually provide adequate protection from coastal surges (FEMA, 1982). During the public meeting, it was indicated that the public right-of-way opening in the seawall was opposite the Site. It should be noted that the opening of the seawall is not opposite the Site, but is located further west of the Site, opposite the Levesque property.

High water mark elevations associated with the 1938 and 1954 hurricanes in Island Park were 15.3 feet and 14.4 feet, respectively. Most, if not all of Island Park sits below these elevations. If storms of these

magnitudes repeat themselves, the presence or absence of the landfill caps will neither improve nor exacerbate the damage that would ordinarily result.

Regarding possible flooding events associated with a storm surge, there is no compensatory flood plain requirement in coastal environments. The capping of the landfill has been subject to project review by the CRMC and the Corps. The project review by the NE-ACOE determined that the project did not require a permit and CRMC approved the project as designed.

6. Inclusion of Comments from Question and Answer Session as Formal Comments

Comments have been made that the video tape of the question and answer sessions should be considered substantive (and therefore incorporated into the Administrative Record for formal response from the Department) because some people chose to leave. During the presentation and question and answer session, the Department made it quite clear that the format would be presentations about the proposal and a brief synopsis of site history, followed by a question and answer session and then we would accept formal comments via a stenographer. It was also made clear from the beginning of the presentation and again and again during the question and answer session, that the question and answer session was only designed to help people formulate their formal comments should they decide to make them at that time, or subsequently by another means (email, mail, etc.).

For whatever reason, if commenters were unwilling to remain to offer formal comments, the Department must consider that they did not make a comment. The alternative is to consider comments part of the public record when participants were told from the beginning that these would not be part of the public record.

7. Comments Not Considered Substantive

For regulatory consistency, the Department addressed comments about related regulatory standards for arsenic and other BUD sites involved with landfill closure. The Department has also received comments about unrelated sites and issues (sewer lines, Bay St, Tiverton cleanup, fecal coliform levels, beach improvements, etc.). The Department is only evaluating comments for **this** issue at **this** site, and therefore, does not consider comments about these unrelated sites relevant.

Attachment A

COMMENT SUMMARY AND GUIDE TO DEPARTMENT RESPONSES FOR DECISION ON THE MODIFICATION OF BENEFICIAL USE DETERMINATION AT THE FORMER PORTSMOUTH TOWN DUMP APPLICATION

Substantive issues from each comment are summarized below. Complete comments are contained in Appendix A-C. Comments are categorized by how they were received (email, hard copy and comments made at public hearings) and sorted in most cases by date received. In the interest of brevity, the concern was usually simply stated without the phrase “commenter states” or “commenter asserts.” This omission should not be construed to imply the Department concurs with a comment or assertion.

COMMENTS FROM PUBLIC MEETING OF JANUARY 18, 2011:

1) Michael McArdle- Portsmouth

- ◆ The project is being snuck in with short notice. Neighbors should be notified by mail. See [Project History and Regulatory Approvals](#) and [Adequacy of Public Notice](#)
- ◆ The project will create a mountain of dirt. In the event of a storm, it will turn Island Park into a wasteland **The Department does not feel a 3-5% slope qualifies as a mountain and the subsequent conclusion is based on that characterization.** See [Storm Surge and Flooding Issues](#).
- ◆ If they get severe rain, arsenic will contaminate the basements of residents. **Given the levels and solubility of naturally occurring arsenic, the Department does not believe this is reasonable.** See also [The Relationship of Regulatory Standards to the Proposal](#)

2) Peter Roberts- Portsmouth

- ◆ Why can't they cap higher without putting waste material there? See [Project History and Regulatory Approvals](#)
- ◆ They are poisoning people, they should send notices regarding symptoms of arsenic poisoning. **As per the discussion in [The Relationship of Regulatory Standards to the Proposal](#) these levels are significantly lower than other standards with more intense use (i.e. proposed Remediation Regulations). As these other standards do not require the measures suggested by the commenter, it would not make sense to require them at the Portsmouth Landfill site.**
- ◆ Health conditions have gotten worse since dirt was placed there. **The material that is the subject of the hearing has not been placed yet. Since the material that has already been accepted meets the Department's health based standards, we have no reason to believe it has or will cause health problems. Anyone believing they are suffering an environmentally based health condition should have their physician contact the Department of Health.**

3) Donna Farrea- Portsmouth

- ◆ No consideration is being given to wildlife. **The primary reason the Department is requiring the remedy is the environmental harm we believe the site will continue to cause unless the remedy is put in place.** See also [Project History and Regulatory Approvals](#)
- ◆ The Providence Journal is not representative of East Bay. See [Notifications in Providence Journal](#)
- ◆ More involvement from the Town is needed. **The Town has not commented on the project. As**

explained in [Project History and Regulatory Approvals](#), the Town has approved the grading and shaping plan, and participated in CRMC approval of the plan, as well.

4) Arlene Goddu- Portsmouth

- ◆ Notice was not adequate. See [Adequacy of Public Notice](#).
- ◆ The Department will not evaluate any comments made by the public. This Response to Comments document is the Department's means of response to all formal public comments received.

5) Theresa Barretto- Portsmouth

- ◆ January 25 deadline should be extended. The deadline was extended to 2/4/2011 as a result of this and other requests.

6) Joseph Barretto- Portsmouth

- ◆ The increase in elevation will back up water on Park Avenue. See [Storm Surge and Flooding Issues](#).
- ◆ January 25 deadline should be extended. The deadline was extended to 2/4/2011 as a result of this and other requests.

7) Claudette Weissinger- Portsmouth

- ◆ This has been going on since 2000 and people just found out by an ad in the Providence Journal. See [Adequacy of Public Notice](#) and [Project History and Regulatory Approvals](#)
- ◆ Commenter is concerned about wetlands and flood plains. These issues were extensively addressed in previous DEM and CRMC reviews as discussed in [Project History and Regulatory Approvals](#) and [Storm Surge and Flooding Issues](#)
- ◆ Is there another place to get soils not this high is arsenic. The Department's role is to review the request to see if it falls within the regulations. APE has been asked to respond as quoted below:

APE response on Source of Material

The sources of the shaping and grading soils that have or may in the future be brought to the site are directly related to locations of active construction projects in the area that have excess soils. The BUD process allows for these soils to be re-used as opposed to being disposed in an active landfill. Based on the studies that have been completed relative to arsenic in Rhode Island soils, APE anticipates that the average level of arsenic in these soils will be similar to local soils. As has been shown by data collected by RIDEM and others, these soils will have concentrations of arsenic that is both above and below the local average arsenic concentration.

- ◆ There is benzene at the site- which is a carcinogen and other chemicals. The dumping of hazardous materials, including several carcinogens, in a coastal wetland, is a serious concern for the Department. This is why the Department has taken the action it took to require implementation of a remedy. Contaminants of concern, including benzene and trichloroethylene, were the driving issue in remedy selection. See also [Project History and Regulatory Approvals](#)

8) Brian Whittier- Portsmouth

- ◆ Nobody was notified and time was too short. See [Adequacy of Public Notice](#).
- ◆ Notification on 1/5/2011 was a strategic move to miss Town Council Meeting of 1/4/2011. The Department was not aware of the schedule of Town Council Meetings and was irrelevant in the choice of the date of advertisement. Nor does it have any bearing on regulatory requirements.
- ◆ Comments from question and answer session should be included as 2/3 of the room left. See [Inclusion of Comments from Question and Answer Session as Formal Comments](#)
- ◆ The height of the cap will create displacement of water in Island Park and problems during storm events. See [Storm Surge and Flooding Issues](#)
- ◆ This cannot happen without going before Army Corps of Engineers. As discussed in [Project History](#)

[and Regulatory Approvals](#), the Army Corps of Engineers in June of 2010 determined that no permit was required to implement the proposed remedy.

- ◆ Commenter is concerned about increases arsenic levels at the site. See [The Relationship of Regulatory Standards to the Proposal](#)

9) Carl Schloemann- Portsmouth

- ◆ At what level is arsenic a hazard? Does it bioaccumulate, after exposure does it leave your body. In dealing with the health effects of arsenic, there is both an acute and a chronic risk. When the Department set its standards, it had to consider both of these (see [The Relationship of Regulatory Standards to the Proposal](#)). In answering this question, we consulted with Dr. Robert Vanderslice, Healthy Homes and Environment Team Leader at the Rhode Island Department of Health. Dr. Vanderslice was also a member of the Special Legislative Commission to Study Naturally Occurring Arsenic in Soil. Regarding whether arsenic stays in the body after exposure, the Toxicological Profile for Arsenic published by the Agency for Toxic Substances and Disease Registry reports: "Direct measurements of arsenic excretion in humans who ingested known amounts of arsenite or arsenate indicate that ...45-85% is excreted in the urine within one to three days." In the same document, they state that it is not possible to determine past exposures because most of the arsenic you are exposed to is eliminated in a few days. See while humans tend to concentrate arsenic with age to some degree, and some aquatic life will concentrate arsenic, arsenic levels are not magnified through the food chain like DDT. So, the answer to the question of bioaccumulation is complex because it does bioaccumulate to very limited degree. However, even though it's bioaccumulation is limited, prolonged exposure can cause health effects, hence the logic in the Department's standards. A detailed discussion of hazards of arsenic can be found by selecting arsenic at [ATSDR - Toxic Substances - Arsenic](#).
- ◆ Commenter is concerned about wetlands and flood plains. See [Storm Surge and Flooding Issues](#)

10) Donna Roberts- Portsmouth

- ◆ Why was ad not placed in local paper? See [Adequacy of Public Notice](#).
- ◆ Question and Answer session should be included in formal comments. See [Inclusion of Comments from Question and Answer Session as Formal Comments](#)

11) Judi Staven- Portsmouth Town Council

- ◆ People are afraid. Agreed. The Department believes some of the fear may be the result of misinformation about the site and proposed arsenic levels.
- ◆ Notice was not adequate. See [Adequacy of Public Notice](#).
- ◆ Commenter was specifically told in an e-mail that it was supposed to be an informational meeting and not a public hearing. Given that the public notice didn't say there would be a stenographer it has been misrepresented. When the commenter originally requested a meeting, several formats were discussed, including a discussion during a meeting of the Town Council as well as an informational workshop. Given the level of concern, it became readily apparent residents wanted to be heard on the issue. Therefore, the press release was sent to the commenter (as well as media outlets and interested parties who had contacted the Department) on 1/14/2011 that contained the following statement: "Representatives of DEM and AP Enterprises LLC will present information about the proposal and answer questions. Interested parties will have an opportunity to submit comments following the question and answer session." We do not see how this could be construed as misrepresentation.
- ◆ Commenter resents the Department walking in and demanding we do this. The Department was more than accommodating to the wishes of the council. To have not allowed people the opportunity to comment for the record when the press release clearly stated: "Interested parties will have an opportunity to submit comments following the question and answer session" would have been completely unreasonable.

- ◆ The whole thing should be prolonged so people can get information. **The comment period deadline date was extended to 2/4/2011.**

12) Laura Rogers- Portsmouth

- ◆ Meeting should be null and void until all area residents within 200 feet of the site are notified in writing. **See [Adequacy of Public Notice](#).**
- ◆ How many feet will arsenic rise every year and will it travel in air and water. **Given the nature of the material (naturally occurring inorganic arsenic that will be covered with 2 feet of clean, vegetated soil), we do not anticipate any migration of contamination. For other reasons, we are requiring quarterly monitoring of onsite groundwater for a variety of contaminants, including arsenic. See also [The Relationship of Regulatory Standards to the Proposal](#)**
- ◆ Will taxes increase because arsenic is blowing on it? **The Department does not understand how windblown dust would increase taxes. However, we understand the concern about how the site could affect the Town's finances. The Town is financially responsible for closure of the landfill under both the Department and Federal EPA regulations if the closure no longer occurs under the voluntary landfill closure program via the approved APE plan. Both the Department and the Federal EPA have the right to pursue enforcement action against the Town, including requiring the Town to complete the closure of the site, assessing fines or seeking reimbursement for work done by federal or state agencies. Also, the Bona Fide Perspective Purchaser Agreement with APE does not prevent either party from pursuing reimbursement from responsible parties.**
- ◆ Is it safe to grow vegetables in my garden? **The Department's arsenic standard for Class A compost to be sold to consumers for garden use is 41 mg/kg. Therefore, the Department does not feel that allowing soils averaging 20 mg/kg or under, mixed with other soils with much lower levels of arsenic, covered by a cap is cause for an advisory. See also [The Relationship of Regulatory Standards to the Proposal](#)**
- ◆ Should the pile be covered? **We should be protected now. The Remedial Action Plan that was approved by the Department in September has a dust mitigation plan, as well as, capping plan.**
- ◆ Did the Town Administrator get notified regarding arsenic levels and capping? **The Town was notified on 1/6/2011 see also [Notification to Town](#)**
- ◆ Residents need time to get a lawyer. **An extension on the comment deadline to 2/4/2011 was granted.**
- ◆ Notification was inadequate. **See [Adequacy of Public Notice](#)**
- ◆ Water levels have already changed and people are getting flooded as never before. **See [Storm Surge and Flooding Issues](#)**
- ◆ Do I need arsenic insurance? **See [The Relationship of Regulatory Standards to the Proposal](#)**
- ◆ Commenter asked the following question "So all that water is sand. That sand moves. When there's arsenic in it, what is it, does it just sit there is my question. Or just go underneath. And if it does, there's a lot of other contamination in the landfill. Why are you disrupting it?" **The comment is unclear to us, but we believe the commenter is concerned about erosion and contaminant migration. Both were studied extensively in previous approvals. See also [Project History and Regulatory Approvals](#) and [Purpose of the Cap](#)**
- ◆ Videotape should be in formal record. **See [Inclusion of Comments from Question and Answer Session as Formal Comments](#)**

13) Robert Gilstein- Portsmouth Town Planner

- ◆ The flooding issue is a real concern. **This concern was not discussed with the applicant or the Department prior to the Town's approval of the Soil Erosion and Sediment Control Ordinance Application. Additionally, the Town's representative on the CRMC voted for the approval of the Category B Assent Application, but did not raise this issue even though storm water management is such an important component. See also [Storm Surge and Flooding Issues](#)**
- ◆ The next meeting needs to have a presentation by a hydrogeologist showing various pathways of

water during a storm. Flooding is already a problem in that area. The site may create a funnel. Commenter is concerned about wetlands and flood plains. Commenter goes on- “The presentation tonight was insufficient. It was a bunch of dates. So I hope that you will do that. And I hope that, if necessary, that there is a re-grading plan, a flood mitigation plan, and enough assurance, perhaps insurance, so the close by neighbors, that they're not gonna be flooded out. That they're not gonna have flooded basements. That needs to be worked on.” **The commenter requested a public meeting as follows:**

“A number of people here in Portsmouth that live near the Island Park Landfill have expressed concern about the requested arsenic variance for APE Enterprise LLC. Obviously, there is at least a lot of confusion for people not familiar with what the various standards mean, how they would be protected, etc. On behalf of the Town, I would like to request that a public meeting be held here in Town Hall to explain the issue and field questions.”

The request is quite specific that the meeting should be about the arsenic issue. No mention is made of the storm water issue. Given that the Town approved of the plan in writing, it was in no way reasonable to assume that the Town’s request meant the Department should give a presentation on storm water. See also [Storm Surge and Flooding Issues](#).

14) Peter Roberts- Portsmouth

- ◆ Someone should look at wetlands to see if contaminants will leach there. **This issue has been extensively studied for years.** See [Project History and Regulatory Approvals](#)

15) Steven Destefano- Portsmouth

- ◆ Section 23-18.9-16, Section A, Subsection 1 requires a newspaper of general circulation. The Providence Journal may not meet that definition. See [Notifications in Providence Journal](#)

16) Donna Farrea- Portsmouth

- ◆ Why would anyone buy a dump? **No response needed.**

17) Mark Dennen- RIDEM

- ◆ The statement was made that the Department is having a workshop and formal hearing on the new arsenic standards on the Thursday following the meeting at DEM Headquarters. The hearing is not related to any particular site but the change on the Remediation Regulations. **This statement was read for the record to reiterate the point made in the presentations that the Department has proposed changing the arsenic standard to allow for levels up to 43 ppm in residential properties with 6 inches of cover.**

COMMENTS RECEIVED BY MAIL OR IN PERSON:

18) Representative J. Patrick O’Neil, Rhode Island House of Representatives Majority Whip

- ◆ Commenter was Vice Chair of Special Legislative Commission to Study Naturally Occurring Arsenic in Soil. As detailed in the Commission’s report (See [Attachment F: Finding and Recommendations of the Special Legislative Commission to Study Naturally Occurring Arsenic in Soils](#)) the regulatory standard of 7 mg/kg needs to have a measure of flexibility to reflect the unique situation regarding naturally-occurring concentrations of arsenic. **No response needed.**
- ◆ The proposed modification regarding acceptance of grading and shaping material with average of 20 and maximum of 40 mg/kg is entirely consistent with the Commission’s findings and recommendations. **Response from the Commission’s leadership is helpful in guiding the Department regarding whether the Commission’s intent was to allow this type of activity.** See also [The Relationship of Regulatory Standards to the Proposal](#)
- ◆ Precluding the use of the material set a bad precedent that will have negative impacts on individuals, developers and municipalities. **See above response.**

- ◆ The Proposed is more conservative than the Commission's recommendations and proposed regulatory amendments in that it calls for 2 feet of cover with and ELUR whereas under the proposed amendments there is only 6 inches of cover with no ELUR for soils with that level of arsenic. [See above response.](#)

19) Petition signed by 228 Residents submitted by Debra Cardoza and Island Park Community. Petition was also received by email.

Full text of the petition is quoted in full below:

PETITION: opposing 8' elevation and the use of contaminated industrial fill which contains 20-40 ppm of arsenic

We, the residents of Portsmouth, petition the Rhode Island Department of Environmental Management and the Portsmouth Town Council to deny the request to cap the Island Park Landfill site with fill contaminated with 20-40 ppm of arsenic and request an extension for review of the history of submitted material and for further laboratory investigation including written comments prior to issuing its final approval.

- ◆ [The Department is very concerned that a petition was provided to hundreds of residents, the title of which \(Residents oppose use of 8' of contaminated industrial fill containing 20-40 ppm of arsenic.\) inaccurately characterizes the proposal of 12/3/2010 that is under consideration. Therefore the Department is left to conclude that they accepted the statement as fact. Specifically:](#)
 - [The proposal calls for a 3-5% grade of the site with a **maximum** height of 8 feet. See \[Purpose of the Cap\]\(#\)](#)
 - [The proposed modification does not call for use of contaminated industrial fill with arsenic. It calls for the use of soils only containing **naturally occurring** levels of arsenic with the absence of other contaminants in the soil. See also \[The Relationship of Regulatory Standards to the Proposal\]\(#\)](#)
 - [The proposal calls for soils from sources with a maximum **average** of 20 ppm, with a **maximum** of 40 ppm in addition to other fill previously approved with levels **below** 7 ppm. \[The Relationship of Regulatory Standards to the Proposal\]\(#\)](#)
- ◆ [An extension of the public comment period should be granted. An extension was granted until 2/4/2011.](#)
- ◆ [Further laboratory investigation should be conducted. As explained in \[Project History and Regulatory Approvals\]\(#\), extensive laboratory sampling has been conducted over the past 10 years. Notification of the results and recommendations was provided to the abutters, CRMC and the Town of Portsmouth prior to the Department's approval. Furthermore, the approved plan also requires groundwater monitoring and sampling of incoming materials.](#)

COMMENTS RECEIVED BY E-MAIL:

20) Gary and Janice Gump- Portsmouth

- ◆ [Residents are concerned about increase run-off to Sakonnet Bay and Blue Bell Cove if arsenic is accepted. See \[The Relationship of Regulatory Standards to the Proposal\]\(#\) and \[Storm Surge and Flooding Issues\]\(#\)](#)

- ◆ The Department should have a hearing on the issue. *As a result of this and other requests, a hearing was conducted on 1/18/2011.*

21) John G. McDaid-Portsmouth

- ◆ While arsenic is below mandated cleanup levels, 20 mg/kg is still high for RI soils. *The commenter is correct regarding Rhode Island as a whole, however, as explained in [The Relationship of Regulatory Standards to the Proposal](#) and [Attachment F: Finding and Recommendations of the Special Legislative Commission to Study Naturally Occurring Arsenic in Soils](#), soils with this level of arsenic are reasonable to expect on Aquidneck Island*
- ◆ Public notice in the Providence Journal was not adequate. *See [Notifications in Providence Journal](#)*

22) Lisa Whittier-Portsmouth

- ◆ Commenter requested a public hearing. *As a result of this and other requests, a hearing was conducted on 1/18/2011.*
- ◆ Why was notice posted in the Providence Journal? *See [Notifications in Providence Journal](#)*
- ◆ Covering contaminated land with contaminated fill is not the answer. *See [Project History and Regulatory Approvals](#)*

23) Michael Sousa-Portsmouth

- ◆ Project will raise the levels of pollution from 7 mg/kg to 40 mg/kg. This should not be allowed. *See [The Relationship of Regulatory Standards to the Proposal](#)*
- ◆ Commenter requested a public hearing. *As a result of this and other requests, a hearing was conducted on 1/18/2011.*

24) Lisa Whittier-Portsmouth

- ◆ Advertisement in Providence Journal was illegal under Rhode Island Law. *See [Adequacy of Public Notice](#)*
- ◆ Change in topography poses a danger to Island Park because it is in a flood plain. *See [Storm Surge and Flooding Issues](#) and [Project History and Regulatory Approvals](#)*
- ◆ Fill is laced with arsenic and the Dept of Health and RIDEM both deemed it unallowable. *The proposal is only for soils with naturally occurring arsenic so the Department does not agree with the characterization. The Departments of Health and Environmental Management were both a part of the legislative commission on arsenic and did not reject the proposed levels but actually moved to promulgate them in December of 2010. See also [The Relationship of Regulatory Standards to the Proposal](#) and [Attachment F: Finding and Recommendations of the Special Legislative Commission to Study Naturally Occurring Arsenic in Soils](#).*
- ◆ USEPA has established a safe level of arsenic as 0.4 ppm. *This is not the level USEPA uses at their cleanups.*
- ◆ The Department allows a ceiling of 7 ppm, at that concentration cancer risk is 1/50,000. *See [The Relationship of Regulatory Standards to the Proposal](#)*
- ◆ Proposal is to increase levels to between 20-40 ppm. *This is not accurate. The proposal calls for soils from sources with a maximum **average** of 20 ppm, with a **maximum** of 40 ppm in addition to other fill previously approved with levels **below** 7 ppm. [The Relationship of Regulatory Standards to the Proposal](#)*
- ◆ Commenter quoted Dr. Vanderslice of the Department of Health as saying *Anytime you have a carcinogen, you set the level as low as you can, stated Dr. Robert Vanderslice of the Department of Health. Vanderslice explained that the DEM standard is based on the fact that children will be exposed to soil 350 days out of the year. No response needed except to emphasize that Dr. Vanderslice was a member of the commission proposing the arsenic levels of 43 mg/kg discussed in [The Relationship of Regulatory Standards to the Proposal](#) and that the Department, as well as*

residents, have been in communication with Dr. Vanderslice on this issue and he has not expressed concerns about our application of the standards.

- ◆ Stenographer started recording at 9:08, many people had left by then. Recording of meeting should be in records for the site. The Department has obtained a DVD of the entire meeting, but will only include formal comments in its official response as explained in [Inclusion of Comments from Question and Answer Session as Formal Comments](#)
- ◆ When was the meeting provided to the Administrator regarding this project? The previous town council as well as new council had no knowledge of this. Commenter would like to review correspondences. The Departments files are public record and can be reviewed by requesting an appointment with the Office of Waste Management or Office of Technical and Customer Assistance. As explained in [Project History and Regulatory Approvals](#) the Department has been in contact with the Town over 10 years including the Town's written approval for the grading plan on 6/8/2010 (see [Attachment H: Approval of 6/8/2010 from Town of Portsmouth](#)). The notification to the Town Administrator occurred on 1/6/2011 regarding the modification request made by APE on 12/3/2010.

25) Debra Cardoza-Portsmouth

- ◆ Project will negatively affect wetlands and beaches. See [Project History and Regulatory Approvals](#) and [Storm Surge and Flooding Issues](#)
- ◆ There is a park where children play in the area. See [The Relationship of Regulatory Standards to the Proposal](#)
- ◆ Notice of the request was inadequate. See [Adequacy of Public Notice](#)
- ◆ Commenter opposes "8' elevation that could flood our homes and pool hazardous materials already existing in the landfill as well as contaminated arsenic fill from 7 ppm to 20-40 ppm." As explained in the response to the petition, the Department is very concerned that a petition was provided to hundreds of residents, with the claim above that inaccurately characterizes the proposal of 12/3/2010 that is under consideration. Specifically:
 - The proposal calls for a 3-5% grade of the site with a **maximum** height of 8 feet. See [Purpose of the Cap](#)
 - The proposed modification does not call for use of contaminated industrial fill with arsenic. It calls for the use of soils containing only **naturally occurring** levels of arsenic with the absence of other contaminants in the soil. See also [The Relationship of Regulatory Standards to the Proposal](#)
 - The proposal calls for soils from sources with a maximum **average** of 20 ppm, with a **maximum** of 40 ppm in addition to other fill previously approved with levels **below** 7 ppm. [The Relationship of Regulatory Standards to the Proposal](#)
- ◆ Deadline for comments should be extended. As a result of this and other request, the deadline was extended until 2/4/2011.

26) Marcie Martin-Portsmouth

- ◆ Commenter was not notified of the plan. See [Adequacy of Public Notice](#)
- ◆ More contaminants should not be allowed on the property to allow this is contrary to the Department's mission. In evaluating this modification, as well as the previous proposal, the Department's mission to protect the environment and enforce the Regulations has been the highest priority. See [Project History and Regulatory Approvals](#) and [The Relationship of Regulatory Standards to the Proposal](#)

27) Denise Francz-Garceau -Portsmouth

- ◆ Has DEM allowed this proposed high concentration of arsenic dirt in other RI neighborhoods? - If

so, where & what was the concentration? - When was it approved? - Are these neighborhoods feet away from these sites, such as Island Park? As explained in [The Relationship of Regulatory Standards to the Proposal](#), the Department would not agree with the characterization of materials with an average of 20 mg/kg as having high concentrations given natural background levels common on the Island. Regarding Landfill BUD's and arsenic, the Department has never refused such a request regarding arsenic. Two other landfills have gone through the BUD process to take off-site grading and shaping materials (Cranston Sanitary Landfill and Forbes Street Landfill). The City of East Providence has not asked to accept materials in excess of 7 mg/kg of arsenic. Cranston sanitary landfill accepts a variety of materials, in addition to soils, with arsenic greater than 7 mg/kg (19 mg/kg). They do not have a restriction that arsenic levels in material accepted are naturally occurring. Cranston Sanitary Landfill, whose Site Investigation Report and BUD were approved on September 23, 2008; has residences located directly across the street. This BUD was approved prior to the Department proposing to alter the standards for arsenic levels.

- ◆ Have there been any adverse health affects to these abutters & has the owner/business put in escrow any funds for possible health care needs in the future? The Department is not aware of either.
- ◆ Capping is not necessary. See [Purpose of the Cap](#)

28) Donna Farrea-Portsmouth

- ◆ Proposal will increase runoff and contaminate wetlands, sea life and the playground and is in direct violation of Clean Water Act. As explained in [Project History and Regulatory Approvals](#), the project, with its grading and shaping plan, has already been approved under the Clean Water Act. See also [The Relationship of Regulatory Standards to the Proposal](#)
- ◆ A hydro-engineer should be consulted to provide an in depth study for water-flow from this area in question prior to any consideration for approval. As explained in [Project History and Regulatory Approvals](#), numerous biologists, geologists and engineers from several agencies have all reviewed the plan and found it compliant with the regulations. Furthermore, the Department's scientists and engineers believe the project will improve environmental conditions at and around the site.
- ◆ Commenter states that "I object to the fact that Ms.Kristen Sherman (AP Enterprises' attorney) indicated at the town hall meeting (see CD) that in order to obtain prior town approval, she and AP Enterprises sat at the table and had a meeting with Mr.Discroll.....This is a direct violation of the R.I. public meetings law !" As the accusation was directed against APE team members, the Department asked them to respond directly as quoted below. The Department concurs with the APE interpretation of the open meetings statute.

APE Response on Open Meetings Law:

On April 30, 2008, representatives of APE met with the Portsmouth Town Manager and Town Counsel, Kevin Gavin, Esq. at the Town Offices for the purpose of discussing the outstanding RIDEM Notice of Intent to Enforce against the Town and APE. Also, at the time of the discussion, APE had made a demand upon the Town as set forth in the attached April 29, 2008 letter. The Town proposed to hire an engineer (PARE), presumably to review APE's claims. Indeed, upon information and belief, the Town Council met on May 12, 2008 to approve funding for the Town to hire an environmental consultant.

The discussion that took place in 2008 was not covered by the Open Meetings Act, R.I. Gen. L. §42-46-1 et seq. The Act only applies to "meetings" of "public bodies." A "meeting" is defined under Section 42-46-2(1) of the Act as "convening of a public body . . . to discuss and/or act upon a matter over which a public body has supervision, control, jurisdiction, or advisory power." A "public body" is defined under Section 42-46-29(3) of the Act as any "department, agency, commission, committee, board, council, bureau, or authority or any subdivision thereof . . ." In the first instance, the informal discussion on April 30, 2008 was not a "meeting" as defined in the Act because it was not designed to discuss or act upon a matter over which the

Town had supervision, control, jurisdiction or even advisory power at the time. At the time of the discussion, APE did not have any applications relative to the closure project pending before the Town.

Discussions with Mr. Driscoll are also not covered by the Act because he is not a “public body” as defined in the Act. Rather, he is an individual official. Ocean State Nissan v. R.I. Dept. of Trans. 1994 WL 930897 (R.I. Super. 1994) (finding that the Director of Rhode Island Department of Transportation is not a “public body” as defined by the Act). Therefore, no Open Meetings Act violations occurred.

29) Laura Rogers-Portsmouth

- ◆ Current levels as quoted by the Department representative at the meeting are 4-11 mg/kg. **This is true based on information contained in the Site Investigation Report.**
- ◆ Proposal will raise water levels in and around the landfill and will alter groundwater flow in the area. It is not allowable to raise dirt in a flood plane more than 1 foot. **See [Project History and Regulatory Approvals](#)**
- ◆ Hurricane damage will be worse and will trap residents from escape. **[Storm Surge and Flooding Issues](#)**

30) Teresa Binette-Portsmouth

- ◆ The proposal is a way to allow development of the area. **The Environmental Land Use restriction required by the Department in the approved Remedial Action Work Plan must be placed on the deed as part of the closure. No building or excavation beyond placement of the cap can be done without written approval of the Department. Furthermore, the remedy does not allow the owner to bypass any other state or local regulations even if any building or excavation were to be approved (which it has not).**
- ◆ Public Notice was inadequate. **See [Adequacy of Public Notice](#)**
- ◆ Changes will impact basements, waterways, topography, wildlife, protected swamps. **See [Project History and Regulatory Approvals](#)**
- ◆ Water table at the site is high and cannot tolerate additional drainage. How will runoff be managed? **As explained in [Project History and Regulatory Approvals](#), plans for runoff were approved by the Department, CRMC and the Town.**
- ◆ Any poison intentionally introduced to the soil will become part of the runoff water with the snow and rain increasing the volume. **See [The Relationship of Regulatory Standards to the Proposal](#)**
- ◆ Are there plans to replace trees, shrubs or other native plants in order to stabilize the proposed 6-8 foot mound of construction-site soil? **Once the site is properly graded with a 3-5% slope and is subsequently capped with two feet of clean soil, a vegetative cover will be planted to promote stabilization and prevent erosion. The ELUR will require annual inspection of the cap and vegetated cover to ensure it is properly maintained and not compromised.**

31) Pauline Mello-Over-Portsmouth

- ◆ Why is the site being developed? **Initially AP Enterprises purchased the property and proposed to build a beach volleyball facility on the site. The plans have since changed. AP Enterprises is currently capping the site, however, the volleyball complex will no longer be built.**
- ◆ Notice in Providence Journal was inadequate. **See [Adequacy of Public Notice](#)**
- ◆ Proposal will impact waterways, parks, neighborhoods and protected swamps. The water table is high and can't take additional drainage. How will additional runoff be handled? **As explained in**

[Project History and Regulatory Approvals](#), plans for runoff were approved by the Department, CRMC and the Town.

- ◆ Are there plans to replace trees, shrubs or other native plants in order to stabilize the proposed 6-8 foot mound of construction-site soil? **Once the site is properly graded with a 3-5% slope and is subsequently capped with two feet of clean soil, a vegetative cover will be planted to promote stabilization and prevent erosion. The ELUR will require annual inspection of the cap and vegetated cover to ensure it is properly maintained and not compromised.**

32) Teresa Barretto-Portsmouth

- ◆ Fill has cancer causing levels of arsenic. DEM allows a ceiling of 7 parts per million. At that concentration the risk of cancer is 1 in 50,000. The area is densely populated. **See [The Relationship of Regulatory Standards to the Proposal](#)**
- ◆ Commenter objects of 15 foot mound of soil. **Proposal that has been approved is for a maximum height of 8 feet.**
- ◆ **The Proposal will make flooding worse in storms. This will trap residents during a storm. See [Storm Surge and Flooding Issues](#)**

33) Charles N. Morin-Portsmouth

- ◆ Several types of cancer have been linked to high levels of arsenic. **As explained in [The Relationship of Regulatory Standards to the Proposal](#), the Department does not think the material in question qualifies as high levels of arsenic.**
- ◆ Children eating dirt with arsenic is a reasonable scenario. **The Department's standards consider such scenarios. The proposal requires 2 feet of clean soil over any material that is accepted. It should be noted that current conditions have levels at the surface that are in excess of the Department's standards for a number of other contaminants and therefore, could present a health issue, especially to children who come into contact with soils and waste at the site.**
- ◆ Proposal will contaminate groundwater with arsenic. **The Department believes that naturally occurring arsenic in mineral form in these soils will have a very low solubility, however, the Department is requiring quarterly groundwater monitoring for many compounds, including arsenic.**
- ◆ Waste at the site should be removed due to asbestos and other dangerous wastes at the site. **The Department has considered this and rejected it, not simply based on cost. To excavate a 14 acre landfill would expose nearby homes to significant dust, odor and airborne contamination while the waste is excavated and loaded into trucks. See also [Purpose of the Cap](#).**
- ◆ Capping should use only clean soil. **See [Project History and Regulatory Approvals](#)**
- ◆ No one would consider the material for use as top soil. **It is not being considered here as topsoil, only as sub-grade covered with two feet of clean fill.**

34) Debra Cardoza -Portsmouth

- ◆ Commenter quotes a letter from the Town Administrator, Robert Driscoll stating that "Mr. Palmer, has not applied for any permits, prospective to this project, nor has any zoning relief or approvals been granted to him.. "One would assume that Mr. Palmer would not proceed with the remediation unless he first obtains all necessary state and local permits. Commenter objects of 15 foot mound of soil. **The Department would assume any projects, beyond what was already permitted by the Town in June of 2010 would need appropriate permits. Any modification of the approved BUD would also need approval by the Department. See also [Project History and Regulatory Approvals](#)**

- ◆ Mr. Palmer must abandon Russell Ave before proceeding with the project. The Department's regulations do not give it the authority to either override or enforce local zoning ordinances. We therefore will make this clear in the decision that neither the current, nor previous approval gives the permittee any right to override local zoning ordinances. Beyond this, the Department will not evaluate the specifics of this as it is clearly a local zoning issue and the Town must take action regarding its previous approval as appropriate. See [Project History and Regulatory Approvals](#)
- ◆ Commenter reiterates concern regarding 20-40 ppm level of arsenic. The Department would again state that the proposal calls for soils from sources with a maximum **average** of 20 ppm, with a **maximum** of 40 ppm in addition to other fill previously approved with levels **below** 7 ppm. See [The Relationship of Regulatory Standards to the Proposal](#)
- ◆ Commenter reiterates concern over flooding issue preventing escape from the area. See [Storm Surge and Flooding Issues](#)
- ◆ The Department should make sure proposal is consistent with federal law as well as zoning laws prohibiting this type of activity within 1000 feet of a residence. See [Project History and Regulatory Approvals](#)
- ◆ The cap should use only clean fill. See [Project History and Regulatory Approvals](#)

Attachment B: Transcript of Public Hearing of 1/18/2011

STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

PUBLIC HEARING IN RE:

Closure activities at the
former Portsmouth town dump

DATE: January 18, 2011
TIME: 7:00 p.m.
PLACE: Portsmouth Town Hall
2200 East Main Road
Portsmouth, Rhode Island

- - -

Lori P. Hamel, RPR-CRR
Capitol Court Reporting, Inc.
931 Jefferson Boulevard
Warwick, Rhode Island 02886

1 (Public Comments section commencing at 9:08 p.m.)

2 LAURIE GRANDCHAMP: Thank you for coming to
3 today's public hearing. Today is Tuesday, January 18,
4 2011, and the time is 9:08 p.m. My name is Laurie
5 Grandchamp and I'm Supervising Engineer in the Office of
6 Waste Management.

7 Today we are holding a public hearing regarding an
8 application from AP Enterprises for a slight
9 modification --

10 Excuse me, could everyone please be quiet. The
11 stenographer needs quiet so that she can make sure that
12 she gets everything on the public record. Thank you.

13 Today we are holding a public hearing regarding an
14 application from AP Enterprises in order to modify their
15 beneficial use determination for the Portsmouth -- former
16 Portsmouth town dump.

17 There was a sign-up sheet for people wishing to make
18 any comment. What I will do is I will call people on the
19 order -- in the order that they signed up. Please come up
20 to the podium and state your name, state your address, and
21 please speak clearly so the stenographer can record your
22 comments.

23 MICHAEL McARDLE: Michael McArdle,
24 M-C-A-R-D-L-E, 85 Highland Avenue. I really believe that

1 this is just being snuck in, very short notice. If I want
2 to put a deck on my house, I would have to go to the town
3 hall, I would have to apply for a permit. All the
4 neighbors within 200 feet would have to be notified by
5 mail. It would have to be in the paper for a certain
6 amount of time. But now they're gonna put a mountain of
7 arsenic dirt, six feet high, fourteen acres of it, which
8 is a bag of bones, so Mother Nature can come in and wash
9 all over Island Park. It's just not right. You're
10 putting the barn there, and Mother Nature's gonna come
11 like the wick some day, and then you people aren't going
12 to be responsible for anything that happens to anybody in
13 their property. It will be a wasteland. And it's sad.

14 We just had a big flood down there. We never had
15 water in the basement before, and ended up with 18 inches.
16 That rain comes like that again, all that arsenic from
17 that six foot, 14-acre site is gonna go into our basement.
18 Resale value and the health threat is enormous, and it's
19 totally irresponsible for you people to even consider
20 placing that mountain of 14 acres, 6-foot high arsenic
21 with no protection to the wetlands, the people living in
22 the neighborhood, the ocean, no regard for anything.

23 I feel bad for Mr. Palmer, he got himself into a jam.
24 But I'd also like to know where that dirt's coming from

1 that he had another construction project where he can
2 probably take that dirt and sell it to this project. I --
3 that -- that stuff does go on, I understand that. People
4 can sell themselves dirt from one job to another. Now he
5 has -- if he has another project where they're condemning
6 the dirt, he can sell it to this. So that -- this loses
7 money and that makes money. I just think --

8 COUNCIL CHAIRMAN: Are you making accusations
9 here?

10 MICHAEL McARDLE: I'm saying what I feel like
11 saying. That's what this meeting is about. I'm just
12 saying it could be. Just like the ocean could come and --
13 I'm just stating a fact that the ocean could come in and
14 wash it all away. I thought this was just for statements,
15 now you're questioning me. I don't get it.

16 I do have a lot more to say and I really believe the
17 townspeople have -- should have enough option to deal with
18 this problem because it's certainly a big problem. Thank
19 you.

20 LAURIE GRANDCHAMP: Peter Roberts?

21 PETER ROBERTS: My name is Peter Roberts, I
22 live at 80 Ormerod Avenue. My first question is, why
23 can't they just cap this a little bit higher than it is
24 and not put all this waste material in there.

1 And second of all, they're poisoning people. Will
2 they send us notices telling us what conditions can be
3 from this poison, and if we start to notice any reactions
4 or any illnesses from it, who do we notify to get them to
5 pay for it.

6 Now, I have a lot of health conditions and I have
7 noticed since this dirt was put in there, that I'm
8 starting to breathe worse now. And I drive up Mason Ave
9 all the time because my house is there. And I want to
10 know if this is affecting my health condition.

11 I am a one hundred service connected, disabled
12 American war veteran, and I have enough problems right now
13 that I don't need poison in my neighborhood. And I do not
14 understand why they need to put poison here. They should
15 put it somewhere where it won't affect people who live
16 near it. There is no excuse for this. This is people
17 trying to make money or save cost by just dumping it
18 somewhere where it's going to affect people.

19 This is completely wrong. There should be laws
20 against it. And DEM should not be backing this in any
21 way.

22 LAURIE GRANDCHAMP: Thank you. Gary Hahn?
23 Gary Gump? Lyle Rudloff? Madeline Beaucage? Dorothy
24 Backman? Bill Backman? Donna Farrea?

1 DONNA FARREA: I'm Donna Farrea, F-A-R-R-E-A, I
2 live at 86 Mason Avenue.

3 One thing I noticed tonight coming home with the rain
4 is around the corner between Mason and the landfill, there
5 are about 150 to 200 starlings in the puddles and on the
6 line drinking the water, washing themselves. No
7 consideration is given to wildlife?

8 My other contention is exactly what Donna Roberts had
9 mentioned. I'm the neighbor that saw that in the
10 Providence Journal, right into a fold of the paper. And
11 to me it was a strategic measure to minimize readership.
12 The Providence Journal is not representative of the East
13 Bay and I object to that.

14 We need more involvement, more input from the town
15 people that it affects directly. I don't see how DEM can
16 make any kind of criteria promises or whatnot, when they
17 can't even manage Bay Street in Tiverton. And we know
18 what kind of horror story is going on there.

19 Thank you.

20 LAURIE GRANDCHAMP: Larry Fitzmorris? John
21 Pencall? Madeline Pencall? Arlene...

22 ARLENE GODDU: Goddu. My name is Arlene Goddu,
23 I live at 92 Mason Avenue.

24 I am very concerned about this deal going on. I feel

1 I'm getting totally bulldozed by the DEM. We can make
2 whatever comments we want, they'll be explained away and
3 decisions will stand just the way they are right now and
4 we still will have no say. Without a meeting for the
5 public, which I don't feel was made in enough of a notice
6 for the people to come tonight. Look at the turnout that
7 we had here. Not many. Now, we have a lot more concerned
8 people than this. But no one knew about this. I got the
9 notice from Donna that night and I distributed it to many
10 people that night. And not one person knew about what was
11 going on. And that concerns me that this is being slipped
12 right under our noses regardless of what we say or do.

13 Thank you.

14 LAURIE GRANDCHAMP: Teresa Barretto?

15 TERESA BARRETTO: My name is Teresa Barretto, I
16 live at Island Park and I would just like to reemphasize
17 that there are many caring people in Island Park, this is
18 their home, they care about it, and we were not given
19 proper notification. And if -- I would like to have
20 this -- this January 25 deadline extended so the caring
21 people of Island Park will have the opportunity to come
22 here because I don't think they're gonna be too happy when
23 they find out this meeting took place, there's a deadline,
24 and they did not -- did not know anything about it. These

1 are our homes, we care about them, we care about our
2 environment, and every single thing that happens in Island
3 Park we care about. So, please consider extending that
4 deadline. Thank you.

5 LAURIE GRANDCHAMP: Thank you. Joseph
6 Barretto?

7 JOSEPH BARRETTO: Joseph Barretto. We're
8 concerned about the elevation of the dump because there's
9 only two exits during a hurricane. The exits are Park
10 Avenue by the dump, that's one exit; the other exit is the
11 escape route bridge. So with the increase in the
12 elevation, it will back up water and it will be hard to
13 exit on Park Avenue. That's my -- that's my concern.

14 LAURIE GRANDCHAMP: Julie -- is it Barfer?
15 B-A-R-F-E-R? I'm sorry, Barken, or Julie -- Dennis
16 Barken? I'm sorry, I'm having trouble reading these.
17 Thomas Fishburn? George Cardoza? Debra Cardoza?
18 Claudette Weissinger?

19 CLAUDETTE WEISSINGER: I'm Claudette
20 Weissinger, 24 Dove, D-O-V-E, Street.

21 I'd like to reiterate what people have been saying
22 about not having any idea of that this was going on. The
23 public -- the citizens of Portsmouth should have been
24 aware. This has been going on since 2000? And people

1 find out by a micro announcement in the Providence
2 Journal.

3 And I'm concerned about the wetlands and I haven't
4 heard much about the effect of all this on wetlands. I'm
5 concerned about flood planes. And I'm just wondering, is
6 there another place to get soils that are not as high in
7 arsenic content? And from what I -- I glanced at while
8 the announcements tonight, there appears to be benzene,
9 which is a carcinogen. And there are other chemicals that
10 should be looked at carefully. Thank you.

11 LAURIE GRANDCHAMP: Thank you. Ben Whittin?

12 BRIAN WHITTIER: Brian Whittier, 128 Highland
13 Ave.

14 LAURIE GRANDCHAMP: Sorry.

15 BRIAN WHITTIER: What concerns me a little bit,
16 and everyone is going on about how nobody was notified.
17 What people in the audience might not realize is that this
18 announcement came out on July -- July 5. Okay? Now this
19 was a Wednesday. And it was also noted that they had one
20 week's time to notify DEM with substantial requests for a
21 hearing. Which is a very short period of time. But, on
22 top of that, if you want to get anything in front of the
23 town council, it has to be in on Tuesday. So, is this a
24 strategic move that was put out there so that the people

1 of Island Park could not approach the town council to find
2 out what was going on? It seems that way to me.

3 Once again on that note, you notice that you're
4 having a public comment here now after everybody said
5 something. Well, the only public comments that are being
6 recorded, when one-third of the room is still here.
7 You've done this after the people that are here. These
8 comments should have been recorded from -- from the get
9 go. Okay?

10 So, and you've got a site that has a 4 PPM arsenic
11 level on it right now. You want to increase the level of
12 arsenic on that site, which everybody knows this and is
13 seeing this. Which we don't feel is proper.

14 And one of my main concerns, which isn't of this
15 hearing but it has to definitely be addressed by AP
16 Enterprises is about the displacement of water in Island
17 Park. You can't take 14 acres of land, pile it six feet
18 high to eight feet high. I believe in the back part of
19 the park -- I mean the site and that part of the dump, the
20 level's gonna be up around 12 foot above mean high tide.
21 Which is way above most of Island Park.

22 The main people that are gonna be affected are the
23 people on Mason, Gormley and Ormerod, and even up to
24 Cottage in the forward section of that. If you look at

1 the stone wall or sea wall that's down there, the first
2 part that's gonna enter -- the water coming in from the
3 tidal surge is gonna enter right at the dump. That is
4 where there's a break in the wall, it's going right away.
5 Okay? That's the first place the water is gonna enter.
6 Now, with the elevated levels of this, the water has no
7 place to go but into the low lying area which is the
8 residential area. It has no place to go.

9 I can't see how this has made it through permitting
10 without going in front of the Army Corps of Engineers.
11 This is crazy. And you're changing the geographical and
12 topographical layout of a flood zone. How can you do
13 that? You're affecting a lot of people in the course of
14 this. And I want to know how after what I've seen here
15 tonight and the way AP Industries has gone about about
16 notifying people and, and going about their processes, how
17 we can be assured of the integrity of this company. I
18 can't see how we can be assured at all about this.
19 Because it's been underhanded. People have not known.
20 Everybody's asking, hey, what the heck's going on at the
21 dump? Nobody had a clue what was going on at the dump.

22 The people of Island Park were -- you know, you may
23 have notified the immediate abutters which are 200 feet,
24 okay? You may have done that. I believe you actually

1 have done that and at that time you did notify the
2 council. I asked several of the abutters today, neighbors
3 of mine, if they were ever notified about the increased
4 arsenic level that was gonna go on at the dump. Now, they
5 are immediate abutters, and their answer to me was no.
6 They were not notified about the increased level of
7 arsenic that they're gonna put on this landfill.

8 Also, speaking -- I mean the council can speak up for
9 me, I'm pretty sure that almost everybody sitting there
10 right now on the town council had absolutely no idea about
11 the increased arsenic level that's going on on the dump.
12 If this was notified to our town, I ask the council to
13 look in why this was not reiterated down to the council.
14 There is a breakdown in communication in our council. Or
15 in the way our municipality's being run. And I think that
16 it should be looked into. Because this is not right. The
17 people of Island Park, I feel, are being railroaded into
18 something. And I can't see any trust in the integrity of
19 AP Industries.

20 LAURIE GRANDCHAMP: Tom Casselman? John
21 McDaio? Arthur Palmer? Kristen Sherman. David Peter.
22 Okay, Charles Cook? Robert Driscoll? Okay. Carl
23 Schloemann?

24 CARL SCHLOEMANN: Yup. My name is Carl

1 Schloemann. I live at 44 Pheasant Drive. I missed the
2 first portion of this so forgive me if what I ask was
3 already answered in your comments.

4 I hear everybody talking about the parts per million
5 and everything. Various parts per million. But I haven't
6 heard anyone say at what level arsenic becomes a hazard.
7 Is it a cumulative issue? Is it something that you build
8 up in the body? Is it something that once you're no
9 longer exposed it just leaves you, or is it something that
10 you just collect? My only experience with arsenic is in
11 the old movie Arsenic and Old Lace, so you're filling
12 somebody in.

13 So that's all I've got for now and I'll just go get
14 myself a glass of (inaudible).

15 LAURIE GRANDCHAMP: Daryll Issa? Donna
16 Roberts?

17 DONNA ROBERTS: My name is Donna Roberts and I
18 live at 80 Ormerod Ave in Portsmouth. I just have a
19 question why the town people of Portsmouth were not
20 notified in our local paper. Why it was sent to the
21 Providence Journal. And I think that was a very sneaky
22 way to not let people know what's going on.

23 And a woman suggested earlier that someone buy you --
24 you people buy the tape, \$6 tomorrow morning, and get all

1 of the comments that were happening during the meeting
2 when everyone really was here. Thank you.

3 LAURIE GRANDCHAMP: Judi Staven?

4 JUDI STAVEN: Judi Staven, 51 Meadow Road. Um,
5 as you can tell, people are afraid. All right? That's
6 what's going on here. And part of it is because -- a big
7 part is what everybody's been saying. There was no notice
8 for this. I don't know what's going on. Nobody knows
9 what's going on. And it scares people. You know, you
10 hear arsenic, you hear raising levels and you live next to
11 there, it's a problem. So, um, I think this should be
12 continued. I don't think that this should be the end of
13 it.

14 And I also have a big issue with this public hearing.
15 All right? I was specifically told in an e-mail --
16 because I kept calling it a public hearing. And I was
17 specifically told that this was supposed to be an
18 information meeting. All right? And now all of -- it
19 wasn't -- it wasn't advertised as a public hearing for
20 comment to go to a stenographer. And I just don't think
21 it's right. It's been misrepresented.

22 Council wasn't ready to do anything. Okay? We
23 didn't know. We had no idea. We were just gonna get the
24 information, and then, you know, talk about it, not talk

1 about it, whatever. All right. We were caught off
2 balance here, too. I don't think that's right. And if
3 that had the agenda as a public hearing, which I have
4 issues with also. So this -- you know, just walking in
5 here, demanding that we do this, I think is absolutely
6 wrong. All right? And actually, for the record, as a
7 town councilor, I resent this.

8 So, I think this whole thing should be prolonged and
9 not be on the 25th, so at least we can get some -- the
10 town, the council can get the information that they need,
11 and that the people can get the information that they
12 need. Thank you.

13 LAURIE GRANDCHAMP: Michael, begins with an M.

14 VOICE: He was number one.

15 LAURIE GRANDCHAMP: Okay, 85 Highland Ave?

16 VOICE: Yes.

17 LAURIE GRANDCHAMP: Okay. Laura Rogers?

18 LAURA ROGERS: That would be me. Laura Rogers,
19 85 Highland Avenue. The landfill or a/k/a dump is my
20 front yard. I, too, would like to request that this
21 meeting be null and void until all the people in Island
22 Park have been notified in writing within 200 feet of the
23 existing land in question.

24 Few questions. Like how many feet will the arsenic

1 level every year rise and will it travel through wind and,
2 and water, go into the water. And what are citizens legal
3 request to stop this action and increase -- of the
4 increase of the arsenic levels.

5 And living on Island Park, I mean, we really work
6 hard down there. I mean, I just got out of work at 7, I
7 rushed to be here. I mean, we're hard working people down
8 there. We pay taxes just like everyone else. Is my taxes
9 gonna be increased due to my front yard being arsenic
10 blown on it? Do I plant a garden in the spring? Because
11 the wind blowing on my yard is gonna have arsenic in it.
12 Shouldn't the arsenic pile now be covered. Shouldn't we
13 be protected now. That's how I feel. We should be
14 protected now.

15 And I would just like all documentation when the town
16 council got notified. Did you get notified? Did the town
17 administrator get notified of the increase of the arsenic
18 level and the capping.

19 Mainly, we need more time to be represented by a
20 lawyer or the attorney general. We need more time. You
21 threw that -- this at us in the Providence Journal. I
22 should be notified. If I want to put on a deck in my
23 house, I have to get a permit. I have to notify all my
24 neighbors. And you're gonna throw dirt in my front yard?

1 And it's blowing there now. Every time I go around that
2 corner.

3 And the water levels have already changed. They have
4 changed. The last time in -- what was it, April when we
5 had a little flood down in Island Park. I've never been
6 flooded out. That was the first time I've even been
7 flooded. So is it gonna be flooded again when you change
8 the six foot levels of dirt? Because that's where my
9 property sits. It's gonna come right down to me and it's
10 gonna be in my basement. Who's gonna help me? My flood
11 insurance, god, that doesn't help me much. I have to pay
12 high flood insurance every single year. I've used it
13 once, thank God. But is there a arsenic level insurance I
14 have to have?

15 I -- I lost my furnace and my hot water heater due to
16 the flood. It's never been flooded. It took the Town of
17 Portsmouth Fire Department to pump it out five or six
18 times. They just couldn't pump it out. So all that water
19 is sand. That sand moves. When there's arsenic in it,
20 what is it, does it just sit there is my question. Or
21 just go underneath. And if it does, there's a lot of
22 other contamination in the landfill. Why are you
23 disrupting it?

24 And I'd also ask for the record please include the

1 video, the official comments that was notified -- that
2 this was not notified, and we'd like to have more time.
3 And please include the videotape. Thank you.

4 LAURIE GRANDCHAMP: Thank you. Is there anyone
5 else that would like to place comments on the record?

6 ROBERT GILSTEIN: Sorry, this sign-up sheet
7 didn't make its way around to my side.

8 My name is Robert Gilstein, I'm the town planner, I'm
9 not a resident.

10 Just an observation, and I guess I squeeze it in
11 through the -- the proposal to put in a higher level of
12 arsenic soil. The flooding issue really is a concern.

13 There needs to be a presentation at the next meeting
14 by a hydrogeologist showing the various pathways of the
15 water during a storm. You should know that the
16 intersection of Boyd Lane and Park Ave, which is adjacent
17 to the site, floods an average of twice a year to the
18 point where it's impassible. It is a problem now. As
19 in -- one of the gentlemen that -- during question and
20 answer session pointed out, maybe creating a funnel. That
21 needs to be investigated and it needs to be presented at
22 the public meeting. Not in a Q&A session but presented so
23 people can understand.

24 The presentation tonight was insufficient. It was a

1 bunch of dates. So I hope that you will do that. And I
2 hope that, if necessary, that the -- there is a regrading
3 plan, a flood mitigation plan, and enough assurance,
4 perhaps insurance, so the close by neighbors, that they're
5 not gonna be flooded out. That they're not gonna have
6 flooded basements. That needs to be worked on.

7 LAURIE GRANDCHAMP: Is there anyone else who
8 would like to make a comment?

9 PETER ROBERTS: May I add one more? Peter
10 Roberts again. I'd like to add in my concerns about the
11 wetlands. There's a lot there and it does leach out into
12 the bay. And I think that really needs to be looked at.
13 That if the poison isn't put there, they're not adding
14 more to it. Thank you.

15 STEVEN DESTEFANO: Steven Destefano,
16 D-E-S-T-E-F-A-N-O, 287 Turnpike Avenue. I'm not for or
17 against this one way or the other, but one thing that
18 concerned me when you read off the statute, Title 23,
19 Health and Safety, Chapter 23 through dash 18.9, Refuse
20 Disposal, Section 23-18.9-16, Section A, Subsection 1,
21 that said public notice in a newspaper of general
22 circulation is required. It seemed like there was some
23 confusion if the Providence Journal is technically a
24 newspaper of general circulation for this area. So, if it

1 isn't legally considered to meet that requirement, there
2 may be some legal recourse for the town to extend the
3 deadline or have another hearing. If anyone's interested
4 in pursuing that. Just wanted to raise that point. Thank
5 you.

6 LAURIE GRANDCHAMP: Anyone else?

7 DONNA FARREA: Donna Farrea again, 86 Mason
8 Avenue. Why on earth would you buy a dump? Thank you.

9 LAURIE GRANDCHAMP: Anyone else?

10 BRIAN WHITTIER: I just got one last comment.
11 Brian Whittier, 128 Highland Avenue. I guess it's a
12 question for the DEM. You seem to have a problem with the
13 coliform bacteria that's entering the water down there in
14 Island Park, trying to force sewers down our throat, but
15 you don't seem to have a problem with elevated arsenic
16 levels that might enter into that same water. It's just a
17 point. Thank you.

18 LAURIE GRANDCHAMP: Any other comments?

19 MARK DENNEN: My name is Mark Dennen, I'm with
20 Rhode Island DEM. I just wanted to let people know for
21 the record that the department is having a hearing on
22 Thursday on its arsenic standards. That's not related to
23 any particular site but it's change in regulations will be
24 Thursday, informal workshop at 10, and a formal public

1 hearing, I believe 1:00.

2 VOICE: Where is that?

3 MARK DENNEN: In Providence, I'm sorry. DEM
4 headquarters at 235 Promenade Street, Providence.

5 VOICE: Room 300?

6 MARK DENNEN: Room 300, that is correct. Thank
7 you.

8 LAURIE GRANDCHAMP: It is now 9:40 p.m., and
9 this concludes the public hearing. Thanks for your
10 comments.

11

12 (Meeting adjourned)

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C E R T I F I C A T E

I, Lori P. Hamel, hereby certify that I am expressly approved as a person qualified and authorized to take depositions pursuant to Rules of Civil Procedure of the Superior Court, especially but without restriction thereto, under Rule 30(e) of said Rules; that this deposition was stenographically reported by me and later reduced to print through Computer-Aided transcription; and that the foregoing is a full and true record of the proceedings.

IN WITNESS WHEREOF, I have hereunto set my hand this 22nd day of January, 2011.

LORI P. HAMEL, RPR, CRR

My Commission Expires 6/24/13

Attachment C: Comments Received by Mail, Fax or in Person



State of Rhode Island and Providence Plantations

HOUSE OF REPRESENTATIVES
REPRESENTATIVE J. PATRICK O'NEILL, District 59
House Majority Whip

January 25, 2011

Mr. Mark M. Dennen
RIDEM
Office of Waste Management
235 Promenade Street
Providence, RI 02908

Re: AP Enterprise, LLC - Former Portsmouth Town Landfill

Dear Mr. Dennen:

I am writing to you as the former Vice Chair of the Special Legislative Commission to Study Naturally Occurring Arsenic in Soil ("Commission") with reference to the proposed Beneficial Use Determination ("BUD") modification submitted by AP Enterprise, LLC ("APE") to permit the project to accept grading and shaping materials with a maximum of 40 mg/kg with an average concentration of 20 mg/kg. As you know, the Rhode Island General Assembly passed a resolution in 2006 to convene the Commission for the purpose of evaluating the naturally-occurring high levels of arsenic in Rhode Island, including the Aquidneck Island area, as well as the State's current standards for arsenic (7 ppm). The Commission included legislators, representatives from the Department of Health and Rhode Island Department of Environmental Management, members of the public and representatives from several public housing organizations.

Based on the Commission's studies, the Commission recommended certain changes to RIDEM's *Rules and Regulations for the Investigation and Remediation of Hazardous Materials Releases* ("Remediation Regulations"). The proposed changes, while being protective of human health and the environment, introduce a measure of flexibility into the Remediation Regulations to reflect the unique situation regarding naturally-occurring concentrations of arsenic.

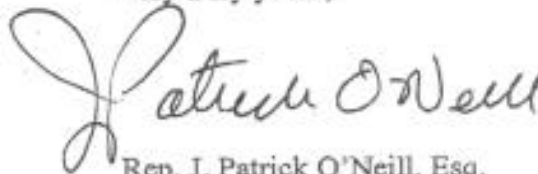
Allowing APE to use grading and shaping materials with an average of 20 mg/kg (with no sample to exceed 40 mg/kg) in the landfill project is entirely consistent with the Commission's findings and recommendations. On the other hand, precluding the use of such material in this situation would set a bad precedent, particularly for construction projects involving soils from Aquidneck Island, by forcing individuals, developers and municipalities to pay for the otherwise non-hazardous material to be disposed of at another facility. In addition to the tipping fees, the trucking costs to another facility could be exorbitant. It is foreseeable that these unnecessary costs might cause otherwise worthy projects in and around Aquidneck Island to stall or be abandoned.

Mark Dennen
January 25, 2011
Page 2

In addition, the APE proposal is consistent with the proposed amendments to the Remediation Regulations. Indeed, in some respects, the APE proposal is more conservative. Under the proposed regulations, in some cases, only six inches of cover material is needed and no land use restriction is required. It is our understanding that the APE project proposes a full two feet of clean fill on top, but also an environmental land use restriction.

Based on the above, it is my opinion that the APE proposal to modify its BUD for an increase in the permissible levels of arsenic is consistent with the intent and goals of the Commission.

Very truly yours,

A handwritten signature in black ink that reads "J. Patrick O'Neill". The signature is written in a cursive style with a large, stylized initial "J".

Rep. J. Patrick O'Neill, Esq.
House Majority Whip
Representative - District 59

Town of Portsmouth

Town Council
2200 East Main Road
Portsmouth, R.I. 02871

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RIDEM - Office of Waste Management
235 Promenade Street
Providence, R.I. 02908

PETITION: opposing 8' elevation and the use of contaminated industrial fill which contains 20-40 ppm of arsenic

We, the residents of Portsmouth, petition the Rhode Island Department of Environmental Management and the Portsmouth Town Council to deny the request to cap the Island Park Landfill site with fill contaminated with 20-40ppm of arsenic and request an extension for review of the history of submitted material and for further laboratory investigation including written comments prior to issuing its final approval.

Signature	Printed Name	Address
	DESHA CARDOZA	84 HIGHLAND AVE
	Justin Cardoza	99 Summit Rd
	George CARDOZA	84 HIGHLAND AVE
	John Escobar	143 Viking Drive
	Ali ESCOBAR	143 VIKING DRIVE
	Christa Gregorio	123 Viking Drive
	William G. Rogers	113 Viking Drive
	Judy V. Rogers	113 Viking Drive
	Donald R. Silvia	83 Viking Drive
	Richard Borges	5 Valhalla Drive
	RICHARD SCHLOSKEY	15 VALHALLA DR
	JAMES E. NIRE	35 Valhalla Dr.
	STEPHEN RAYMOND	58 VALHALLA DR
	ROSEMARY SWANN	65 VALENTACCA DR
	BILL LYNCH	115 VALHALLA DR
	CAROLINA KOZAKIEWICZ	135 VALHALLA DR.
	WILLIAM R. BACKMAN	136 NORSEMAN DR
	Eddie L Henderson	99 Norseman DR
	PETER KENIAHAN	87 NORSEMAN DR

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2011 JAN 31 P 1:44

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Signature	Printed Name	Address
<i>Christine Carter</i>	CHRISTINE CARTER	112 Viking Drive
<i>Joyce Cooper</i>	Joyce Cooper	102 Viking Dr
<i>Robert Grinnell</i>	ROBERT GRINNELL	42 VIKING DR
<i>Donald L. Wheeler</i>	DONALD L. WHEELER	53 VIKING DR.
<i>Anita D. Bissematt</i>	Anita D. Bissematt	24 Valhalla Dr.
<i>Dana E. Luther</i>	Dana E Luther	34 Valhalla Dr
<i>Linda Andromalos</i>	LINDA ANDROMALOS	54 VALHALLA DR.
<i>Vincent Salvato</i>	Vincent Salvato	64 Valhalla DR
<i>Vincent Salvato</i>	Vincent Salvato	64 Valhalla DR
<i>Tom Cousins</i>	TOM COUSINS	94 VALHALLA DR
<i>Dawn Correy</i>	DAWN CORREY	86 NORSEMAN
<i>Robert E. Bauer</i>	ROBERT BAUER	56 NORSEMAN
<i>Jeffrey Magalhães</i>	Jeffrey Magalhães	46 Norseman
<i>Sally Ellenwood</i>	SALLY ELLENWOOD	36 NORSEMAN DR.
<i>Bernardo Amador</i>	BERNARDO AMADOR	16 Norseman DR.
<i>Teresa Pinto</i>	Teresa Pinto	9 Aguidneck Ave
<i>Ani Connolly</i>	Ani Connolly	95 Aguidneck Ave
<i>Jean H. Minese</i>	Jean H. Minese	86 Aguidneck Ave
<i>Trish Martins</i>	Trish Martins	69 Narragansett Ave

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Signature	Printed Name	Address
<i>Jason Brule</i>	Jason Brule	77 Norseman Dr.
<i>Britt S. Brule</i>	Britt S. Brule	77 Norseman Dr.
<i>Larry Wall</i>	LARRY WALL	67 NORSEMAN DR
<i>Lyn Boyd</i>	Lyn Boyd	57 NORSEMAN DR.
<i>Leo McGee</i>	Leo McGee	47 NORSEMAN DR.
<i>Denise D McGee</i>	Denise D McGee	47 Norseman Dr
<i>Stan Farak</i>	STAN FARAK	37 NORSEMAN
<i>Jonathan Cardozo</i>	JONATHAN Cardozo	Summit St
<i>Mike Lank</i>	Mike Lank	Park Ave
<i>Norman Bailey</i>	Norman Bailey	Aquidneck Ave
<i>Donna Compos</i>	Donna Compos	38 Aquidneck Ave
<i>Nicissa Stewart White</i>	Nicissa Stewart White	43 Aquidneck Ave
<i>Aidan Graham</i>	AIDAN GRAHAM	Higrock Ave

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Signature	Printed Name	Address
<i>Donald Collins</i>	Donald Collins	47 Narragansett <i>avenue</i>
<i>Ruth E. Cote</i>	RUTH E. COTE	45 Narragansett
<i>Patty Dunbar</i>	Patty Dunbar	13 Narragansett

Town of Portsmouth

Town Council
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Portsmouth, R.I. 02871

683-4295
GARY
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235 Promenade Street
Providence, R.I. 02908

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Signature	Printed Name	Address
<i>Luther Plawton</i>	LUTHER PLAWTON	41 Mason Ave
<i>Andrea Silow</i>	ANDREA SILOW	41 MASON AV.
<i>Andrew Thomas</i>	ANDREW THOMAS	46 mason Ave
<i>Denise Chauous</i>	DENISE CHAOUUS	8 ORMEROD AVE
<i>Jim Martin</i>	JIM MARTIN	30 Ormerod ave.
<i>Paula Lynn Jordan</i>	PAULA LYNN JORDAN	62 Pine Street
<i>Matthew J Sanford</i>	MATTHEW J SANFORD	68 Pine St
<i>Hollie Mello</i>	HOLLIE MELLO	68 Pine St
<i>Allee Mello</i>	ALEE MELLO	68 pine st.
<i>PAT FRANCIS</i>	PAT FRANCIS	72 Ormerod Ave

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Town of Portsmouth

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Signature	Printed Name	Address
<i>Mary Jo Benson</i>	MARY-JO BENSON	97 MASON AVE
<i>Peter Roberts</i>	PETER ROBERTS	80 ORMEROD AVE
<i>Donna Roberts</i>	DONNA ROBERTS	80 ORMEROD AVE
<i>Albert Asher</i>	ALBERT ASHER	53 MASON AVE
<i>Antonio T. Wyngar</i>	Antonio T Wyngar	88 Ormerod Ave
<i>Roger Alix</i>	Roger Alix	74 Mason Ave.
<i>Stephen Alix</i>	Stephen Alix	74 Mason Ave.
<i>Peter Alix</i>	Peter Alix	224 Cedar Ave
<i>Charles Rogers</i>	CHARLES ROGERS	52 MASON AVE
<i>Michael J. Proulx</i>	Michael J. Proulx	25 Mason Ave.
<i>Jacqueline Proulx</i>	Jacqueline Proulx	25 Mason Ave.
<i>Raymond Bruscato</i>	RAYMOND BRUSCATO	15 MASON AVE
<i>Rick Van D</i>	Rick Van D	456 W. St. Jt.
<i>Aidan O'Kane</i>	Aidan O'Kane	15 Pioneer Lane
<i>Ray Mello</i>	Ray Mello	93 Ormerod
<i>Jack Gagliardi</i>	Jack Gagliardi	93 Ormerod
<i>Colleen Beaver</i>	Colleen Beaver	69 Ormerod Avenue
<i>Florence Beaver</i>	Florence Beaver	69 Ormerod Avenue
<i>Robert Potter</i>	51 Pine St Robert Potter	51 Pine St
ROBERT DRAKE	<i>Robert Drake</i>	634 PARK AVE

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Signature	Printed Name	Address
<i>Elizabeth Burns</i>	Elizabeth Burns	55 Summit Rd.
<i>Valerie Griffiths</i>	Valerie Griffiths	2127 E. Main Rd
<i>Sean Griffiths</i>	SEAN GRIFFITHS	2127 E Main Rd
<i>William McLaughlin</i>	William McLaughlin	74 Highland Ave
<i>Gonnie Mathias</i>	GONNIE MATHIAS	79 ALAN AVE
<i>Kristen Correia</i>	Kristen Correia	105 Dexter St.
<i>Phyllis L Correia</i>	Phyllis L CORREIA	105 DEXTER ST.
<i>Arielle Correia</i>	Arielle Correia	2707 east main rd.
<i>Nancy L Souza</i>	NANCY L SOUZA	211 Windward Dr
<i>Jenny Wentworth</i>	Jenny Wentworth	63 Massasoit Avenue
<i>David M Gleason Jr</i>	David M Gleason Jr	77 MASSASOIT Ave
<i>Mary L Correia</i>	MARY L. Correia	203 Windward Drive
<i>John Souza</i>	John Souza	211 Windward Pr
<i>Beverly A. Gorton</i>	Beverly A. Gorton	1291 East Main Rd.
<i>Michael A. McArdle</i>	Michael A. McArdle	85 Highland Ave
<i>Michael A. Hayes</i>	Michael A. HAYES	84 Highland Ave
<i>Gretchen Shellman</i>	Gretchen Shellman	84 Highland Ave

Town of Portsmouth

Town Council
2200 East Main Road
Portsmouth, R.I. 02871

RECEIVED
D.E.M. / OJAN

RIDEM – Office of Waste Management
235 Promenade Street
Providence, R.I. 02908

PETITION: opposing 8' elevation and the use of contaminated industrial fill which contains 20-40 ppm of arsenic

We, the residents of Portsmouth, petition the Rhode Island Department of Environmental Management and the Portsmouth Town Council to deny the request to cap the Island Park Landfill site with fill contaminated with 20-40ppm of arsenic and request an extension for review of the history of submitted material and for further laboratory investigation including written comments prior to issuing its final approval.

Signature	Printed Name	Address
	Gary Hahn	65 Walnut St
	Timothy Freitas	77 Walnut St
	Jennifer Sullivan	77 Walnut St
	Ray Sebris	48 Mason Ave
	PAMELA McFADDEN	27 Corners Ave
	RONALD DePloie	27 CORNERED AVE
	JAMES T. MASS	99 CORNERED AVE.
	CHERYL ANN SHEEHY	99 Corners Ave.
	Arthur A Ball Jr	121 Corners Ave
	SUSAN BALL	121 Corners Ave
	MONIQUE E MORAN	350 PARK AVE
	WILLIAM J. SOUSA	67 RUSSELL AVE
	Timothy Holt	350 PARK AVE
	MARCIA WHITMAN	30 Corners Ave
	John Spradling	94 Highland Ave
	William McLaughlin	94 Highland Ave
	Raymond J Perry	49 Corners Ave
	Karen A Perry	49 Corners Ave

Town of Portsmouth

Town Council
2200 East Main Road
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Signature	Printed Name	Address
	LEONARD SILVA	25 BASIN ST.
	Glenn MATHIAS	390 middle Rd
	CRAIG HABTEGREITHEN	6 GARDEN ST
	ARTHUR T. NAPIER	8 W. MAIN RD
	141 Bienville Pkwy Everett Correia	Mary Jane
	413 Turnpike Ave DONALD SILVA	413 Turnpike Ave
	108 CANTON AV. Terry Johnson	108 CANTON AV.
	3028 E. MAIN RD Joseph R. Medeiros	3028 E. MAIN RD
	53 LINDA AVE Mark Correia	53 LINDA AVE
	2703 E. Main Rd E. BAKER	2703 E. Main Rd
	E. BAKER Rex Dune	51. M.R. Pontreux
	258 middle Rd K. SILVIA	258 middle Rd
	39 BIRCHWOOD DR. DAVE BACCARO	39 BIRCHWOOD DR.
	101 B FREEBORN ST. DAVID M. GARCEAU	101 B FREEBORN ST.
	170 Hummock Ave. Jim Groff	170 Hummock Ave.
	88 SOARS Dr. JOHN C. ARRUDA	88 SOARS Dr.
	75 Sherwood Terr. JOHN L. KRAKIEWICZ	75 Sherwood Terr.
	135 VALHALLA DR Vern Cortez	135 VALHALLA DR
	1291 E. MAIN RD. Trina Potter	1291 E. MAIN RD.
	44 Gormley Ave ANTHONY L. WEATHERFORD	44 Gormley Ave

To return completed petition call: 683-8110

Town of Portsmouth

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Signature	Printed Name	Address
Kathleen Dennis	Katherine Dennis	122 Highland Ave.
Lyle Rudloff	Lyle Rudloff	122 Highland Ave.
Cynthia Malone	CYNTHIA MALONE	85 RUSSELL AVE
Thomas Malone	THOMAS MALONE	85 RUSSELL AVE.
Stephen B. Kane	Stephen B. Kane	91 Walnut St.
Donna Farrea	DONNA FARREA	86 MASON AVE
Teresa E. Binette	TERESA E. BINETTE	82 MASON AVE.
Ann Fore	ANN FORE	290 F. Coelho Dr.
Lindsay M. Hill	Lindsay M. Hill	59 WALNUT ST.
Nancy M. Millard	Nancy M. Millard	463 Park Ave
Curtis C. Hill	Curtis C. Hill	59 Walnut St
Lisa Whittis	Lisa Whittis	128 Highland Ave
Brian Whittis	Brian Whittis	128 Highland Ave
Arlene Goddu	Arlene Goddu	92 Mason Ave
Albert Goddu	ALBERT GODDU	92 MASON AV
Thomas M. Riley	Thomas M. Riley	123 Highland Ave
Albert Papineau	ALBERT PAPINEAU	17 OAK ST
Russell Papineau	RUSSELL PAPINEAU	17 OAK ST

Town of Portsmouth

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Signature	Printed Name	Address
<i>Laura Rogers</i>	Laura Rogers	85 Highland Ave
<i>Paula Ramos</i>	Paula Ramos	15 Riverside St.
<i>Jane M Perreault</i>	PERREAULT	37 Riverside ST
<i>Caetano Johnson</i>	CARZOU JOHNSON	650 N FBL
<i>Helen Rhee</i>	Helen Rhee	24 Morgan St
<i>Jan Carruba</i>		-
<i>Jennifer Carruba</i>	Jennifer Carruba	27 Morgan St.
<i>Steve DeDa</i>	Steve DeDa	424 PARK AV
<i>Brett DePaola</i>	Brett DePaola	432 Park AV
<i>Joseph F Young</i>	Joseph Young	27, Morgan ST.
<i>Michelle J Charette</i>	Michelle J. Charette	56 Riverside St.
<i>Francis E Charette Jr</i>	Francis E. Charette Jr	56 Riverside St.
<i>Roger Charette</i>	Roger Charette	54 Riverside St.
<i>Melissa Wicks</i>	Melissa Wicks	55 Riverside St.
<i>Randy Martin</i>	Randy Martin	81 Cove St.
<i>Cheryl Martin</i>	Cheryl Martin	81 Cove St.
<i>Lorraine Mello</i>	LORRAINE MELLO	74 Cove St.
<i>Susan Soderlund</i>	Susan Soderlund	71 Cove St
<i>Logan Soderlund</i>	Logan Soderlund	66 Cove

Town of Portsmouth

Town Council
2200 East Main Road
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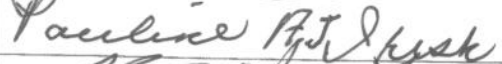

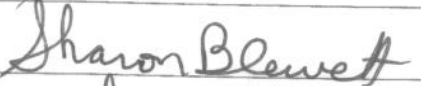



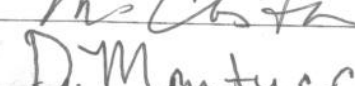
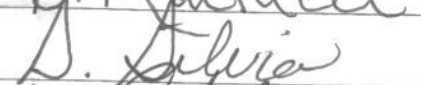
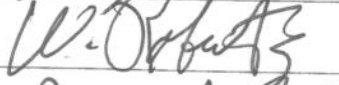
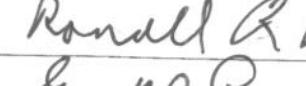

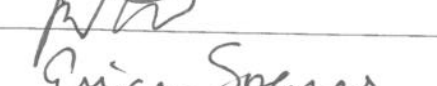




RECEIVED
D.E.M. / O.W.M.

RIDEM - Office of Waste Management
235 Promenade Street
Providence, R.I. 02908

2011 JAN 31 P 1:44

PETITION: opposing 8' elevation and the use of contaminated industrial fill which contains 20-40 ppm of arsenic

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Signature	Printed Name	Address
	FRANK B TRISCH	35 COVE STREET
	PAULINE A.J. IRISH	35 COVE STREET
	John Blewett	36 Cove Street
	Sharon Blewett	36 Cove Street
	Denise Garceau	48 Cove Street
	Kevin Silvia	448 Park Ave
	LAWRENCE J. FARYNIARZ	52 LAKEVILLE AVE
	M. Costin	87 Cove St.
	D. Martucci	30 Linda Ave
	S. Silva	739 West Main Rd
	G. Roberts	2848 East Main Rd Bets.
	RONALD R REED	28 Zornhugan
	GERALD Powers	53 Cottage Ave
	Jason Gaston	228 Bristol Ferry Rd.
	Erica Soares	228 Bristol Ferry Rd
	Neal Venancio	116 point rd.
	Katherine Sherring	027 Peartree Lane

Town of Portsmouth

Town Council
2200 East Main Road
Portsmouth, R.I. 02871

RECEIVED
E.M. / O.W.M.
2011 JAN 27 11

RIDEM - Office of Waste Management
235 Promenade Street
Providence, R.I. 02908

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Signature	Printed Name	Address
<i>Donna Lafleur</i>	Donna Lafleur	24 Cedar Ave. Portsmouth RI
<i>Kathy St Laurent</i>	Kathy St Laurent	185 Riverside St Ports RI
<i>Dennis St Laurent</i>	Dennis St Laurent	185 Riverside St Ports RI
<i>John St Laurent</i>	John St. Laurent	66 WARREN
<i>James St Laurent</i>	James St. Laurent	186 Riverside st Ports RI
<i>Keri Bricchilli</i>	Keri Bricchilli	186 Riverside St. Ports RI
<i>David A. Jettmarault</i>	David A. Jettmarault	287 RIVERSIDE ST PORTSMOUTH
<i>Pauline Mello Oyer</i>	Pauline Mello Oyer	378 Park Ave. Portsmouth
<i>Joseph Lafleur</i>	Joseph Lafleur	24 Cedar Ave Portsmouth
<i>Rose Graham</i>	Rose GRATHAM	355 RIVERSIDE ST - PORTS.
<i>Russell Sousa</i>	Russell Sousa	355 RIVERSIDE ST PORTSMOUTH

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Signature	Printed Name	Address
	Cameron McDonald	75 Cliff Ave
	John S Meniz III	5 Seacomet Ave
	John S Meniz Jr	5 Seacomet Ave
	Schyler Riley	196 Riverside St
	NANCY LUONGO - Fielding	117 Greenfield Ave
	Lori A. Fielding	117 Greenfield Avenue
	SUSAN J PRATT	40 Cedar Ave
	Debra D Young	25 Chardon Dr.
	Philip Young	25 Chardon Dr.
	ANTHONY SOARES	57 PINE ST
	Daryll D. Issa	42 Lakeville Ave
	RACHEL A. SPURIA	42 LAKEVILLE AVE
	Kathy Matsch	467 Park ave.
	BRUCE E. LAWSON	37 MASON AVE.

Town Council
 2200 East Main Road
 Portsmouth, R.I. 02871

Town of Portsmouth
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Signature	Printed Name	Address
<i>Carrie Deus</i>	Carrie Deus	500 Park Ave.
<i>David Bl Whitmarsh</i>	DAVID BL WHITMARSH	32 BLUEBILL WAY
<i>Lacey Brown</i>	Lacey Brown	112 Highland Ave
<i>Christopher Hardy</i>	Christopher Hardy	112 Highland Ave
<i>Madeleine M. Pencak</i>	MADELEINE M. PENCACK	98 MASON AVE
<i>John S. Pencak Jr</i>	JOHN S. PENCACK, JR	98 MASON AVE
<i>Madelyn R. Bruneau</i>	MADELYN R. BRUNEAU	53 GREEN ST.

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Signature	Printed Name	Address
Joseph F. McDowell	Joseph F McDowell	132 Highland Ave.
Susan Cordeiro	JUSAN CORDEIRO	231 CEDAR AVE
Karen Gleason	KAREN J. GLEASON	63 MASSASOIT AVE
David G. Reese	DAVID G. REESE	60 FREEBORO ST

RHODE ISLAND DEM
PUBLIC HEARING Tuesday, January 18, 2011 10/22/2010 7:00
Portsmouth Town Hall

SIGN UP SHEET FOR PUBLIC COMMENTS

Name	Organization	email	Phone
PETER ROBERTS			683-1760
GARY Hobb			683 4295
GARY Gump	Resident Portsmouth	ggump1@verizon.net	683-4766
LYLE RUDLOFF			
Madeline Beauvoage	Resident	MBeauvoage@aol.com	683-7
Dorothy Backman	Resident	NRGB1@yahoo	683-9479
Bill Backman	"	"	"
DONNA FARRETT	RESIDENT	DONNA.FARRETT@COX.NET	(683-4391)
LARRY FITZMORRIS	PCC	LJFITZ45@aol.com	683-6127
John S Pencak Jr	Resident		683 4604
Madeleine Pencak	Resident		683 4604
Julie Goddu	Resident	arline.Goddu@yahoo.com	683-3646
Teresa Barretto	Resident	TKBarretto@aol.com	
Joseph Barretto	"		
Julie Barker	"	julie.barker51@yahoo.com	
Maria Barker	"		683-2774
Thomas Fishburn	"		
George CARDOZA	RESIDENT	BUTZ	683-3365
Debra CARDOZA	RESIDENT		
CLAUDETTE Weissinger	Port Conservation Com		683-0085
Ben White			683-5693
Tom Casselman			
John McDaid	harddeadlines.com	jmcdaid@torrey.com	683-2316
Arthur Palmer	AP Enterprise LLC		
Kristen Sherman	APJS	ksherman@apslaw.com	274-7200
David Peter	SRT	d.peter@att.net	
CHARLES COOK	PCC		846-3055
Robert Dascoli	Town/Portsmouth	RDRISCOL@portsmouth.com	683-3255
CARL SCHLOEMANN	RESIDENT	CARL.SCHLOEMANN@BOX.NET	683 2823
Daryll D. Issa	Res/Envir Scientist	daryll-issa@ (40)	683-2467

→ daryll-issa@yahoo.com

DONNA ROBERTS
donna7889@ 683-1760
peoplepc.com

Judi Staven
joey31@juno.com 683-5516

Attachment D: Comments Received by Email

Portsmouth Email Comments

The Department received a number of request for a public meeting. As a public meeting was subsequently held, comments that only requested a meeting are not included here.

From: GARY GUMP [mailto:ggump1@verizon.net]
Sent: Thursday, January 06, 2011 7:24 PM
To: Mark Dennen
Cc: 'Robert G. Driscoll'; 'Robert W. Gilstein'; jmcdaid@torvex.com; 'Bob Hamilton'; 'Esmond Smith'; Gtoo@aol.com
Subject: Providence Journal Jan 05, 2011 PUBLIC NOTICE This public notice is related to environmental conditions at the Former Portsmouth Landfill, located on the north side of Park Avenue in Portsmouth, Rhode Island (Assessor's Plat 20, Lots 1,2, and 13 etc..

Mr. Dennen, Please consider this our written communication regarding the public notice copied below:

As residents of Portsmouth Park and living quite close to the former landfill we are concerned about the potential for increased levels of unacceptable run-off into the Sakonnet Bay and the upper reaches of Blue Bell Cove if this higher level of arsenic is allowed. The DEM and Portsmouth are currently at odds over pollution in the bay area immediately adjacent to this land fill and to allow this increase without first addressing the possibility of increasing the pollution problems should not be allowed. A well publicized public hearing will insure that all our citizens have an opportunity communicate our concerns to the RI DEM. We urge you to conduct a public meeting where this matter can be discussed and questions/concerns can be addressed.

Respectfully,

Gary and Janice Gump
37 Aquidneck Ave.
Portsmouth, RI 02871

-----Original Message-----

From: John McDaid [mailto:jmcdaid@torvex.com]
Sent: Friday, January 07, 2011 9:13 AM
To: Mark Dennen
Cc: sen-ottiano@rilin.state.ri.us; Jay Edwards; 'Robert G. Driscoll'; 'Robert W. Gilstein'; jmcdaid@torvex.com; 'Bob Hamilton'; 'Esmond Smith'; gtoo
Subject: Written comment pertaining to public landfill in Portsmouth

Mr. Dennen...

Please consider this a formal request for a public meeting pursuant to the notice attached. I am a long-time resident of Island Park, and our family lives two blocks from this landfill. While I fully understand that arsenic is a naturally occurring element, and that 20mg/kg is below mandated cleanup levels, it is still higher than normally found in RI soils, and I'd like the opportunity to have DEM and the developers discuss safety concerns with residents.

I am also cc'ing our state legislative delegation, both as a heads up, and also, because I do not believe that posting in the Providence Journal constitutes sufficient notice to residents of Portsmouth. The Journal may be the paper of record for Providence, but it closed its East Bay office several years ago; this, to me, means that by definition it is not a paper of record for the population of our town, and I would ask our legislators to work with DEM to find ways to provide effective notice.

Best Regards.

--John

--

John G. McDaid
jmcdaid@torvex.com
<http://www.torvex.com/jmcdaid>
twitter: jmcdaid
h (401) 683-2316
m (401) 965-0992

From: Lisa Whittier [mailto:lwhittier@cox.net]

Sent: Friday, January 07, 2011 5:14 PM

To: Mark Dennen

Subject: Island Park - Portsmouth

As a resident of Island Park, I would like to request a public hearing for the changes that you are proposing. I would also like to ask why was this not posted in the local paper but printed in the ProJo ?

Covering contaminated land with more contaminated fill is not the answer for this piece of land.

From: Michael Sousa [mailto:michaeljosephsousa@yahoo.com]

Sent: Saturday, January 08, 2011 1:01 PM

To: Mark Dennen

Subject: Re: AP Enterprise Inc. / BUDA Portsmouth RI

Hello Mr. Dennen,

My parents live in Portsmouth, RI in the Island Park section where AP Enterprise is trying to raise the level of poisons arsenic concentration in the landfill area from 7mg/Kg. to 40mg/Kg. In my opinion this should not be allowed. There are so surprises here - AP Enterprise knew what they were getting with this land and now they want to change the playing field to their advantage, to the disadvantage to those who live in the area.

I think the Portsmouth Town Council is correct and Public Hearings should at least be held in Portsmouth, to inform the citizens of the implications of this request.

Thanks for your attention.

Michael Sousa

(my parents live at 49 Riverside Street, Portsmouth)

From: Lisa Whittier [mailto:lwhittier@cox.net]
Sent: Sunday, January 23, 2011 7:40 PM
To: Mark Dennen
Cc: Janet Coit
Subject: Island Park Landfill

Mr. Dennen,

I would like these comments submitted for public record regarding the hearing that was held in Portsmouth on January 18.

1. This was advertised as a public meeting not a public hearing. It was advertised illegally according to Rhode Island law as it was not advertised in a local paper.
2. I object to the proposal of raising the elevation to 8' above what it is now. This poses a danger to the residents of Island Park as you cannot change the topographical flood plane in an area.
3. I object to the proposal to raise the allowable "arsenic" laced fill that you would like to bring in. This is completely unacceptable. It has been deemed by the Rhode Island Department of Health and the RI Department of Environmental Management back in the spring of 2007 that allowing increased limits of arsenic in soil increases the risk of cancer.
4. The federal Environmental Protection Agency has set the "safe" level of arsenic in the soil at .4 parts per million, with the risk of cancer at 1 in a million people.
5. DEM allows a ceiling of 7 parts per million based on the naturally occurring level in Rhode Island soil. At that concentration, the cancer risk is 1 in 50,000
6. And you now want to increase it to a level of between 20 – 40 parts per million? What is wrong with you?
7. Anytime you have a carcinogen, you set the level as low as you can, stated Dr. Robert Vanderslice of the Department of Health. Vanderslice explained that the DEM standard is based on the fact that children will be exposed to soil 350 days out of the year.
8. The meeting that was run on January 18, was run so carelessly that you all should have been embarrassed. I can't tell you how many times the answer to questions were "oh, I don't have that information with me".
What was the purpose of the meeting if you didn't bring all the information with you?
9. Why did the stenographer start the recordings at 9:08pm, when the meeting began at 7:00pm? Of course, at that time, half the room had already emptied out because townspeople were so disgusted.
10. When and what information has been provided to our Town Administrator regarding this project? I would like copies of all correspondence that has transpired with Robert Driscoll regarding this.
11. The previous Town Council as well as the new Town Council members had absolutely no knowledge of any of this.
12. The Town Clerk has a recording of this entire meeting, which I will ask that it be made part of this file. It is available at the Town Clerk's office for a fee of \$6.00. This will show the meeting in its entirety. Not the small portion that you will hope to show.

Please respond to my concerns and take all this into consideration when making a decision. This should not be allowed. My home is located within very close proximity to this landfill and I fear for the safety of my family, myself, my home and my animals.

Thank you,
Lisa Whittier
128 Highland Avenue
Portsmouth, RI 02871

From: Tomilson, Deborah [mailto:dtomilso@projo.com]
Sent: Monday, January 24, 2011 3:02 PM
To: Mark Dennen
Cc: Connolly, Scott
Subject: Comments Regarding The Providence Journal

Dear Mark,

I am writing in regards to a recent public hearing in which comments by residents were made regarding the lack of coverage by The Providence Journal in the Aquidnick Island area. I would like to provide you with some facts and figures of our statewide coverage and specifically, our coverage of Aquidnick Island.

Our newspaper and website, projo.com, deliver unmatched coverage of the entire state of Rhode Island. Everyday 150 reporters, photographers, editors, designers, producers and support staff are deployed across the state covering the stories of the day. Our newspaper is distributed to every city and town in the state by home delivery and retail sale. According to Scarborough Research, over 591,000 Rhode Island adults, or 72% of all Rhode Islanders get their news from us in print or online each week. Projo.com is the most visited local Website in the region according to the research company Comscore.

The Providence Journal has a strong presence in the Aquidnick Island area with over 4,600 Sunday home delivery subscribers and is available for sale at 45 retail locations. We maintain a distribution center on the island to provide subscribers and retailers prompt delivery in the morning.

We have also taken steps to expand the visibility of State of Rhode Island notices by featuring a fixed online ad position on our Rhode Island news section of the website which links readers to a portal where they can view all State of Rhode Island advertising.

I hope these statistics provides the assurance that we are a statewide circulating newspaper including coverage of the Aquidnick Island area. If I can be of any further assistance in this matter, please do not hesitate to contact me directly.

Sincerely,

Deborah Tomilson
Vice President, New Business and Interactive Development
The Providence Journal Company
401-277-7024
dtomilso@projo.com

From: firevision_3@hotmail.com
To: terrygray@dem.ri.gov
Subject: Extension Request
Date: Mon, 24 Jan 2011 10:11:02 -0500

Dear Mr, Gray;

Thank you for receiving my call this morning and allowing me to briefly express my concerns as it would directly impact negatively my prroperty and home as well as this neighborhood along with it's wetland and beach barriers. Are you aware there is also a little children's park in this very area?

I have attached a copy of one petition we have about 200 signatures in short notice in the record freezing cold, so cold our pens would not write.

Please extent the deadline of January 25. As none of us were notified, The only advertisement was a tiny blip in the Providence Journal which most of us do not receive.

We oppose this 8' elevation that could flood our homes and pool hazardous materials already existing in the landfill as well as contaminated arsenic fill from 7ppm to 20-40ppm.

Please, let us work together to solve this problem intelligently. Thank you again for all considerations.

Sincerely,

Debra Cardoza and Island Park Community
401-683-8110

From: Sakriver@aol.com [mailto:Sakriver@aol.com]
Sent: Tuesday, January 25, 2011 3:58 PM
To: Mark Dennen
Subject: Island Park Landfill

Mr Dennen

I have been a resident of Island Park (Ormerod Ave) for 28 years and a resident of Portsmouth for 50 years and I am opposed to the plans regarding the former Island Park Landfill. We (the residence) were not notified of these plans and in no way should DEM or any other agency allow more contaminants on this property.

I thought DEM first and foremost obligation is to help clean and protect our environment and if you allow this to pass it would be a huge contradiction for what your department stands for. Please reject these plans !!!!

Marcie Martin
30 Ormerod Ave

Portsmouth RI 02871
401-683-2671

From: dfgarceau@aol.com [mailto:dfgarceau@aol.com]
Sent: Saturday, January 29, 2011 6:59 PM
To: Mark Dennen
Subject: Island Park Landfill

Dear Mr. Dennen,

My questions regarding capping the Island Park Landfill are as follows:

Has DEM allowed this proposed high concentration of arsenic dirt in other RI neighborhoods?

- If so, where & what was the concentration?**
- When was it approved?**
- Are these neighborhoods feet away from these sites, such as Island Park?**
- Have there been any adverse health affects to these abutters & has the owner/business put in escrow any funds for possible health care needs in the future?**

If all answers to the above are -----No, then I do not see why this is even being considered! The people of Island Park need some guarantees that someone is looking out for their well-being.

In addition,

I believe capping of this site higher than grade will not only be an eyesore for the area, but is it really necessary?

Would you live next to such a site? Many of these townspeople have no other option.

Unfortunately, Mr. Palmer may have to cut his losses as many have done in this economy. I have heard some rumors that Mr. Palmer would be moving this soil from other sites that he owns.

Sometimes a profit is not possible at the risk of others.

I will await your reponse,

Denise Francz-Garceau

-----Original Message-----

From: donna.farrea@cox.net [mailto:donna.farrea@cox.net]

Sent: Tuesday, February 01, 2011 7:49 PM

To: Mark Dennen

Subject: Former Portsmouth landfill

I am strongly opposed to increased levels of arsenic for the Portsmouth landfill. I am especially concerned with run-off to neighboring residents as well as the playground our children play in. I am also opposed to this "BUD" request because it is in direct violation of the Clean Water Act for storm water runoff and contamination.

A hydro-engineer should be consulted to provide an in depth study for water-flow from this area in question prior to any consideration for approval.

I also object that DEM is demanding Island Park be "sewered" because of suspected contaminated water run off yet is willing to consider this "BUD" request from AP Enterprises to poison our soil, the surrounding wetlands, and the Sakonett River along with the wildlife / sealife this river supports.

This will also have a devastating affect on property values for this area.

Another thing I object to is the fact that Ms. Kristen Sherman (AP Enterprises' attorney) indicated at the town hall meeting (see CD) that in order to obtain prior town approval, she and AP Enterprises sat at the table and had a meeting with Mr. Discroll..... This is a direct violation of the R.I. public meetings law !

I also object that RIDEM appears to be supporting / enriching AP Enterprises in its quest for "waterfront development" no matter the consequences!

From: Irogers123@live.com

To: janet.coit@dem.ri.gov

Subject: arsenic in residential area

Date: Tue, 1 Feb 2011 23:05:52 -0500

The levels of Arsenic in the old landfill in Island Park, right now as quoted by (Mark Dennen) is approximately 4ppm-11ppm. To raise that levels near and around, water, housing, wetlands, and the oceans is the biggest mistake this State will make. I have lived here for 30 years if you want to fix the landfill, then fix it DO NOT DESTROY IT FURTHER. With the water tables and the hurricanes that come to this area, you will direct the water in new directions.. I thought you could not raise the levels of dirt in a flood zone more than one foot.

People talk about the 38 hurricane and the 54 hurricane, but no-one said anything about Hurricane Bob. The kids were in canoes in the streets. The only way to enter the park was through the escape bridge.. the state road was closed which is directly across the street from the dump. what happens when we cannot get out of the park. Is the state going to send in helicopters or let us die in the arsenic laid dirt that will be blown all over island park, on our land, and in our basements. What is the average wind speed, when a hurricane hits? Are you telling us that 6-8 ft. of dirt will not move when this happens? Please review the tape of the town council meeting or what you might call the information meeting. That was to inform us of what you want to do to us... I just heard on the news there will be flooding during wed. storm? I HOPE YOU HAVE ALL NEW DOCUMENTS that PERTAINS TO THE NEW LEVELS OF ARSENIC YOU ARE INTENDING TO DUMP.

laura rogers of ISAND PARK

Dear Mr. Dennen and Ms. Coit,

In this depressed economy we must be vigilant. Laws that protect our environment must be maintained.

Please prove to me that devious methods were not enlisted to get this Island Park old dump site developed.

What is the ultimate goal of AP Developers?

Why were local homeowners not notified of the changes planned? These changes do impact the entire area. The area includes waterways, topography, wildlife and protected swamp areas.

The watertable is high and cannot tolerate additional drainage. How is this additional runoff going to be managed?

Any poison intentionally introduced to the soil will become part of the runoff water with the snow and rain increasing the volume. Dry basements will become wet in the surrounding properties.

Are there plans to replace trees, shrubs or other native plants in order to stabilize the proposed 6-8 foot mound of construction-site soil?

Thank you for taking the time to read this.

I look forward to your response regarding the proposed Island Park landfill.

Teresa E. Binette
82 Mason Ave
Portsmouth, RI 02871

Mr. Dennen & Ms. Coit

I'd like you to know that my heart is broken with all this shenanigans. Does anyone realize how many CHILDREN are in this area? People make this seaside community their summer home vacation spot. Whose underhanded sneaky idea was it to propose the Island Park old dump site be developed? Just curious. Local papers to announce things include 'The Newport Daily' or 'The Seakonnet Times', & NOT the 'Providence Journal' with a teeny tiny ad that something was going on here in Island Park...locals just weren't reading it because it's not a local paper to our Island. I'm not trying to bust anyone's chops, but know that people in this community are FURIOUS and grossed out at what is being proposed. And that these changes will affect the entire area. The area includes waterways by Cardi's, the parks nearby, the neighborhood surrounding and protected swamp areas around it. Summers will stink. Literally. After all the work that's been done here...benches....lamps...paved sidewalks etc; Small steps. But steps nonetheless.

The watertable is high already, and cant take additional drainage. How is this additional runoff going to be handled? I shudder to think!

Id also like to see a plan to replace trees, shrubs or other native plants in order to stabilize the potential 6-8 foot mound of construction-site soil?

I've lived here all my life. I'm really sad to think this stinky smelly eyesore is potentially coming to town.

Thanks for listening.

Pauline Mello-Oyer
378 Park Ave.
Portsmouth RI

Dear Mr. Dennen,

It is with sheer disbelief that I write this letter. As an agent for the Department of Environmental Management, I am reporting to you my strong objection to the request to bring in fill that has a cancer causing level of arsenic in it.

DEM allows a ceiling of 7 parts per million. At that concentration the risk of cancer is 1 in 50,000. Anything above this level has been strongly advised against. It is grossly irresponsible to subject this neighborhood to arsenic levels beyond that which has already been established. We are a densely populated, residential community and this action will affect many, many people.

I also strongly object to the 15 foot mound that has been requested. It is of the utmost importance we have the ability to leave Island Park at a moment's notice due to a storm or a high tide with a strong wind pushing the sea over the sea wall. This area is well known for flooding. For you to allow this imposing height will surely put our lives in grave danger. Once the Escape Route bridge is closed for repairs, our only route to safety will be Park Ave. to Boyd's Lane. We get many days and nights where this route is flooded and inaccessible to travel. If you go forward and grant permission for this project, it could be catastrophic. Our history of this flood zone area has already proven this.

The Department of Environmental Management is supposed to be my steward for a better and safe environment----not an agent to make my neighborhood unhealthy and dangerous.

Respectfully submitted,

Teresa Barretto

February 4, 2011

DEM Office of Waster Management

ATTN: Mr. Mark Dennen

235 Promenade Street

Providence, RI 02908

Reference: News Release Dated January 25, 2011 - DEM Announces Extension Period
Regarding Portsmouth Town Dump Proposal

Dear Mr. Dennen,

This letter is to adamantly reject any and all proposals for the "capping" of the old Portsmouth Town Dump with sub-grade material having elevated levels of arsenic. My reasoning for this decision is based primarily on the fact that several types of cancer have been linked to high levels of arsenic. It is my understanding that the main cause for and potential for cancer is through two primary means, eating the dirt or through

groundwater. Eating dirt sounds foolish, but kids do eat dirt! And groundwater, well animals. and humans could very well- be subjected to this high level of arsenic. I do know that arsenic does not decompose. It doesn't biodegrade or move downward through soils and will remain permanently in the top levels of soil unless it is removed. Is this the possibility of cancer causing agents to humans worth the risk of granting this proposal? As background and to make a point, I as a young child back in the early 50's, had a direct view of the old dump from my Great Aunt's house located at the corners of Omerod and Pine Streets. I still recall vividly the constant billowing of burning trash, tires, and kitchen appliances. I do recall it closing either in the late 60's or early 70's. One can only imagine the accumulation of toxic items (such as asbestos) still buried at the site today. Not much was done to cleanup the area and to me looks the same.

The intent to "cap" of this property using sub-grade materials is an apparent cost saving measure with speculation by the current owners. It is common knowledge with most residents of Portsmouth, that this property is deemed useless due to its environmental issues. An obvious factor is that it would be extremely costly for the owners to remove the refuse from this dump. Which, is the most logical and environmental friendly way to do so, as with the requirement for gas stations having to remove and replace obsolete gas storage tanks. If "capping" is to be performed, then do so by either removing the refuse or cap the area using an acceptable grade of top soil without elevated levels of arsenic. In closing, one would think that the ownership of AP Enterprise LLC wouldn't use or even consider sub-grade elevated level of arsenic material as top soil for their homes! So, why then we should be subjected to this unacceptable procedure?

I thank you for your time and consideration in reviewing my comments regarding this most important environmental issue.

From: Debra C. [mailto:firevision_3@hotmail.com]

Sent: Friday, February 04, 2011 3:59 PM

To: Terry Gray

Subject: landfill

Good afternoon Terry,

Thank you for meeting with us on Tuesday. RIDEM dept of Health has stressed concern at these levels. Our extension according to you ends today.

However, as stated at this meeting we had asked several times on that day Tuesday, or make an appointment for a review of this file, at both times you stated we couldn't because they are working on it. We have been denied a review of this file to state and make appropriate comments on this regard.

1) I have before me a letter from the Town Administrator, Robert Driscoll, " Mr. Palmer, has not applied for any permits, prospective to this project, nor has any zoning relief or approvals been granted to him.." "One would assume that Mr. Palmer would not proceed with the remediation unless he first obtains all necessary state and local permits.

2) One such relief before Mr. Palmer proceeds any further, he is required to go before the Portsmouth Town Council and seek to abandon Russell Ave. (paper Road). Just because he is the owner of both side does not give him legal authority to take it upon himself that decision.

3) It is my obligation to notify our tenants of this proposal. Our tenants in the past have expressed how very happy they are there and really loved the house, the location and their plans for a long stay. However, they have just expressed great concern over this proposal and their intent to leave. It is rare when you have such good tenants who value and take great care of your property.

4) My sister just died of cancer. Our friend and neighbor we are helping is full of cancer, given 2 month to live. We are very alarmed at 20-40ppm

5) Mr. Gray, you have noted our concerns, the serious flooding, and increase..the escape bridge will be out, 8 months, our direct impact.

6) DEM is trying to clean-up this area and we are working hard toward that goal. Please do not risk our health, environment.

Maybe, Federal law regarding your proposal should be rechecked. New zoning law deny this kind of fill within 1000' of a residential area.

Mr. Palmer, or his agent must go before the Town Council for the paper road and approvals.

We do believed this site should be covered and ask that you only consider clean fill and decrease this evaluation.

When will this decision be made?

Thank you for your time and consideration

Debra



News Release
RI Department of Environmental Management
235 Promenade St., Providence, RI 02908
(401) 222-2771 www.dem.ri.gov

For Release: January 14, 2011

Contact: Gail Mastrati 222-4700 ext. 2402

DEM TO HOLD PUBLIC MEETING AT PORTSMOUTH TOWN HALL RELATED TO ONGOING CLOSURE ACTIVITIES AT THE FORMER TOWN LANDFILL SITE

PROVIDENCE - The Department of Environmental Management will hold a public meeting in Portsmouth on January 18 related to ongoing closure activities at the former Portsmouth town dump. AP Enterprise LLC purchased and is trying to remediate the property to bring the site into compliance with DEM Regulations and closure requirements.

In September 2010 following a public notice and hearing, DEM issued a Beneficial Use Determination (BUD) to AP Enterprise LLC, to accept soils that comply with the Department's industrial/commercial standards at the former Portsmouth Town Landfill on Park East Drive. This material was to be used as grading and shaping material underneath the soil cap. AP Enterprise LLC is now seeking a modification to that approval to accept materials that have elevated levels of naturally occurring arsenic. The proposal under consideration by the Department has identified said soils as being above the Department's industrial/commercial direct exposure standard of 7 mg/kg. These naturally occurring elevated arsenic concentrations are typically identified by the absence of any other contaminants.

The public meeting will be held at 7 p.m. at Portsmouth Town Hall, 2200 East Main Road. Representatives of DEM and AP Enterprises LLC will present information about the proposal and answer questions. Interested parties will have an opportunity to submit comments following the question and answer session. Information about the site is available on the DEM website, www.dem.ri.gov, by clicking on "Office of Waste Management" under Offices and Divisions on the homepage, then "Waste Facilities Management Program," then "Inactive Landfill Closure Program."

Written comments on the AP Enterprise LLC application will be accepted through 4 p.m. on January 25. They should be addressed to the attention of Mark Dennen at DEM's Office of Waste Management, 235 Promenade Street, Providence, RI, 02908, or via email at mark.dennen@dem.ri.gov.

-30-

Attachment F: Finding and Recommendations of the Special Legislative Commission to Study Naturally Occurring Arsenic in Soils

Attachment G: 2006 Notification of Abutters

Notification To Abutters
Site Investigation
Former Kidd Disposal Site
Portsmouth Town Landfill
Portsmouth, Rhode Island
July 6, 2006

In accordance with the Rhode Island Department of Environmental Management's (RIDEM's) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (the Remediation Regulations), and the Industrial Property Remediation and Reuse Act (Rhode Island General Law 23-19.14, Section 11), Vanasse Hangen Brustlin, Inc. is providing notice to abutters that a Site Investigation for the above mentioned property has been completed. The property is further designated as Plat 20 Lots 1, 2, 3, and 13, Plat 25 Lot 2, and Plat 19 Lot 89 of the Portsmouth Tax Assessor's plat maps. The goal of the investigation was to determine the extent to which any historical activities at the property may have resulted in any exceedences of the RIDEM's promulgated soil criteria and groundwater objectives. The investigation involved sampling and analysis of surface and subsurface soil and groundwater. The results of the investigation indicate that soils exhibit levels of lead that exceed the RIDEM Residential Direct Exposure Criteria and levels of trichloroethene (TCE) and cis-1,2-dichloroethene (cis-1,2-DCE) that exceed the RIDEM GA Leachability Criteria. Groundwater on the Site exceeded the RIDEM GA criteria for TCE, vinyl chloride, tetrachloroethene, cis-1,2-DCE, benzene, and barium. The proposed remedial alternative for the property is the installation of a cap or other engineered barrier over the entire Site and monitored natural attenuation to address residual volatile organic compounds in the groundwater. The future use of the property will be for commercial purposes. RIDEM has determined that the investigation has adequately assessed the nature and extent of the contamination at the property and addressed all concerns in accordance with the Remediation Regulations.

There is a 14-day comment period, commencing with the date of delivery of this notice, during which the public may review RIDEM records pertaining to this property and submit written comments regarding the technical feasibility of the preferred remedial alternative. Should you require additional time for review, a request for an extension of the comment period may be made to the Department. Requests must be received by the Department before 4:30pm on the final day of the comment period, and may be made in writing to the address below or by calling the telephone number listed below. RIDEM will consider all substantive written comments prior to issuing its final approval of the proposed remedial alternative.

Written comments should be submitted to:

Chris Walusiak
R.I. Department of Environmental Management
Office of Waste Management
235 Promenade Street
Providence, RI 02908-5767

Arrangements to review RIDEM records may be made by calling 222-2797, ext. 7135.

Attachment H: Approval of 6/8/2010 from Town of Portsmouth

TO: Coastal Resources Management Council
4808 Tower Hill Road Suite 3
Wakefield, RI 02879
Phone: (401) 783-3370

DATE: June 8, 2010

FROM: Building Official: Town of Portsmouth

SUBJ: Application of: Vanasse hangen Brustlin, Inc. (VHB) on behalf of client AP Enterprise, LLC (APE)

Location: Old Orchard Cove
Address: Park Avenue

Plat No 20
Plat No. 25

Lots No. 1, 2, & 13
Lot No. 2

To: cap landfill.

I hereby certify that I have reviewed ___ foundation plan(s).
___ plan(s) for entire structure
X site plans

Titled: Grading Plan

Date of Plan: April 28, 2010

X and find that the issuance of a local building permit is not required as in accordance with section 113 of the Rhode Island State Building Code.

___ and find that the issuance of a local building permit is required. I hereby certify that this permit shall be issued once the applicant demonstrates that the proposed construction/activity fully conforms to the applicable requirements of the RISBC.

___ and find that a Septic System Suitability Determination (SSD) must be obtained from the RI Dept. of Environmental Management.

X and find that a Septic System Suitability Determination (SSD) need not be obtained from the RI Dept. of Environmental Management.

X and find that said plans conform with all elements of the zoning ordinance, and that if said plans require zoning board approval, that the applicant has secured such approval and that the requisite appeal period has passed with no appeal filed or appeal is final. The Zoning Board approval shall expire on _____.

George Modenas 6/8/10
Building Official's Signature Date

X and find that said plans conform with all elements of the zoning ordinance, and if said plans require zoning board approval, that the applicant has secured such approval and that the requisite appeal period has passed with no appeal filed or appeal is final.

George Modenas 6/8/10
Zoning Official's Signature Date

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
Rhode Island Department of Environmental Management**

**Fact Sheet for
Former Portsmouth Town Landfill (aka Island Park Landfill)**

March 4, 2011

The former Portsmouth Town Dump, also known as the Island Park Landfill, is a privately owned 18 acre site, 14 acres of which was leased as a landfill between 1954 and 1974 by the Town of Portsmouth. The Department's Landfill Closure Program became involved with the site in 2003 when Art Palmer (owner of AP Enterprise "APE") approached the Department about his desire to acquire the site. His original plan was to clean up the site and create a recreational volleyball facility at the site.

In November of 2003 and January of 2006, APE submitted Site Investigation Reports (SIR) to the Department. They found the following regulatory issues at the site:

- Trash and refuse is present near the surface with minimal or no cover
- Existing soils exceed the RIDEM Direct Exposure Criteria for the following hazardous substances: arsenic, lead, benzo (a) pyrene, benzo (b) fluoranthene, and chrysene.
- Existing soils also exceed groundwater protection standard (leachability criteria) for trichloroethene, trichloroethene, tetrachloroethene and cis-1,2-dichloroethene.
- Groundwater sampling of on-site wells shows the groundwater exceeds the GA criteria for barium, benzene, cis-1,2-dichloroethene, tetrachloroethene, trichloroethene, and vinyl chloride. The area is classified as GA.
- Soil gas results indicate elevated levels of trichloroethene, 1,1,1-trichloroethane, toluene, 1,1-dichloroethene and 1,1,2-trichlorotrifluoroethane on the central portion of the landfill.

The 2006 proposed remedy for the Site consisted of the following elements:

- A final cap consisting of two feet of soils meeting the RIDEM Residential Direct Exposure Criteria.
- The use of shaping and grading soils under the final cap to give the cover a 3-5% slope to minimize storm water infiltration and better protect the groundwater.
- Deed restriction (an Environmental Land Usage Restriction or ELUR) to prevent building or disturbance of the cap.
- Monitoring of groundwater and soil gas.

In the Remedial Action Work Plan submitted in March of 2010, APE kept the elements of the remedy above but no longer included the proposal to build a recreational complex.

Initial Beneficial Use Determination (BUD) Application

A.P. Enterprises submitted an initial BUD Application in August 2010 requesting to accept soils that were above the Rhode Island Department of Environmental Management's Residential Direct Exposure Criteria and below the Industrial/Commercial Direct Exposure Criteria. The proposed soils would be used for grading and shaping of the landfill contours prior to placement of the final cap. A public hearing was held on September 18, 2010 but no comments were submitted. The proposed plan also obtained approval from the Town of Portsmouth and the Coastal Resource Management Council. The Department approved the BUD at the end of September 2010.

Elevated Naturally Occurring Arsenic Soil Issues and Beneficial Use Determination (BUD) Modification

The proposal is to accept, in addition to other soils already approved, soils containing naturally occurring arsenic above the RIDEM Direct Exposure Criteria of 7 mg/kg (ppm), with an average arsenic level below 20 mg/kg and a maximum level of 40 mg/kg. Levels proposed are similar to naturally occurring levels in Aquidneck Island. The matter under consideration now (modification of the BUD to include soils with naturally occurring arsenic) relates only to the acceptance criteria of soils and makes absolutely no changes to landfill contours, volume of material accepted or any other aspect of the approved remedy.

The Relationship of Regulatory Standards to the Proposal

The Rhode Island House of Representatives "Special Legislative Commission to Study Naturally Occurring Arsenic in Soil", as reported in May 2008 dealt with the issue of naturally occurring arsenic, particularly on Aquidneck Island. The commission found that the cleanup standard of 7 mg/kg had a negative economic, environmental and quality of life impact that disproportionately affected the residents of Aquidneck Island.

As a result of the Commission's findings, the Department proposed revised standards in its Remediation Regulations that were released for public comment in December of 2010. These allow for the presence of arsenic in residential soils at a level of 43 mg/kg with very minimal standards (6" of clean soil and some notification). Levels above 43 mg/kg are considered acceptable with 2 feet of cover and an Environmental Land Use Restriction.

Other important regulatory standards are the RIDEM Compost Regulations (Solid Waste Regulation #8). These set a limit of 41 mg/kg in Class A compost, which are considered safe for unrestricted homeowner use in growing vegetables, gardening, lawn application and landscaping, as well as application at public parks. Class B compost, with levels of arsenic up to 75 mg/kg can be used in more limited applications.

Soils Received from the Fairhaven, Massachusetts Site

The Department received complaints on February 11, 2011 that soils with a gasoline odor and were contaminated with benzene had been dumped at the Former Portsmouth Landfill. DEM personnel inspected the site on February 14, 2011 and February 16, 2011 to investigate the complaint. The Department also received analytical results that showed the material, from a site in Fairhaven, MA, met the standards of the approved Beneficial Use Determination. Upon confirming the material in question had a gasoline odor, Department representatives sampled the pile and analyzed the soil for volatile organic contaminants (VOCs) and total petroleum hydrocarbons (TPH). Analytical results showed there were no detectable levels of benzene and that other constituents analyzed were below

both industrial/commercial and residential standards. In addition, the analytical results confirmed that all constituents were below the standards included in the September 2010 BUD approval and could be used for grading and shaping purposes.

Former Portsmouth Landfill (aka Island Park Landfill)

Important Site Milestones:

- 11/2003** APE submits Site Investigation proposing soil cap as part of recreational use
AP Enterprise LLC enters agreement to purchase property.
- 6/2006** After review and correspondence, RIDEM issues Program letter considering SIR complete. Public notice occurs which included notification of all abutters and the Town of Portsmouth by mail.
- 11/2006** APE submits Remedial Action Work Plan with the proposed recreational Complex.
- 12/2006** Remedial Decision Letter issued by RIDEM
- 3/2010** APE submits revised Remedial Action Work Plan without recreational use and pavement and submits detailed criteria for grading and shaping materials.
- 5/2010** APE submitted Category B Assent Application to CRMC
- 6/2010** APE submits Soil Erosion and Sediment Control Ordinance Application to Portsmouth Building Official and Town of Portsmouth approves Application.
- 8/2010** APE submits BUD Application
- 9/2010** Following the public hearing on 9/18/2010, the Department approved the BUD.
- 9/2010** CRMC unanimously approves the application. The Town Manager of Portsmouth was present for the meeting and is on the CRMC Board. He voted to approve AP Enterprises application. (9/28/2010).
- 12/2010** APE asks for a modification of BUD.
- 1/5/2011** Public Notice was published in the Providence Journal notifying the public of request for modification
- 1/18/2011** Public Meeting on BUD modification



Vanasse Hangen Brustlin, Inc.

December 3, 2010

Ref: 72257.00

Mr. Mark Dennen
Principal Environmental Scientist
Rhode Island Department of Environmental Management
235 Promenade Street
Providence, Rhode Island 02908-5767

Re: Proposed Amendment to BUD Approval
Former Portsmouth Landfill
Plat 20 Lots 1,2,13 and Plat 25 Lot 2
Portsmouth, Rhode Island

Dear Mr. Dennen:

On behalf of AP Enterprise, LLC (APE), Vanasse Hangen Brustlin, Inc. (VHB) submits this letter to propose an amendment to the Beneficial Use Determination (BUD) Application that was approved by the Rhode Island Department of Environmental Management (RIDEM) in a letter dated September 20, 2010.

The proposed amendment to the approved BUD relates to the re-use of soils that exhibit naturally occurring elevated arsenic concentrations (such as those found on Aquidneck Island – the location of the Project) that exceed the RIDEM Industrial/Commercial Direct Exposure Criteria (I/CDEC) of 7 mg/Kg (parts per million or ppm). These naturally occurring arsenic concentrations are typically identified by the absence of any other contaminants (organic and inorganic) within the sample.

APE requests a change in the acceptance criteria for arsenic-only impacted soils used for grading and shaping soils that will be placed under an approved cap. Rather than use the RIDEM I/CDEC of 7 mg/Kg, APE requests a maximum arsenic concentration of 40 mg/Kg with a source data average concentration not to exceed 20 mg/kg. The average concentration would be determined by the arithmetic average of no less than 10 samples

Mr. Mark Dennen
RIDEM
Ref.: 72257.00
December 3, 2010
Page 2

Elements of the approved BUD Application that reference the I/C DEC and therefore are potentially affected by the proposed amendment are Comments 6 (f), 7, and 9 (c). In the interest of clarity we will re-state each of those comments and discuss it relative to the proposed amendment:

***BUD Application Comment 6f** - Identify and discuss the controls (e.g. environmental, engineering, institutional...etc.) that will be used to properly and safely recycle and reuse the solid waste. This discussion should include, but not be limited to, information regarding the following:*

How the generator has minimized the quantity and toxicity of the waste material;

***Original Response** - The acceptance criteria for imported soil will be RIDEM's Industrial/Commercial Direct Exposure Criteria and the GB Leachability Criteria. Soils exhibiting toxicity characteristics will not be accepted.*

Amendment Discussion – It is important to note that arsenic has a very low solubility in water. We are proposing to accept soil with elevated arsenic due only to natural conditions. Therefore any leachability impacts from this soil will be no worse than what one would expect from the local native soil. As the landfill will be capped with soil that meets the RIDEM I/C DEC we expect that any long terms impacts would actually be less than that of local natural conditions.

***BUD Application Comment 7** - Explain why the proposed recycling of solid waste is not simply an alternate method of disposal. The Director may require information regarding the estimated value of the solid waste material both before and after it is recycled.*

***Original Response** - The use of soil containing substances above Residential Direct Exposure Criteria (RDEC) but below the Industrial/Commercial Direct Exposure Criteria (I/CDEC) as a cover material is standard practice at landfills.*

Amendment Discussion – Although this comment discusses the I/C DEC, it does not significantly relate to this proposed amendment. This amendment pertains only to the re-use of soil that contains elevated concentrations of arsenic due to a natural condition. It is not clear if this soil is a solid waste per the RIDEM Solid Waste Regulations, however it is well known that the re-use of these soils is severely restricted by the RIDEM Remediation Regulations, thus our proposal is sound practical alternative to disposal.



Mr. Mark Dennen
RIDEM
Ref.: 72257.00
December 3, 2010
Page 3

BUD Application Comment 9c - Where the project in question includes the reuse of any soil impacted by known or suspected contamination, or the use of any recycled solid waste as a "manufactured soil product" (i.e.: solid waste that is or has been altered or rendered into a material with soil type properties), the applicant must demonstrate the use of these materials as the location in question:

Will not result in degradation of the environment.

Original Response - Adherence to the I/CDEC and GB Leachability Criteria will ensure that the grading and shaping material does not result in degradation of the environment.

Amendment Discussion The Project will not result in the degradation of the environment. As mentioned previously, arsenic has a very low solubility in water; furthermore as these soils will be covered with a RIDEM-approved cap eliminating the potential of direct contact with the shaping/grading soils which could potentially contain the elevated arsenic. It is important to note also that the Site is currently an uncapped landfill and that the Project will actually benefit the environment.

Please let us know if you have any questions or if you require additional information. We can be reached at 401-272-8100.

Very truly yours,

~~VANASSE HANGEN BRUSTLIN, INC.~~



Timothy O'Connor, P.E.
Principal



Claude Masse
Senior Environmental Scientist

cc: Arthur Palmer, APE
Kristen Sherman, Adler Pollock & Sheehan P.C.
David Peter, Site Restoration Technologies, LLC





RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

September 20, 2010

Mr. Arthur Palmer
AP Enterprises, LLC
28 Teal Drive
Wakefield, RI 02879

CERTIFIED MAIL

RE Beneficial Use Determination Approval
Former Portsmouth Landfill Plat 20 Lots 1,2,13 and Plat 25- Lot 2
Portsmouth, Rhode Island

Dear Mr. Palmer:

Enclosed please find the Beneficial Use Determination Approval (BUDA) for the above listed property. Please review the stipulations of this BUD thoroughly to ensure your compliance with the requirements.

Please notify this office at least 72 hours prior to the beginning of any work related to the remediation of the property. If you have any questions or comments regarding this letter, please contact me by telephone at (401) 222-2797 ext. 7421 or by e-mail at james.wilusz@dem.ri.gov

This approval shall be recorded in the land evidence records of the Town of Portsmouth as required by law and a recorded copy returned within ten (10) days of the above date.

Sincerely,

Mark M. Dennen
Principal Environmental Scientist
Office of Waste Management

cc: Laurie Grandchamp, Supervising Engineer OWM - Solid Waste program

Beneficial Use Determination Approval (BUDA)
667 Waterman Avenue
East Providence, Rhode Island

Page 1 of 5
August 13, 2008

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

In the matter of the application for
Beneficial Use Determination Approval at:

Office of Waste Management

**Former Portsmouth Landfill
Plat 20 Lots 1,2,13 and Plat 25- Lot 2
Portsmouth, Rhode Island**

Beneficial Use Determination Approval

In the above entitled matter wherein AP Enterprises LLC as owner of the former Portsmouth Landfill located north of Park Avenue in Portsmouth, filed with the Rhode Island Department of Environmental Management (RIDEM) the following document which fulfill the requirements of the Guidelines on Beneficial Use Determinations ("BUDs") for Source Segregated Solid Waste:

1. Beneficial Use Determination Application- Former Portsmouth Landfill, Plat 20, Lots 1,2,13 and Plat 25 Lot 2, Portsmouth, RI, submitted by VHB, received 8/11/2010.

This document answers and discusses the questions put forth in the application process, in-order to ensure compliance with the requirements pursuant to the Department's Remediation Regulations, as amended February 2004, and the Rules and Regulations for Composting Facilities and Solid Waste Management Facilities (Solid Waste Regulations) dated January 1997 in accordance therein.

Upon consideration thereof, the Department of Environmental Management's Office of Waste Management (OWM) approves the Beneficial Use Determination Application through this Beneficial Use Determination Approval (BUDA) provided that:

1. The Department shall receive notification 72 hours prior to the commencement of closure construction activities.
2. All work must be performed in accordance with all applicable regulations and the Department approved Remedial Action Work as modified by the Response to Comments dated July 8, 2010- Portsmouth Landfill, submitted by VHB received 8/11/2010 and must be consistent with Section 11.00 (Remedial Action) of the Remediation Regulations.
3. Grading and shaping material shall consist of soils meeting the method 1 RIDEM Industrial Commercial Standards shall be managed in accordance with the Remedial

Action Work Plan and will be sampled at a frequency of once every 2,500 cubic yards as detailed in your response to comments referenced above. These will be covered with a landfill cap as described below:

4. AP Enterprises will construct a landfill cap within the defined limit of waste to close the landfill in accordance with the Solid Waste Regulations and the Remediation Regulations. The source of the cover material will be evaluated to demonstrate that it does not contain contaminants at concentrations above Method 1 Residential Criteria.

All clean fill imported to the site shall be sampled prior to delivery and placement. Clean fill and loam shall be sampled for arsenic at a minimum frequency of one sample per 1000 cubic yards. One-quarter of the total number of compliance samples of clean fill and loam shall be sampled for total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and 13 priority pollutant metals. All clean fill utilized onsite shall be compliant with the Department's Method 1 Residential Direct Exposure Criteria (RDEC) pursuant to the Remediation Regulations. The Closure Report shall include all original laboratory analytical sampling results from the fill demonstrating compliance with the RDEC and either a statement from the facility that provides the clean fill attesting to the materials origin and suitability or written certification by an Environmental Professional that the fill is not jurisdictional and is suitable for the cap.

5. Placement of the final landfill cap shall commence not later than 90 days after final receipt of the grading and shaping material and finish within one year.
6. Results of all environmental sampling shall be sent to Mark M. Dennen, Office of Waste Management (OWM), 235 Promenade Street, Providence, RI 02908.
7. The OWM shall be immediately notified of any Site or operation condition that results in non-compliance with this BUDA.
8. Any interruptions of the remedial action shall be reported to Mark M. Dennen at the Office of Waste Management by telephone within one (1) working day and in writing within seven (7) days of occurrence.
9. All waste derived from the implementation of the Remedial Action Work Plan / Closure Plan shall either be managed in accordance with the approved Beneficial Use Determination Variance Application, or disposed of in accordance with the Department's Rules and Regulations for Hazardous Waste Management, and the Solid Waste Regulations. In the event waste is disposed of off-site, documentation of proper disposal shall be provided to the Office of Waste Management.
10. The BUDA does not remove AP Enterprises of their obligation to obtain any necessary permits from other state, local, or federal agencies, including the Rhode Island

Coastal Resources Management Council.

11. This BUDA shall be recorded in the Town of Portsmouth Land Evidence records and a recorded copy forwarded back to RIDEM within ten (10) days.
12. This BUDA shall expire two years from the date of issuance and may be renewed yearly after that.
13. AP Enterprises shall submit quarterly updates to the Department with the following information:
 - Name, address, and quantity received of each source of material
 - An explanation and photographs of construction activities and sedimentation control measures that have been done at the site
 - Sampling that has been done on material received
 - An explanation of any complaints that have been received
 - An updated schedule of timelines to completion of project
14. No Hazardous waste shall be accepted from any off-site sources for treatment, storage or disposal at the Site.
15. An Institutional Control in the form of an Environmental Land Use Restriction (ELUR) for the Site will be recorded in the Town of Portsmouth Land Evidence Records at the time of this projects completion and will specify all the site conditions, restrictions and emergency provisions in order to meet the appropriate Remedial Objectives as defined in the Remediation Regulations and Solid Waste Regulations. Be advised that, because the ELUR is part of the remedy, the Department will require (as will be stated in the ELUR) that the property owner submit an annual inspection report by a qualified environmental professional. This report will be subject to review by the Department. A recorded copy of the Department approved ELUR must be forwarded back to the Office of Waste Management (OWM) prior to issuance of the Interim Letter of Compliance.

This BUDA shall remain in full force and effect provided said Remedial Action Work Plan / Closure Plan is implemented in a manner satisfactory to the Department of Environmental Management. Failure to comply with all points stipulated in this BUDA shall result in the issuance of a Notice of Violation and against the responsible parties.

This BUDA shall be subject to modification or revocation in accordance with the law.

Entered as the Approval of the Department of Environmental Management this 20th day of September, 2010.

By:

A handwritten signature in black ink, appearing to read "Leo Hellested", written over a horizontal line.

Leo Hellested, P.E.
Chief, Office of Waste Management
Department of Environmental Management

**Transportation
Land Development
Environmental
Services**



imagination | innovation | energy Creating results for our clients and benefits for our communities

RECEIVED
D.E.M / O.W.M

2010 MAR 19 P 12:08

March 17, 2010

Vanasse Hangen Brustlin, Inc.

Ref: 72257

Mr. Mark Dennen
Rhode Island Department of Environmental Management
Office of Waste Management
235 Promenade Street
Providence, Rhode Island 02908

Re: Remedial Action Work Plan
Former Kidd Disposal/Portsmouth Town Dump, CERCLIS # 987467917
Plat 20, Lots 1,2,13 and Plat 25, Lot 2
Portsmouth, Rhode Island

Dear Mr. Dennen,

Vanasse Hangen Brustlin, Inc. (VHB) submits this letter on behalf of our client AP Enterprises, LLC (APE) to transmit a revised Remedial Action Work Plan (RAWP) for the portion of the former Portsmouth Town Landfill which is owned by APE (the Site). The Site is currently unimproved and overgrown with vegetation. The Site is bounded on the north and east by residential properties, on the west by a coastal salt pond and on the south by Park Avenue, beyond which is the Sakonnet River.

A RAWP was previously submitted to the Rhode Island Department of Environmental Management (RIDEM) in November 2006 and was commented on by RIDEM in February 2007. At the time of the submittal of the RAWP, APE planned on redeveloping the Site as a recreational beach volleyball complex. APE is not presently planning to move ahead with the plans for the complex and proposes instead to cap the Site. This revised RAWP incorporates comments from RIDEM regarding the previous submission and reflects changes in the proposed redevelopment of the Site. This RAWP focuses on the placement of a two to six foot cap over the former landfill within the Site boundaries.

To improve Site grading and to aid in off-setting the enormous costs associated with the cap construction, the import of fill material from area contractors that exceeds the RIDEM Residential Direct Exposure Criteria (RDEC) but not the RIDEM Industrial/Commercial Direct Exposure Criteria (I/CDEC) is proposed to be used beneath a two foot cap of clean fill material. APE estimates that it will require a minimum of 100,000 cubic yards of fill material to build the cap. Of that amount, approximately 36,000 cubic yards will consist of clean fill material meeting RIDEM RDEC to be used to construct a two foot cap.

Due to the proximity to coastal features, the Site is also under the jurisdiction of the Coastal Resources Management Council (CRMC) under the Coastal Resources Management Plan (CRMP).

10 Dorrance Street, Suite 400
Providence, Rhode Island 02903
401.272.8100 • FAX 401.273.9694
email: info@vhb.com
www.vhb.com

Mr. Mark Dennen
RIDEM-OWM
Project No: 72257
March 17, 2010
Page 2

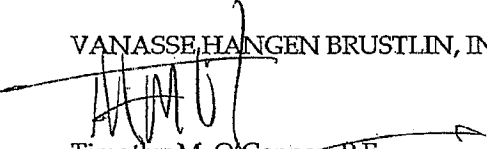
Once the RAWP has been approved by RIDEM, a CRMC Assent application will be submitted to CRMC.

Since this is a revision of the previously submitted RAWP, we have assumed that the application fee will be waived.

If you have any questions concerning this matter, please do not hesitate to call Michele Paul at 401-272-8100.

Sincerely,

~~VANASSE HANGEN BRUSTLIN, INC.~~


Timothy M. O'Connor, P.E.
Principal


Claude M. Masse
Senior Environmental Scientist

Enc

Cc: Art Palmer, APÉ
Kristen Sherman, Adler, Pollock, & Sheehan



Former Kidd Disposal Site Portsmouth Town Landfill

Portsmouth,
Rhode Island

Prepared for: **AP Enterprises, LLC**
Newport, Rhode Island

Prepared by: **VHB / Vanasse Hangen Brustlin, Inc.**
Providence, Rhode Island

March 2010

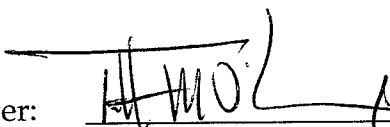
Former Kidd Disposal Site Portsmouth Town Landfill

Portsmouth,
Rhode Island

Prepared for: **AP Enterprises, LLC**
Newport, Rhode Island

Prepared by: **VHB /Vanasse Hangen Brustlin, Inc.**
Providence, Rhode Island

Project Scientist: 
Claude Masse

Project Manager: 
Timothy M. O'Connor, P.E.

March 2010

Table of Contents

Introduction	1
Site Description	3
Location and Site Description	3
Regulatory Exceedances	3
Site/Vicinity Characteristics.....	4
Environmental Setting.....	4
Remedial Activities	7
Remedial Objectives	7
Proposed Remedy	8
Soil Stockpile Management/Erosion Control.....	10
Dust Control.....	11
Points of Compliance	11
Proposed Schedule of Remediation	12
Contractors and Consultants	12
Site Plan.....	13
Design Standards and Technical Specifications.....	13
Set-Up Plans.....	13
Effluent Disposal	13
Contingency Plan.....	13
Operating Log	13
Security Procedures.....	14
Shut-Down, Closure and Post-Closure Requirement.....	14
Compliance Determination.....	14
Report Preparation.....	14
Certification	15
References	16
List of Acronyms	17
Figures	19

Appendices

- A – Limitations
- B – Waterman Grading Plan
- C – Draft Environmental Land Usage Restriction
- D – Contingency Plan

List of Figures

Figure No.	Title
1	Site Locus Map
2	Site Plan



1

Introduction

At the request of AP Enterprises, LLC (APE), Vanasse Hangen Brustlin, Inc. (VHB) has completed this revised Remedial Action Work Plan (RAWP) for the portion of the former "Portsmouth Town Landfill" which is owned by APE. The landfill is located in Portsmouth, Rhode Island, specifically, Portsmouth Assessor's Plat 20, Lots 1, 2, and 13, Plat 25, Lot 2 (the Site).

A RAWP was previously submitted to Rhode Island Department of Environmental Management (RIDEM) in November 2006 and was commented on by the RIDEM in February 2007. At the time of the submittal of the RAWP, APE planned on redeveloping the Site as a recreational beach volleyball complex. The complex would have consisted of a stadium volleyball court, associated paved parking, and several satellite volleyball courts. Due to economic constraints and conditions, APE is not presently proceeding with the proposed complex and will instead place a cap over the former landfill within the Site boundaries.

In January 2006, VHB submitted, on behalf of APE, a Supplemental Site Investigation Report (SSIR) detailing investigative activities and findings regarding the Site. The SSIR was prepared consistent with Section 7.0 of the Rhode Island Department of Environmental Management's (RIDEM) *Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (Remediation Regulations)* amended August 1996, revised February 2004.

The findings of the VHB SSIR were as follows:

- Soils within the former landfill footprint are mixed with trash/refuse, fill and other debris encountered at depths ranging from two (2) to eight (8) feet below surface grade (bsg).
- Soils exhibit levels of lead that exceed the RIDEM Residential Direct Exposure Criteria (RDEC); and levels of trichloroethene (TCE), tetrachloroethene (PCE) and cis-1,2-dichloroethene (cis-1,2-DCE) that exceed the RIDEM GB Leachability Criteria.
- Sediment samples from the tidal flats do not exceed National Oceanographic and Atmospheric Administration (NOAA) median effects range sediment guidelines. Metal concentrations of arsenic, copper, lead, mercury and zinc exceed low effects range guidelines in one or more of the sediment samples collected. VHB



believes that arsenic concentrations are consistent with background conditions and are likely attributed to naturally occurring arsenic levels in near-shore marine sediments.

- Soil gas results indicate elevated levels of TCE, 1,1,1-trichloroethane, toluene, 1,1-dichloroethene (1,1-DCE) and 1,1,2-trichlorotrifluoroethane on the central portion of the landfill, however, these concentrations decrease to non-detectable levels on the southern and northern portions of the Site.
- Groundwater in several of the monitoring wells on Site exceeds the RIDEM GA criteria for TCE, vinyl chloride (VC), PCE, cis-1,2-DCE, benzene and barium.
- Surface water samples from the tidal flat area indicate trace lead concentrations, however, these concentrations do not exceed the RIDEM Ambient Water Quality Criteria for Aquatic Life.

To remediate the Site, VHB has selected a remedy to address impacted soil and groundwater on the Site which facilitates the property re-development, this remedy consists of the following components:

- The installation of a cap or other engineered barrier over the entire former landfill footprint located within APE property boundaries. The cap will consist of the placement of approximately two to six feet of fill with the upper two feet meeting residential criteria.
- Monitored natural attenuation (MNA) to address residual volatile organic compounds (VOCs) in groundwater at the Site. Based on investigations at the Site to date, the exceedances identified in groundwater do not pose an unacceptable risk to human health or the environment. Site groundwater is not used for human consumption, nor will the intended future use of the Site result in exposure to Site groundwater.
- An Environmental Land Usage Restriction (ELUR) requiring that the cap be maintained or the use of the Site be restricted. A draft ELUR is included in **Appendix C** of this report.

This RAWP was completed using the Remediation Regulations (as amended August 1996 and February 2004) as guidance.

This RAWP has been prepared on behalf of and for the exclusive use of APE. This plan and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party, nor used by any other party in whole or in part, without the prior written consent of VHB. However, VHB acknowledges and agrees that this report will be part of the public document file upon approval by the RIDEM.

Site Description

Location and Site Description

The Site is an approximately 18 acre unimproved group of parcels formerly identified as the Portsmouth Town Landfill located north of Park Avenue in Portsmouth, Rhode Island. Much of the Site was formerly utilized by the Town of Portsmouth for its municipal landfill. The Site is specifically identified by Portsmouth Assessor's Plat Map 20, Lots 1, 2 and 13, and Plat 25, Lot 2.

Regulatory Exceedances

The RAWP includes remedial strategies to address impacted soil, and is based on our understanding of Site conditions as presented in the following reports:

1. Vanasse Hangen Brustlin, Inc., *Supplemental Site Investigation Report, Former Kidd Disposal Site, Portsmouth Town Landfill*, January 2006.
2. Vanasse Hangen Brustlin, Inc., *Site Investigation Report, Former Kidd Disposal Site, Portsmouth Town Landfill*, November 2003.

As identified in the reports listed above, soil at certain locations at the Site contains hazardous materials at concentrations that represent Method 1 exceedances as defined by the Remediation Regulations. In RIDEM's February 27, 2007 comment letter on the RAWP submitted in November 2006, RIDEM indicated that "[i]n accordance with Rules 9 and 10 of the Office of Water Resources Rules and Regulations for Groundwater Quality, the groundwater beneath the landfill and within the applicable buffer zones should be re-classified with a GB water designation." Rule 9.13 (B)(i) of the Rules and Regulations for Groundwater Quality identifies inactive landfills as an area that may be classified by RIDEM as GB Groundwater resources. As such, laboratory analytical results will be compared to GB criteria. Specifically, the following exceedances were documented:

- Residential Direct Exposure Criteria (Soil) – arsenic, lead, TCE and semi-volatile organic compounds (SVOCs): benzo(a)pyrene, benzo(b) flouranthene, and chrysene.
- Industrial/Commercial Direct Exposure Criteria (Soil) – arsenic.

- GB Leachability Criteria (Soil) – TCE.
- Upper Concentration Limits – none.
- GB Groundwater Objectives (Groundwater) – TCE, PCE, cis-1,2-DCE.

Site/Vicinity Characteristics

The Site consists of the former Portsmouth Town Landfill and is currently unimproved and overgrown. The Site is bounded on the north and east by residential properties, on the west by a coastal salt pond and on the south by Park Avenue and the Sakonnet River.

Environmental Setting

The Site is located at 71° 14' 20" west longitude and 41° 37' 28" north latitude. The Site is located in a developed residential area with some commercial land uses in the general vicinity. Surface elevations at the Site are approximately 0 to 10 feet above the National Geodetic Vertical Datum of 1929, according to the USGS Tiverton, Rhode Island Quadrangle Topographic Map.

According to groundwater maps from the Rhode Island Geographic Information System (RIGIS), the Site's groundwater is classified as GA-Non-attainment. This classification consists of areas that are known or are presumed to be out of compliance with the groundwater quality standards for the assigned classification. This classification was made by RIDEM as a matter of policy to address known landfill/dump areas. RIDEM has indicated that the groundwater beneath the landfill and within the applicable buffer zones should be re-classified with a GB water designation.

According to the RIDEM Wellhead Protection Map (2009), the Site is not located within a community or non-community wellhead protection area. The nearest community water system wellhead protection area is located approximately five miles southeast of the Site.

Municipal water services the general Site vicinity. There are no known water supply wells located on the property. No known private wells are located within the immediate vicinity of the Site.

Several water bodies are in close proximity to the Site. The Sakonnet River is approximately 60 feet to the south of the Park Avenue entrance to the Site. Mount Hope Bay is also located approximately 0.75-miles north of the Site. An area known as "The Cove" is located approximately 500 feet northeast and an unnamed tidal pond is located approximately 100 feet west of the Site. According to the RIDEM



Water Resources Water Quality Regulations (July 2006, Amended May 2009), the Water Use Classification for these waters is Class SA. These waters are designated for shellfish harvesting for direct human consumption, primary and secondary contact recreational activities, and fish and wildlife habitat. They shall be suitable for aquaculture uses, navigation, and industrial cooling. These waters shall have good aesthetic value.

The Flood Insurance Rate Mapping for the Town of Portsmouth (Community Panel Nos. 44005C0038H and 44005C0101H , Effective Date April 5, 2010) indicates that the Site is located within Zone VE, an area of 100-year coastal flood with velocity (wave action); base flood elevation determined to be 17 feet and Zone AE, base flood elevation has been determined to be 15 feet above the National Geodetic Vertical Datum of 1929.

According to the groundwater elevation survey completed by VHB on November 18, 2005, groundwater flow has a southerly component in the southern portion of the Site and an overall westerly to northerly groundwater flow toward the wetland area and "The Cove" area. The gradient appears to be slightly influenced by tidal fluctuations; however the overall gradient appears to be less than 0.01 feet per foot.

Wetland and wetland-type vegetation has been identified on the Site. These wetlands are located along the western and northeastern portions of the Site.

Soil Geology

According to the *Soil Survey of Rhode Island* (Rector, 1981), soils at the Site have been mapped as Dumps. The Dumps unit consists of areas used for trash disposal. Surrounding areas have been mapped as Udorthents-Urban land complex and Merrimac-Urban land complex, soils that occur in urban areas and are characterized as coarse textured and as formed on glacial outwash plains. Based on an analysis of the USGS Tiverton, Rhode Island Quadrangle Topographic Map and the Soil Survey, the Site appears to be situated in glacial outwash plains.

Bedrock Geology

According to the Bedrock Geologic Map of Rhode Island (Hermes et al., 1994), the bedrock underlying the Site is classified as Esmond-Dedham Subterranean, further characterized as the Rhode Island formation consisting of meta-sandstone, meta-conglomerate, schist, carbonaceous schist and graphite. During VHB's subsurface investigations, bedrock was not encountered. Bedrock outcrops have not been identified at the Site.



Groundwater Hydrology

Based on previous reports prepared for the Site, groundwater flow in the southern portion of the Site is to the south, towards the Sakonnet River. The remainder of the Site has an overall westerly to northerly flow toward the wetland area and "The Cove" area. The overall gradient appears to be less than 0.01 feet per foot.

Remedial Activities

As detailed in Section 9.0 of the Remediation Regulations, this Work Plan describes the remedial action necessary under these regulations.

Remedial Objectives

The remedial objective for this Site is to reduce potential direct exposure to impacted soils and groundwater via capping and institutional controls.

In accordance with Section 9.02 of the Remediation Regulations, this Section addresses remedial objectives for all potentially impacted media (soil, groundwater, surface water/sediment and air) for the entire Site. Remedial objectives for each of the media prescribed by the regulations are discussed below.



Soil

Based on soil sampling data collected to date, contaminants of concern (COC) relative to soil include TCE, PCE and cis-1,2-DCE. The remedial objective for this Site is to reduce possible direct exposure to impacted soils via capping and institutional controls.

Given the former land use and to improve Site grading and aid in off-setting the enormous costs associated with the cap construction, the import of fill material from area contractors that exceeds RIDEM RDEC but not the RIDEM I/CDEC will be used beneath a two foot cap of clean fill material. APE estimates that it will require a minimum of 100,000 cubic yards of fill material to construct the cap. Of that amount, approximately 36,000 cubic yards will consist of clean fill meeting RIDEM RDECs to be used as capping material. At the completion of cap construction, an ELUR will be recorded for the Site. The ELUR will require that the capped portions of the Site are maintained, any soil disturbed post-remediation be managed in accordance with a RIDEM approved Soil Management Plan (SMP), and that groundwater at the Site not be used as a source of drinking water.



Groundwater

Based on groundwater sampling data collected to date, COC in groundwater appear to be limited to TCE, PCE, and cis-1,2-DCE. Since on-site soil gas monitoring results have indicated that none of the above compounds present a significant indoor air quality threat relative to their presence in site groundwater and since private and public drinking water wells are not located on-Site or proximate to the Site, active groundwater remediation measures are not proposed. VHB proposes conducting groundwater monitoring at selected Site wells that have exhibited exceedances of the RIDEM GB Groundwater Criteria.

Air

Compounds detected during the Site Investigation process are not anticipated to result in adverse impacts to ambient air. Soil gas monitoring near Site boundaries indicates that landfill gases does not pose a threat to nearby dwellings relative to future development under proposed scenarios. To that regard, no remedial objectives for air are necessary. However, dust control measures will be required during construction, renovation, and earthwork activities. Refer to the "Dust Control" sub section below for information pertaining to fugitive dust issues.

Surface Water/Sediment

Based upon the contaminants of concern, the concentration of contaminants and Site conditions, the RAWP does not include response actions associated with surface water or sediment. Surface and erosion runoff controls will be provided as detailed in the "Soil Stockpile Management/Erosion Control" sub-section below.

Proposed Remedy

The proposed remedy for the Site involves a cap in conjunction with an institutional control. The remedy is described in the following sub-sections. An environmental professional will be on-Site at major milestones during construction and periodically during general earthwork to monitor the remedial activities described herein.

Cap

The proposed cap (two feet of clean fill) over the Site would provide the appropriate protection from direct exposure to Site soils to potential users of the Site and workers. The proposed grading/cap construction plan, prepared by Waterman



Engineering Co., dated October 6, 2009, is attached as **Appendix B**. APE estimates that it will require a minimum of 100,000 cubic yards of fill material to construct the cap. Of that amount, approximately 36,000 cubic yards will consist of clean fill meeting RIDEM RDECs to be used as capping material.

An environmental professional will sample clean fill at prescribed intervals including sub-grade material and loam imported to the site to be utilized to construct the cap. Laboratory analytical results will be documented in the Remedial Action Closure Report. Clean fill and loam will be sampled for arsenic at a frequency of one sample per 1,000 cubic yards. One-quarter of the total number of compliance samples of clean fill and loam will be sampled for VOCs, total metals (RCRA 13), PAHs, and TPH. All soil utilized onsite for the cap must meet the Residential DEC or be certified to be non-jurisdictional. A written statement attesting to the material's origin and suitability will be included in the Remedial Action Closure Report.

Prior to the construction of the cap, earthwork will occur on-Site to provide Site grading consistent with the Coastal Resources Management Council (CRMC) Assent anticipated for the project. To adequately encapsulate the former landfill, it will be necessary to conduct fill operations within the CRMC-regulated 200-foot contiguous area. The landfill cap design has maintained a minimum Buffer Zone of 100 feet. Although no earthwork will be conducted within the 100-foot Buffer Zone, surface solid waste will be removed from the Buffer Zone. It may be necessary to use cables to drag some of the heavier solid waste objects from the Buffer Zone.



Groundwater Monitoring

Following construction, an environmental professional will conduct groundwater monitoring in the areas where the RIDEM GB Groundwater Criteria has been exceeded (VHB-7D and VHB-8D). These monitoring wells would be monitored quarterly for one year at which point the sampling locations and frequency will be evaluated and a long-term monitoring plan will be developed. A Site Plan showing the approximate locations of these wells is included as **Figure 2**. Laboratory analyses for groundwater samples include VOCs by EPA Method 8260B and Total and Dissolved Priority Pollutant 13 metals. Monitoring activities will continue until at least three groundwater sampling rounds indicate compliance with GA Groundwater Objectives.



Environmental Land Usage Restriction

The proposed remedy for the Site is to utilize capping and institutional controls to reduce the threat of direct exposure. Since the contaminated soil will be left in place with a cap remedy, a RIDEM-approved ELUR will also be required for the Site. Restrictions included in the ELUR will be the following:



- No groundwater from the Site shall be used as potable water;
- No soil at the Site shall be disturbed in any manner without written permission of the Department's Office of Waste Management, except as permitted in SMP to be approved by the Department;
- Humans using the Site shall not be exposed to soils containing hazardous materials and/or petroleum in concentrations exceeding the applicable Department approved DEC set forth in the Remediation Regulations;
- No subsurface structures shall be constructed on the Site over groundwater containing hazardous materials and/or petroleum in concentrations exceeding the applicable Department approved GB Groundwater Objectives set forth in the Remediation Regulations;
- The engineered controls at the Site shall not be disturbed and shall be properly maintained to prevent humans engaged in residential activity from being exposed to soils containing hazardous materials and/or petroleum in concentrations exceeding the applicable Department-approved Residential DEC in accordance with the Remediation Regulations; and,
- No action shall be taken, allowed, suffered, or omitted at the Site if such action or omission is reasonably likely to: create a risk of migration of hazardous materials and/or petroleum; create a potential hazard to human health or the environment; or result in the disturbance of any engineering controls utilized at the Site, except as permitted in the Department-approved SMP.

A copy of the draft ELUR for this property is included in **Appendix C**. Upon completion of the proposed redevelopment construction activities and RIDEM approval, the ELUR will be filed in the Town of Portsmouth property records.

Soil Stockpile Management/Erosion Control

Stockpiling of soil may be necessary for the work to be conducted at the Site. To employ best management practices, the following procedures and guidelines will be implemented:

- All excavated material which requires stockpiling (with the exception of clean fill/loam imported to the Site and certified via laboratory sampling as non-jurisdictional) as detailed in the previous section will be temporarily stockpiled in the central portion of the filled area.
- The Site work areas will be surrounded by staked hay bales. The Site shall remain in compliance with applicable federal, state and local regulations. The sheeting and



staked/secured hay bales shall be inspected daily to ensure that dust and/or erosion controls are in place.

- Excess material generated during earthwork at the Site will likely include material which qualifies for reuse under capping material (as needed for grading). On-Site soil may only be used to backfill as needed beneath the Department-approved capping material. Stockpile locations will be recorded in the monthly operations log.
- Erosion control measures (silt fences or hay bales) will also be placed in areas of construction or demolition abutting the coastal salt pond to prevent off-Site soil erosion as depicted in the Waterman Grading Plan attached as **Appendix B**.

Dust Control

All reasonable precautions must be taken to prevent the excessive generation of dust during soil excavation, stockpiling, loading, and other soil handling activities. Work at the site must comply with applicable federal, state, and local regulations, including the RIDEM Air Pollution Control Regulations, and specifically Regulation No.5 regarding control of fugitive dust. Dust control measures must be implemented, as required, to prevent airborne particulate matter from leaving the site. Dust control measures (wetting soils and the use of calcium chloride) shall be implemented on an as needed basis (i.e. visual evidence of airborne dust) throughout the project. Stockpiles shall be inspected on a daily basis to ensure compliance with RIDEM Air Pollution Control Regulations. VHB will periodically monitor the Site to provide consultation regularly dust control measures in place at the Site. This information will then be recorded in the operations log.

Points of Compliance



Soil

During site construction activities, the site construction contractor will monitor site earthworks to ensure that the engineered controls are properly constructed. An environmental professional will conduct periodic Site inspections to document the placement of the cap. At the conclusion of construction activities, VHB will conduct a final Site reconnaissance to document completion of the cap.

The remedial objective for soil at the Site is the RDEC for exposed soil, or non-exposure, in the form of a cap. An environmental professional will sample imported capping material for analysis indicated in the previous section at the specified sampling interval.

Groundwater

The remedial objective for groundwater at the Site is the GB Groundwater Objectives. Groundwater monitoring will be conducted in the areas of the RIDEM GB Groundwater Criteria exceedances on a quarterly basis for the period of one year. Monitoring activities will continue until at least three consecutive compliant rounds are achieved. These monitor wells will be monitored quarterly for one year at which point the sampling locations and frequency will be evaluated and a long-term monitoring plan will be developed.

Surface Water/Sediment/Air

No remediation is proposed for surface water or sediment. An environmental professional will conduct post-closure monitoring of soil gas samples at property boundaries abutting residential dwellings. Monitoring will be conducted using a hand-held combustible gas meter that detects at a minimum percent lower explosive limit and percent methane. A photoionization detector (PID) will also be used to monitor total volatile organic compounds (TVOCs). Soil gas will be monitored through either portable or permanent soil gas rods/probes.

Proposed Schedule of Remediation

The proposed Site remedy consists of encapsulation of soils. APE or its designee will provide RIDEM with written notification a minimum of 48 hours prior to the start of earthwork. It is anticipated that the construction at the Site will begin in spring of 2010 and APE is targeting the fall of 2010 for completion of the work. The Department approved ELUR will be filed within 90 days of the completion of construction of the project.

Contractors and Consultants

The names, addresses, and phone numbers of contact persons are provided below as required in Section 9.08 of the Remediation Regulations:

1. Environmental Consultant: Timothy M. O'Connor, P.E., *Vanasse Hangen Brustlin, Inc.*, 10 Dorrance Street, Suite 400, Providence, RI, 02909. Phone: (401) 272-8100.
2. Owner: Arthur Palmer, *AP Enterprises, LLC*, 28 Teal Drive, Wakefield, Rhode Island 02879
3. Site Contractor: David Peter, *Site Restoration Technologies, LLC*, 18 Shoreline Drive, Foxboro, MA 02035.
Phone: (508) 380-1267



Site Plan

Refer to **Figure 2** for a Site Plan. The proposed grading plan is presented as **Appendix B**.

Design Standards and Technical Specifications

Soil to be used as a cap (once sampling results have been obtained) will be placed on Site using a front end loader and compacted using soil compactors and rollers.

Set-Up Plans

Temporary fencing will be installed around the perimeter of the Site to prevent trespassers from entering the work zone.

Effluent Disposal

Typical wastes generated during the remedial activities but not associated with existing contamination include general household trash including but not limited to: paper towels, equipment/tool purchase wrapping and meal/beverage containers; and disposable items related to health and safety such as safety apparel and disposable gloves. These items will be contained in proper solid waste disposal receptacles and appropriately disposed of at the conclusion of the project.

Contingency Plan

A Contingency Plan is attached in **Appendix D**.

Operating Log

An operating log will be maintained on Site during construction activities. The operating log will detail information such as soil management, earthwork/grading, disposal sampling, clean fill sampling, the thickness, composition and location of the cap. The construction superintendent will also monitor and document earthwork activities to ensure that soil stockpiles are covered to prevent wind-blown soils from traveling to residential properties and that excess soil not utilized on site is properly managed off site pursuant to all State and Federal regulations. The operating log will remain on-Site during implementation and operation of the remedial action.

Security Procedures

A chain link fence will surround areas of the Site where impacted soil and landfill material has been exposed. The fence will be secured at the conclusion of each workday during the construction project by the construction superintendent.

Shut-Down, Closure and Post-Closure Requirement

For daily shutdown, the only requirement will be to ensure that the construction site has been properly secured and is not accessible to the public.

Compliance Determination

The Site shall be capped with a RIDEM approved engineering control. All soil to be used in the upper two feet of the cap shall meet the RIDEM Method 1 RDEC and GA Leachability Criteria. During and at the conclusion of construction activities, VHB will inspect the Site to monitor for compliance with the RAWP.

Report Preparation

A Remedial Action Closure Report detailing all sampling and remedial activities will be completed and submitted to RIDEM. In addition, documentation detailing the capping locations, capping material and analysis, and all disposal documentation, photographs and laboratory analysis certificates of analysis will be provided in the report. A certification statement will be included to certify that remediation was completed in accordance with the RIDEM approved RAWP. We anticipate receiving an Interim Letter of Compliance upon RIDEM acceptance of the Closure Report.

5

Certification

Certification by Preparer:

I, Claude Masse, an employee of Vanasse Hangen Brustlin, Inc and the preparer of this report, hereby certify that the information contained within this report is complete and accurate to the best of my knowledge.

I, Timothy M. O'Connor, P.E., an employee of Vanasse Hangen Brustlin, Inc. have reviewed this report and certify that it is accurate and complete to the best of my knowledge.



Preparer's Signature

3/16/10

Date



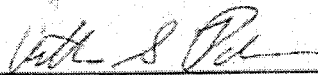
Reviewer's Signature

3/16/10

Date

Certification by Owner/Operator

I certify that the information contained in this report is a complete and accurate representation of the contaminated site and the release and contains all known facts surrounding the release to the best of my knowledge.



Owner/Operator Signature

3/16/10

Date

President

Title



6

References

Vanasse Hangen Brustlin, Inc., November 2006, *Remedial Action Work Plan, Former Kidd Disposal Site, Portsmouth Town Landfill, Portsmouth, Rhode Island.*

Vanasse Hangen Brustlin, Inc., January 2006, *Supplemental Site Investigation Report – Former Kidd Disposal Site, Portsmouth Town Landfill, Portsmouth, Rhode Island.*

Vanasse Hangen Brustlin, Inc., January 2006, *Site Investigation Report – Former Kidd Disposal Site, Portsmouth Town Landfill, Portsmouth, Rhode Island.*

RIDEM, 1996. *Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases*, March 1993, amended February 2004.

RIDEM, 2009. *Groundwater Classification Map*, December 2009.

RIDEM, 2006. *Water Quality Regulations*, Amended May 2009.



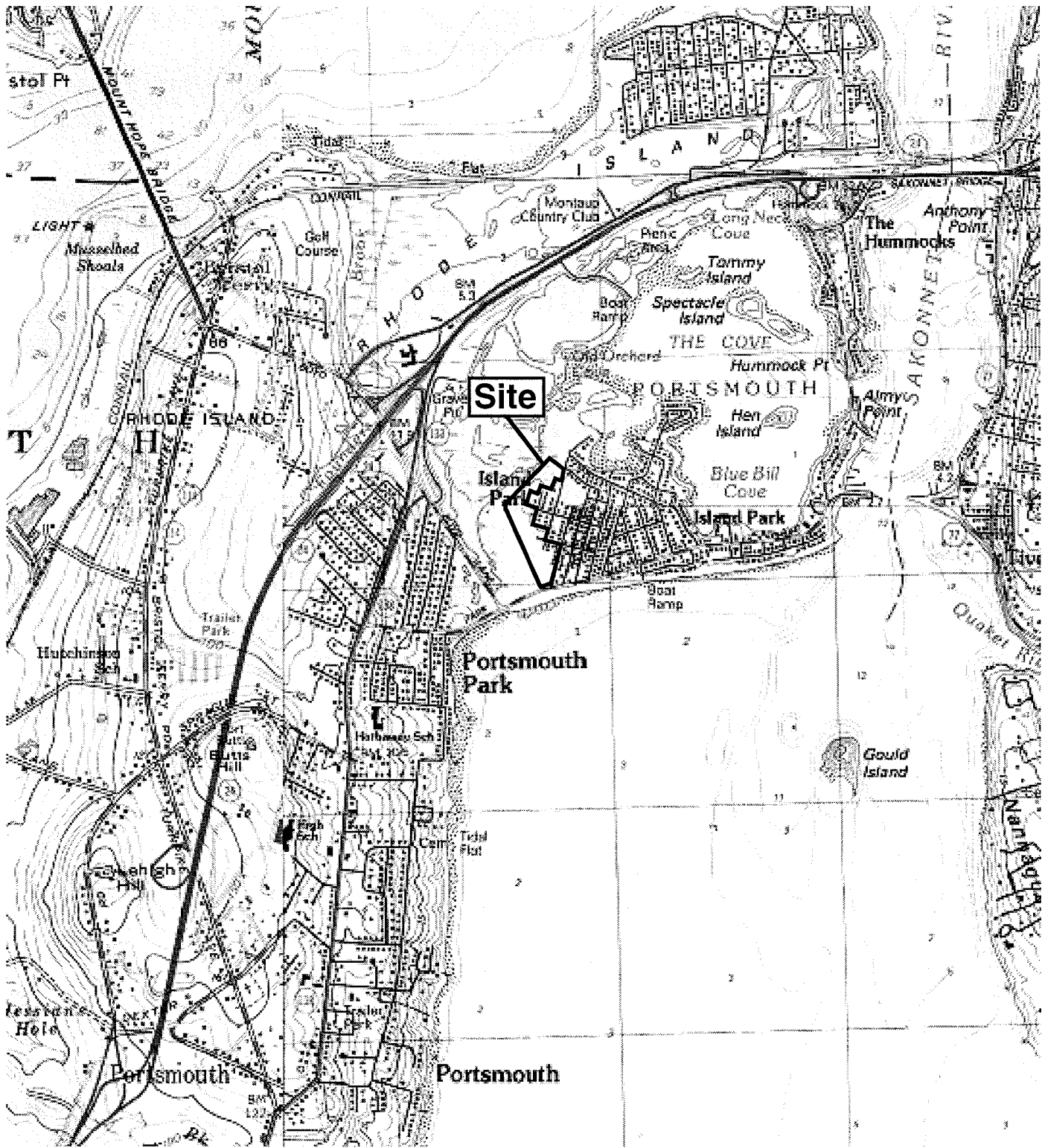
List of Acronyms

ACM	Asbestos Containing Materials
AST	Above Ground Storage Tank
ASTM	American Society of Testing and Materials
BTEX	Benzene, Toluene, Ethyl Benzene, Xylene
CERCLIS	Comprehensive Environmental Response Compensation and Liability Information System
COR	Corrective Action Sites
DEC	Direct Exposure Criteria
ERNS	Emergency Response Notification System
FINDS	Facility Index System
GEN	Generators
LBP	Lead Based Paint
LUST	Leaking Underground Storage Tanks
RIDEM	Rhode Island Department of Environmental Management
MTBE	Methyl Tertiary Butyl Ether
NLR	No Longer Regulated
NPL	National Priorities List
PCB	Poly Chlorinated Biphenyls
PESA	Phase I Environmental Site Assessment
RCRA	Resource Conservation and Recovery Act
RAWP	Remedial Action Work Plan
SPILLS	State Spills List
STATE	State Sites
SVOC	Semi-Volatile Organic Compound
SWL	Solid Waste Landfills
TPH	Total Petroleum Hydrocarbons
TSD	Transportation, Storage, Disposal Facility
USEPA	United States Environmental Management Agency

UST Underground Storage Tank
VOC Volatile Organic Compounds

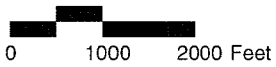


Figures



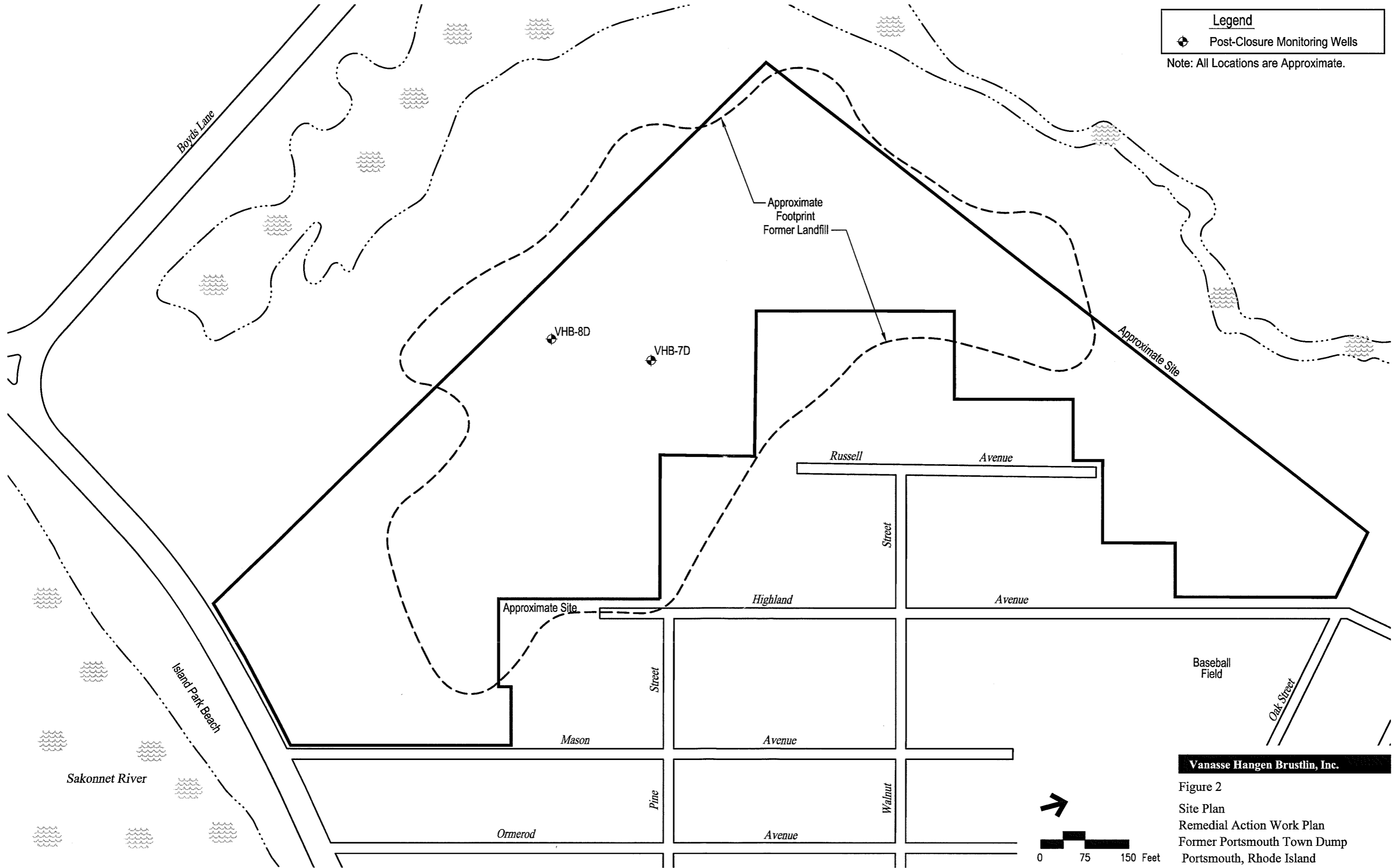
Source: Tiverton, Rhode Island U.S.G.S. Quadrangle

Vanasse Hangen Brustlin, Inc.



Site Location Map
Former Portsmouth Landfill
Portsmouth, Rhode Island

Figure 1



Legend
◆ Post-Closure Monitoring Wells
Note: All Locations are Approximate.

Vanasse Hangen Brustlin, Inc.

Figure 2
Site Plan
Remedial Action Work Plan
Former Portsmouth Town Dump
Portsmouth, Rhode Island



Appendix A - Limitations

Limitations



AP Enterprises, LLC Wakefield, Rhode Island

- This report has been prepared for the sole and exclusive use of AP Enterprises, LLC (Client), and is subject to and issued in connection with the Agreement and the provisions thereof. Any use or reliance upon information provided in this report, without the specific written authorization of Client and VHB, shall be at the User's sole risk.
- In conducting this investigation, VHB has obtained and relied upon information from multiple sources to form certain conclusions regarding potential environmental issues at and in the vicinity of the subject property. Except as otherwise noted, no attempt has been made to verify the accuracy or completeness of such information.
- No attempt has been made to assess the compliance status of any past or present Owner or Operator of the Site with any federal, state, or local laws or regulations.
- The assessment has been performed in accordance with generally accepted engineering practices. No other warranty, expressed or implied, is made.
- VHB's investigation, findings and conclusions were based on our Site reconnaissance. VHB is not responsible for providing findings and conclusions for areas of the Site not visible during our Site reconnaissance.
- The assessment presented in this report is based solely upon information gathered to date. Should further environmental or other relevant information be developed at a later date, Client should bring the information to the attention of VHB as soon as possible. Based upon an evaluation, VHB may modify the report and its conclusions.



Appendix B – Waterman Grading Plan

ABUTTERS LIST

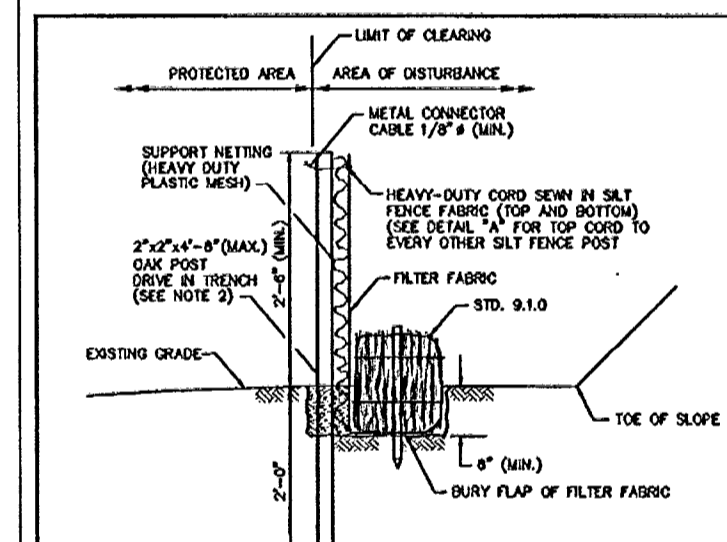
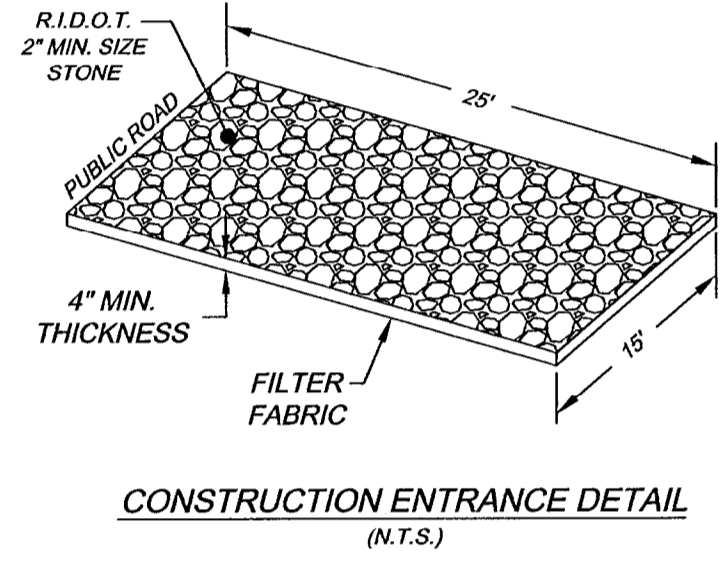
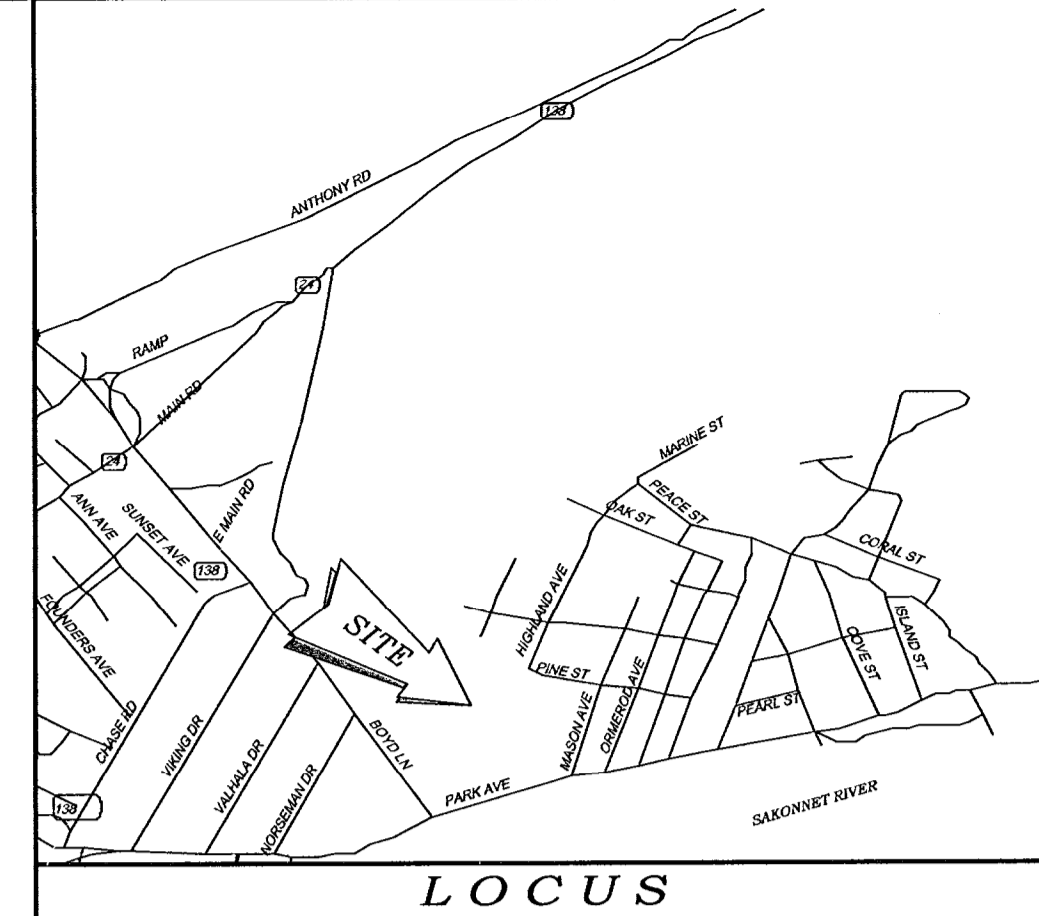
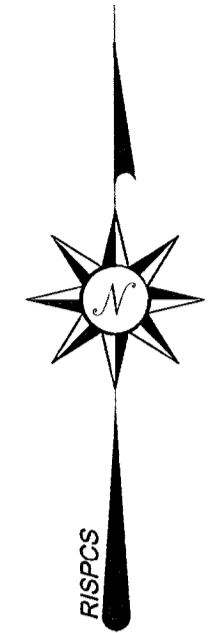
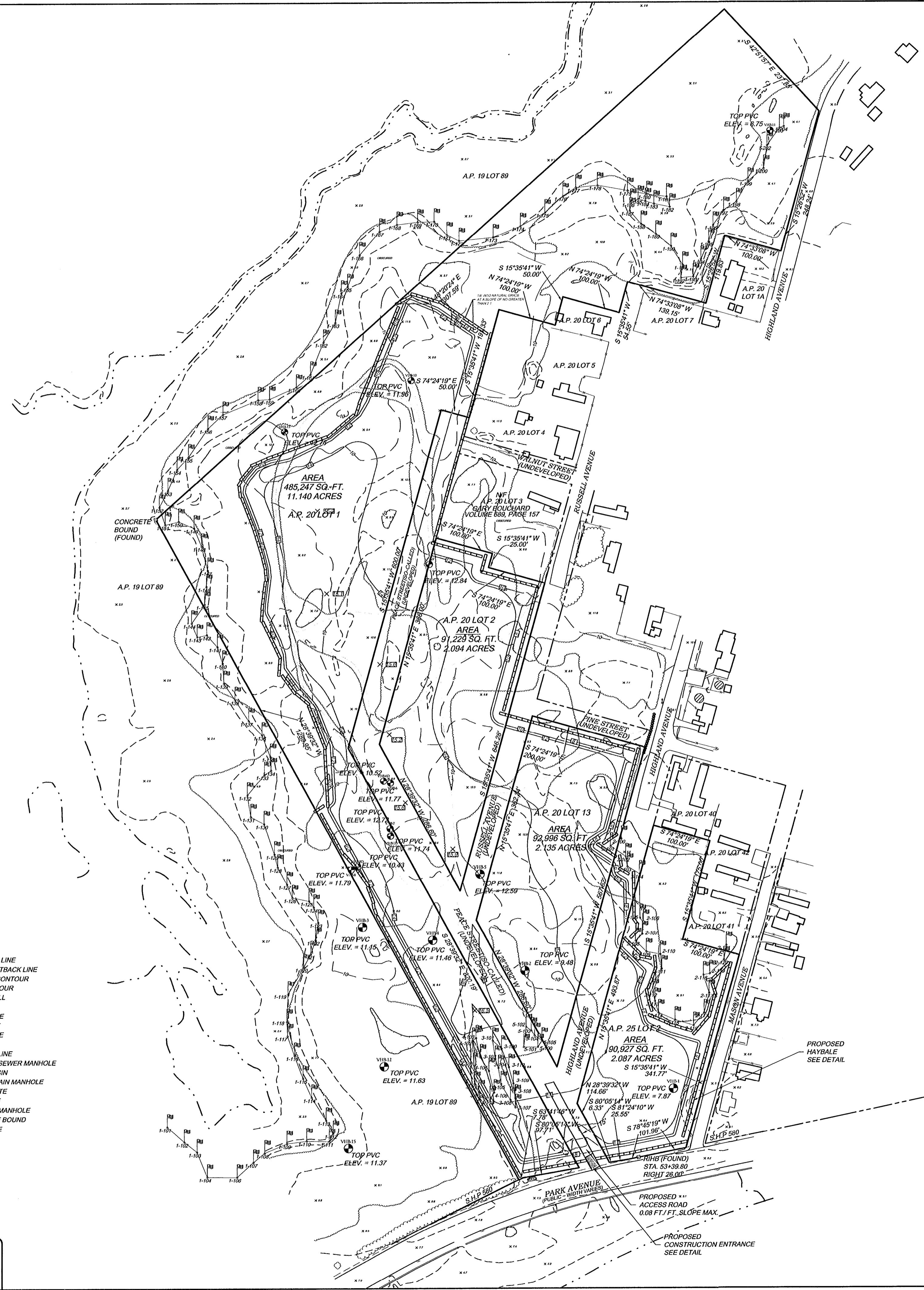
- A.P. 20 LOT 1A
MARK A. BROWNELL
VOLUME 324 PAGE 128
- A.P. 20 LOT 3
GARY BOUCHARD
VOLUME 689 PAGE 157
- A.P. 20 LOT 4
GARY & PAMELA BOUCHARD
VOLUME 994 PAGE 10
- A.P. 20 LOT 5
FRANK S. & GAIL A. PERRY
VOLUME 206 PAGE 324
- A.P. 20 LOT 6
JEFFERY & OSSELLE COSTA
VOLUME 1086 PAGE 327
- A.P. 20 LOT 7
HAROLD MCCRAY
VOLUME 277 PAGE 168
- A.P. 20 LOT 20
MARY A. & JOSEPH F. McDOWELL
VOLUME 481 PAGE 216
- A.P. 20 LOT 40
SANDRA L. McKEE
VOLUME 1005 PAGE 164
- A.P. 20 LOT 41
JAMES P. BOTELO
VOLUME 89 PAGE 596
- A.P. 20 LOT 42
JAMES P. BOTELO
VOLUME 89 PAGE 596
- A.P. 19 LOT 89
THOMAS H. & ANNA LEVESQUE
ET AL MATTHEW & SARAH
FAERBER
VOLUME 104 PAGE 96

LEGEND & ABBREVIATIONS

- | | | |
|--------------------------------|-----------|------------------------|
| NF - NOW OR FORMERLY | — — — — — | PROPERTY LINE |
| A.P. - ASSESSORS PLAT | — — — — — | ZONING SETBACK LINE |
| S.F. - SQUARE FEET | — — — — — | EXISTING CONTOUR |
| AC. - ACRES | — — — — — | NEW CONTOUR |
| + - PLUS OR MINUS | — — — — — | STONE WALL |
| STY - STORY | X | FENCE |
| WF - WOOD FRAMED | S | SEWER LINE |
| SHP - STATE HIGHWAY PLAT | D | DRAIN LINE |
| RET. - RETAINING WALL | W | WATER LINE |
| PED. - PEDESTRIAN | G | GAS LINE |
| (F.N.O.) - FOUND | E | ELECTRIC LINE |
| RHNB - RI HIGHWAY BOUND | ⊕ | SANITARY SEWER MANHOLE |
| PK NAIL - MASONRY NAIL | ⊕ | CATCH BASIN |
| FE - FLARED END | ⊕ | STORM DRAIN MANHOLE |
| RCP - REINFORCED CONCRETE PIPE | ⊕ | WATER GATE |
| CLF - CHAIN LINK FENCE | ⊕ | GAS VALVE |
| INV. - INVERT | ⊕ | ELECTRIC MANHOLE |
| ± 10.80 - EXISTING SPOT GRADE | ⊕ | CONCRETE BOUND |
| ± 10.80 - NEW SPOT GRADE | ⊕ | DRILL HOLE |
| | ⊕ | IRON PIPE |

GRAPHIC SCALE
100 0 50 100 200 300
(in feet)
1 INCH = 100 FEET

COPYRIGHT
THESE DRAWINGS ARE THE PROPERTY OF THE ENGINEER/SURVEYOR AND HAVE BEEN PREPARED FOR THE OWNER FOR THIS PROJECT AT THIS SITE AND ARE NOT TO BE USED FOR ANY OTHER PURPOSE. LOCATION OR OWNER WITHOUT WRITTEN CONSENT OF THIS OWNER OR ONE OF ITS DIRECTORS.



NOTES:

1. SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE R.I. STATUTES.
2. SILT FENCE SHALL BE INSTALLED "TIGHT" AGAINST SILT FENCE FABRIC. SILT FENCE FABRIC SHALL NOT BE STRETCHED TIGHT AGAINST SILT FENCE FABRIC.
3. SILT FENCE SHALL BE DRIVEN THROUGH SILT FENCE FABRIC. SILT FENCE FABRIC SHALL NOT BE STRETCHED TIGHT AGAINST SILT FENCE FABRIC.
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STA. 53+39.80 RIGHT 28.00'

L. ROBERT SMITH
No. 3536
REGISTERED PROFESSIONAL ENGINEER

RICHARD S. LIPSITZ
No. 1837
REGISTERED PROFESSIONAL SURVEYOR

CERTIFICATION

THIS SURVEY AND PLAN CONFORM TO THE FOLLOWING CLASS STANDARDS AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS, EFFECTIVE APRIL 1, 1994.

BOUNDARY SURVEY - CLASS I
TOPOGRAPHIC SURVEY - CLASS III

Richard S. Lipsitz
1837 1-1-10
RICHARD S. LIPSITZ
WATERMAN ENGINEERING COMPANY
REG. NO. DATE

NOTES / REFERENCES

1. REFERENCE IS MADE TO THE FOLLOWING MAPS AND PLANS OF RECORD:
A.) "ISLAND PARK ANNEX PLAT BY E.M. CORBETT, MAY 1904."
B.) "PLAT SHOWING LAND OF WM. B. ANTHONY HEIRS (BUFUM LAND AND ELM FARM) PORTSMOUTH, R.I. SCALE 1" = 200' DEC. 1950 REVISED JAN. 21, 1951."
C.) "PROPOSED LOT CHANGES IN ISLAND PARK ANNEX PORTSMOUTH, R.I. SCALE 1" = 50' OCT. 1951."
D.) "ISLAND PARK SUB-DIVISION LAND OF SETH R. ANTHONY NORTH OF PARK AVENUE SCALE 1" = 100' AUGUST 1952."
E.) "STATE OF RHODE ISLAND HIGHWAY PLAT NO. 508 PORTSMOUTH EAST MAIN ROAD FROM STONE BRIDGE TO BOYDS LANE."
F.) "ADMINISTRATIVE SUBDIVISION FOR GERALD T. KIDD & LOIS A. CLEMENT WALNUT AVENUE & RUSSELL ST. A.P. 20 LOT 2 & PORTSMOUTH DATE: 08/09 SCALE: 1" = 20' DWG. NO. 000808 BY BARKER LAND SURVEYING, INC. WHICH IS RECORDED WITH THE LAND EVIDENCE RECORDS AT THE TOWN OF PORTSMOUTH, R.I. AS PLAN #819.

2. REFERENCE IS MADE TO THE FOLLOWING TOWN OF PORTSMOUTH LAND EVIDENCE RECORDS REGARDING RECORDED TITLE TO THE PREMISES SURVEYED.
A.) AP ENTERPRISES - VOLUME 1129 PAGE 78

3. THESE PREMISES MAY BE SUBJECT TO THE FOLLOWING EASEMENTS, RIGHTS OF WAY OR AGREEMENTS
A.) NONE FOUND RECORDED

4. THESE PREMISES ARE SITUATED IN AN R-10 ZONE:

DIMENSIONAL REQUIREMENTS

MIN. LOT AREA	= 10,000 SQ. FT.
MIN. LOT DEPTH	= N/A
MIN. LOT WIDTH	= N/A
MIN. S/B REAR YARD	= 20 FT.
MIN. S/B FRONT YARD	= 20 FT.
MIN. S/B SIDE YARD	= 10 FT.
MAX. STRUCTURE HEIGHT	= 35 FT. (2 1/2 STORY)
MAX. COVERAGE	= 20%

NOTE - ZONING INFORMATION IS FROM CURRENT ZONING AND MAY NOT REFLECT THE CONDITIONS AT THE TIME OF CONSTRUCTION OR ANY VARIANCES GRANTED.

5. THESE PREMISES ARE SITUATED PARTLY IN AN A14 ZONE (AREAS OF 100 YEAR FLOOD; BASE FLOOD ELEVATIONS AND FLOOD HAZARD FACTORS DETERMINED); FLOOD ELEV. = 16 FEET. PARTLY IN A ZONE V20 (AREAS OF 100 YEAR COASTAL FLOOD WITH VELOCITY (WAVE ACTION); BASE FLOOD ELEVATIONS AND FLOOD HAZARD FACTORS DETERMINED); ELEV. = 18 FEET. AS DESIGNATED ON "NATIONAL FLOOD INSURANCE PROGRAM, FIRM FLOOD INSURANCE RATE MAP TOWN OF PORTSMOUTH, RHODE ISLAND NEWPORT COUNTY, PANEL 7 OF 15 COMMUNITY - PANEL NUMBER 445405 0007 E MAP REVISED: JUNE 16, 1992."

6. ALL UNDERGROUND UTILITIES SHOWN ON THIS PLAN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING PLANS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH OR ABANDONED. THE SURVEYOR DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM ALL AVAILABLE INFORMATION. PLEASE CONTACT DIG SAFE PRIOR TO CONSTRUCTION AT PHONE NO. 1-888-DIG-SAFE, AND/OR ALL LOCAL UTILITY COMPANIES.)

7. AERIAL TOPOGRAPHIC MAPPING COMPILED BY EASTERN TOPOGRAPHICS INC. FROM AERIAL PHOTOS CAPTURED 4-20-85 AND GROUND CONTROL SURVEYS CONDUCTED BY WATERMAN ENGINEERING CO. THE VERTICAL DATUM IS NGVD-29 AND THE HORIZONTAL DATUM IS NAD-83.

8. WETLAND FLAGS PLACED IN THE FIELD BY VANASSE HANGEN BRUSTLIN, INC. AND LOCATED BY FIELD SURVEY BY WATERMAN ENGINEERING.

NO.	DATE	REVISION	CHECKED BY

GRADING PLAN
"ISLAND PARK"
A.P. 20 LOT'S 1, 2 & 13 - A.P. 25 LOT 2
PORTSMOUTH, RHODE ISLAND

AP ENTERPRISES, LLC
28 TEAL DRIVE
WAKEFIELD, RHODE ISLAND 02840

WATERMAN ENGINEERING CO.
CIVIL ENGINEERS / SURVEYORS - EST. 1894
46 SUTTON AVENUE
EAST PROVIDENCE, RHODE ISLAND 02914
PH. - (401) 438-5775 FAX - (401) 438-5773

PROJECT NO. 05-047
SCALE: 1" = 100'
DATE: OCT. 6, 2009
DRAWN BY: MS/NAS
CHECKED BY: RSL
FILENAME: 05047gradeprop-rev1
1 of 1 SHEETS
DRAWING # G-1



Appendix C – Draft Environmental Land Use Restriction

ENVIRONMENTAL LAND USAGE RESTRICTION

This Declaration of Environmental Land Usage Restriction ("Restriction") is made on this ____ day of _____, 20__ by ~~{property owner}~~ **AP Enterprise, LLC**, and its successors and/or assigns (hereinafter, the "Grantor").

WITNESSETH:

WHEREAS, the Grantor AP Enterprise, LLC _____ (name) is the owner in fee simple of certain real property identified as Assessor's Plat 20, Lots 1, 2 and 13 and Plat 25, Lot 2 in Portsmouth ~~{specify Plat, Lot(s), address and Town or City}~~ Rhode Island (the "Property"), more particularly described in Exhibit A (Legal Description) which is attached hereto and made a part hereof;

WHEREAS, the Property ~~(or portion thereof identified in the Class I survey which is attached hereto as Exhibit 2A and is made a part hereof)~~ has been determined to contain soil and/or groundwater which is contaminated with certain hazardous materials and/or petroleum in excess of applicable ~~{residential or industrial/commercial direct exposure criteria, GB Leachability Criteria and GB and/or applicable groundwater objectives}~~ criteria pursuant to the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases ("Remediation Regulations");

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WHEREAS, the Grantor has determined that the environmental land use restrictions set forth below are consistent with the regulations adopted by the Rhode Island Department of Environmental Management ("Department") pursuant to R.I.G.L. § 23-19.14-1;

WHEREAS, the Department's written approval of this Restriction is contained in the document entitled: ~~{Remedial Decision Letter/ Settlement Agreement/ Order of Approval/ Remedial Approval Letter}~~ issued pursuant to the Remediation Regulations;

WHEREAS, to prevent exposure to or migration of hazardous substances and to abate hazards to human health and/or the environment, and in accordance with the ~~{Remedial Decision Letter/ Settlement Agreement/ Order of Approval/ Remedial Approval Letter}~~, the Grantor desires to impose certain restrictions upon the use, occupancy, and activities of and at the ~~{Property; Contaminated Site}~~;

WHEREAS, the Grantor believes that this Restriction will effectively protect public health and the environment from such contamination; and

WHEREAS, the Grantor intends that such restrictions shall run with the land and be binding upon and enforceable against the Grantor and the Grantor's successors and assigns.

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NOW, THEREFORE, Grantor agrees as follows:

A. Restrictions Applicable to the {Property/Contaminated Site}: In accordance with the ~~{Remedial Decision Letter/ Settlement Agreement/ Order of Approval/ Remedial Approval Letter}~~, the use, occupancy and activity of and at the {Property/Contaminated Site} is restricted as follows:

- i. No residential use of the {Property/Contaminated Site} shall be permitted contrary to Department approvals and restrictions contained herein;
- ii. No groundwater at the {Property/Contaminated Site} shall be used as potable water;
- iii. No soil at the {Property/Contaminated Site} shall be disturbed in any manner without written permission of the Department's Office of Waste Management, except as permitted in the ~~Remedial Action Work Plan (RAWP) or Soil Management Plan (SMP)~~ approved by the Department in a written approval letter dated _____ (date) ~~Exhibit B~~ and attached hereto as Exhibit AD;

~~iv.~~iv. _____ Humans engaged in activities at the {Property/Contaminated Site} shall not be exposed to soils containing hazardous materials and/or petroleum in concentrations exceeding the applicable Department approved direct exposure criteria set forth in the Remediation Regulations;

~~v.~~v. Water at the {Property/Contaminated Site} shall be prohibited from infiltrating soils containing hazardous materials and/or petroleum in concentrations exceeding the applicable Department approved leachability criteria set forth in the Remediation Regulations;

~~vi.~~vi. _____ No subsurface structures shall be constructed on the {Property/Contaminated Site} over groundwater containing hazardous materials and/or petroleum in concentrations exceeding the applicable Department approved GB Groundwater Objectives set forth in the Remediation Regulations;

~~vii.~~vii. The engineered controls at the {Property/Contaminated Site} contained in Exhibit BC attached hereto and as described in the RAWP or SMP contained in Exhibit B attached hereto shall not be disturbed and shall be properly maintained to prevent humans engaged in residential or industrial/commercial activity from being exposed to soils containing hazardous materials and/or petroleum in concentrations exceeding the applicable Department-approved residential or industrial/commercial direct exposure criteria in accordance with the Remediation Regulations; and,

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~~lviii. The engineered controls at the **{Property/ Contaminated Site}** described in the **{RAWP or Soil Management Plan SMP}** contained in Exhibit B attached hereto shall not be disturbed and shall be properly maintained so that water does not infiltrate soils containing hazardous materials and/or petroleum in concentrations exceeding the applicable Department approved leachability criteria set forth in the Remediation Regulations.~~

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B. No action shall be taken, allowed, suffered, or omitted at the **{Property/ Contaminated Site} if such action or omission is reasonably likely to:**

- i. Create a risk of migration of hazardous materials and/or petroleum;
- ii. Create a potential hazard to human health or the environment; or
- iii. Result in the disturbance of any engineering controls utilized at the **{Property/Contaminated Site}**, except as permitted in the Department-approved **{RAWP or SMP}** contained in Exhibit **BAD**.

C. Emergencies: In the event of any emergency which presents a significant risk to human health or to the environment, including but not limited to, maintenance and repair of utility lines or a response to emergencies such as fire or flood, the application of Paragraphs A (iii.-viii.) and B above may be suspended, provided such risk cannot be abated without suspending such Paragraphs and the Grantor complies with the following:

- i. Grantor shall notify the Department's Office of Waste Management in writing of the emergency as soon as possible but no more than three (3) business days after Grantor's having learned of the emergency. (This does not remove Grantor's obligation to notify any other necessary state, local or federal agencies.);
- ii. Grantor shall limit both the extent and duration of the suspension to the minimum period reasonable and necessary to adequately respond to the emergency;
- iii. Grantor shall implement reasonable measures necessary to prevent actual, potential, present and future risk to human health and the environment resulting from such suspension;
- iv. Grantor shall communicate at the time of written notification to the Department its intention to conduct the emergency response actions and provide a schedule to complete the emergency response actions;
- v. Grantor shall continue to implement the emergency response actions, on the schedule submitted to the Department, to ensure that the **{Property/Contaminated Site}** is remediated in accordance with the Remediation Regulations (or applicable variance) or restored to its condition prior to such emergency. Based upon information submitted to the Department at the time the ELUR was recorded pertaining to known

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environmental conditions at the ~~{Property/Contaminated Site}~~, emergency maintenance and repair of utility lines shall only require restoration of the ~~{Property/Contaminated Site}~~ to its condition prior to the maintenance and repair of the utility lines; and

- vi. Grantor shall submit to the Department, within ten (10) days after the completion of the emergency response action, a status report describing the emergency activities that have been completed.

D. Release of Restriction; Alterations of Subject Area: The Grantor shall not make, or allow or suffer to be made, any alteration of any kind in, to, or about any portion of the ~~{Property/Contaminated Site}~~ inconsistent with this Restriction unless the Grantor has received the Department's prior written approval for such alteration. If the Department determines that the proposed alteration is significant, the Department may require the amendment of this Restriction. Alterations deemed insignificant -by the Department will be approved via a letter from the Department. The Department shall not approve any such alteration and shall not release the ~~{Property/Contaminated Site}~~ from the provisions of this Restriction unless the Grantor demonstrates to the Department's satisfaction that Grantor has managed the ~~{Property/Contaminated Site}~~ in accordance with applicable regulations.

E. Notice of Lessees and Other Holders of Interests in the ~~{Property/Contaminated Site}~~: The Grantor, or any future holder of any interest in the ~~{Property/Contaminated Site}~~, shall cause any lease, grant, or other transfer of any interest in the ~~{Property/Contaminated Site}~~ to include a provision expressly requiring the lessee, grantee, or transferee to comply with this Restriction. The failure to include such provision shall not affect the validity or applicability of this Restriction to the ~~{Property/Contaminated Site}~~.

F. Enforceability: If any court of competent jurisdiction determines that any provision of this Restriction is invalid or unenforceable, the Grantor shall notify the Department in writing within fourteen (14) days of such determination.

G. Binding Effect: All of the terms, covenants, and conditions of this Restriction shall run with the land and shall be binding on the Grantor, its successors and assigns, and each owner and any other party entitled to control, possession or use of the ~~{Property/Contaminated Site}~~ during such period of ownership or possession.

H. Inspection & Non-Compliance: It shall be the obligation of the Grantor, or any future holder of any interest in the ~~{Property/Contaminated Site}~~, to provide for annual inspections of the ~~{Property/Contaminated Site}~~ for compliance with the ELUR in accordance with Department requirements.

~~{An officer or director of the company with direct knowledge of past and present conditions of the ~~{Property/Contaminated Site}~~ (the "Company Representative"), or}~~ A qualified environmental professional will, on behalf of the Grantor or future holder of any interest in the ~~{Property/Contaminated Site}~~,

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evaluate the compliance status of the ~~{Property/Contaminated Site}~~ on an annual basis. Upon completion of the evaluation, the ~~{Company Representative or}~~ environmental professional will prepare and simultaneously submit to the Department and to the Grantor or future holder of any interest in the ~~{Property/Contaminated Site}~~ an evaluation report detailing the findings of the inspection, and noting any compliance violations at the ~~{Property/Contaminated Site}~~. If the ~~{Property/Contaminated Site}~~ is determined to be out of compliance with the terms of the ELUR, the Grantor or future holder of any interest in the ~~{Property/Contaminated Site}~~ shall submit a corrective action plan in writing to the Department within ten (10) days of receipt of the evaluation report, indicating the plans to bring the ~~{Property/Contaminated Site}~~ into compliance with the ELUR, including, at a minimum, a schedule for implementation of the plan.

In the event of any violation of the terms of this Restriction, which remains uncured more than ninety (90) days after written notice of violation, all Department approvals and agreements relating to the ~~{Property/Contaminated Site}~~ may be voided at the sole discretion of the Department.

- I. Terms Used Herein:** The definitions of terms used herein shall be the same as the definitions contained in Section 3 (DEFINITIONS) of the Remediation Regulations.

IN WITNESS WHEREOF, the Grantor has hereunto set (his/her) hand and seal on the day and year set forth above.

~~{Name of person(s), company, LLC or LLP}~~ AP Enterprise, LLC

By: _____
(signature) _____ (typed)

STATE OF RHODE ISLAND
COUNTY OF _____ NEWPORT

In ~~(CITY/TOWN)~~ Portsmouth, in said County and State, on the ____ day of _____, 20____, before me personally appeared _____, to me known and known by me to be the party executing the foregoing instrument and (he/she) acknowledged said instrument by (him/her) executed to be (his/her) free act and deed.

Notary Public

My Comm. Expires: _____

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Appendix D – Contingency Plan

Former Portsmouth Town Landfill

Portsmouth
Rhode Island

Table of Contents

VHB Site-Specific Health and Safety Plan	1
Introduction	1
General Site Information	2
Site/Hazard Overview	3
Site Description and History	3
Regulatory Exceedances Summary	3
Tasks	3
Hazard Assessment	4
Heat Stress	4
Cold Stress	5
Inorganic Chemicals, Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs) and petroleum products	6
General Construction	7
Noise	7
Chemical Exposures	7
Symptoms of Chemical Exposure	8
First Aid	9
On-Site Control	9
Action Levels and Personnel Protection	10
General Safety Requirements	11
Personal Protective Equipment	12
Decontamination Procedures	12
Emergency Medical Care	13
Emergency Procedures	14
Signature Page	15
VHB Site Personnel	15

Emergency Hospital Route

Hazardous Substance Fact Sheet for Suspected Site Contaminants

VHB Site-Specific Health and Safety Plan

Introduction

This Site-Specific Contingency Plan has been prepared by Vanasse Hangen Brustlin Inc. (VHB) for the sole and exclusive use by VHB personnel while working at the Former Portsmouth Landfill in Portsmouth, Rhode Island (the Site). VHB's work at the Site is being conducted at the request of AP Enterprises, LLC. Use or reliance upon information provided in this Contingency Plan by any party other than VHB, shall be at the User's sole risk.

In preparing this Contingency Plan, VHB has obtained and relied upon information from multiple sources to form certain conclusions regarding potential environmental issues at and in the vicinity of the Site. Except as otherwise noted, no attempt has been made to verify the accuracy or completeness of such information.

In preparing this Contingency Plan, no attempt has been made to assess the compliance status of any past or present Owner or Operator of the Site with any federal, state, or local laws or regulations.

The guidance presented in this Contingency Plan is based solely upon information gathered to date. Should further environmental or other relevant information be developed at a later date, VHB may modify the report and its conclusions

General Site Information

Site Name: Former Portsmouth Town
Landfill
Portsmouth, Rhode Island

Table 1
Emergency Information and Local Resources
Former Portsmouth Landfill
Portsmouth, Rhode Island

Public and Private Resources	Telephone Numbers
Ambulance	911
Newport Hospital (Hospital)	911 or (401) 846-6400
Portsmouth Fire Department (Emergency)	911 or (401) 683-1155
Portsmouth Police Department (Emergency)	911 or (401) 683-2422
Department of Public Works	(401) 683-0362
National Poison Control Center	800-682-9211
RIDEM 24-Hour Emergency Reporting Line	(401) 222-3070
DIG SAFE Reporting Line	888-344-7233

Nearest Hospital: Newport Hospital
11 Friendship Street
Newport, Rhode Island 02840

Directions:

1. Start out going SOUTHWEST on Park Avenue towards Boyd Lane (0.5 miles);
2. Turn slight LEFT onto RI-138/East Main Road (0.3 miles);
3. Turn RIGHT onto Sprague Street (0.6 miles);
4. Sprague Road becomes RI-114 South (7.4 miles);
5. RI-114 South becomes RI-138/West Main Road (0.7 miles);
6. Stay Straight to go onto Broadway (0.6 miles);
7. Turn LEFT onto Friendship Street (0.3 miles);
8. End at 11 Friendship Street (<0.1 mile).

A map depicting the emergency hospital route is attached.

Site/Hazard Overview



Site Description and History

The Site is located at the former Portsmouth Town Landfill, north of Park Avenue in Portsmouth, Rhode Island. The parcel comprising the Site is identified as Portsmouth Assessor's Plat 20, Lots 1,2,3 and 13, and Plat 25, Lot 2. The Site consists of approximately 15 acres of land.

The Site consists of the former Portsmouth Town Landfill. The Site is currently unimproved. The Site is proposed to be encapsulated with approximately two to six feet of fill.

Numerous field investigation activities have occurred at the Site since 1990. Refer to the following section for regulatory exceedances documented in reports prepared by other consultants and VHB.



Regulatory Exceedances Summary

Soil at certain locations at the Site contains hazardous materials at concentrations that represent Method I exceedances as defined by the Remediation Regulations. Specifically, the following exceedances have been documented:

- Residential Direct Exposure Criteria – arsenic, lead and semi-volatile organic compounds (SVOCs): benzo(a)pyrene, benzo(b) flouranthene, and chrysene.
- Industrial/Commercial Direct Exposure Criteria – arsenic.
- GB Leachability Criteria – trichloroethene (TCE).
- Upper Concentration Limits – none.
- GB Groundwater Objectives – TCE, tetrachlorethene (PCE), cis-1,2-DCE.

Tasks

Redevelopment of the Site includes solid debris removal and regrading. This contingency plan is intended to be a guide during all construction activities.

Hazard Assessment

Hazards of Concern (Check as many as apply):

- | | | |
|---------------------------------------|------------------------------|--------------|
| X Heat Stress | Oxygen Deficient | Radiological |
| X Cold Stress | X General Construction | Biological |
| Explosion/Flammable
Confined Space | X Inorganic Chemicals | X Noise |
| X Semi-Volatile Organic Compounds | X Volatile Organic Chemicals | Corrosives |
| X Physical Hazards | | |

Other (Specify): Unknown

The dangers that may be attributed to these hazards are discussed below.



Heat Stress

During the summer months, warm weather may become a health factor. Personnel working on-site may have to wear protective clothing and respirators, which would increase the chance of workers suffering from heat-related problems. The situation will be monitored on days when the ambient temperature exceeds 70°F. Workers must be briefed on the signs and symptoms of heat-related problems and on preventive measures.

The three levels of Heat Stress are:

- Heat Cramps
- Heat Exhaustion
- Heat Stroke

Symptoms of heat cramps include painful muscle spasms. Treatment includes providing liquid with electrolytes.

Weakness, fatigue, dizziness, heavy sweating, headache, nausea, fainting and pale, cool moist skin are all symptoms of heat exhaustion. Treatment includes resting in a cool place and providing plenty of liquids with electrolytes if the person is conscious; if unconscious, get medical help immediately.

Symptoms of heat stroke are very dry, hot skin, mottled blue or red appearance, confusion, convulsions, rapidly rising temperature and unconsciousness. If any person experiences these symptoms get medical attention immediately. **Heat stroke is a life-threatening emergency.**

Cold Stress

During the winter months, cold weather may become a health factor. Personnel working on-site may have to wear protective clothing to protect themselves from wind and other cold weather exposures that may lead to hypothermia and frostbite. The situation will be monitored periodically on days when the ambient temperature is below 32° Fahrenheit (F), or when the local weather forecasting agencies suggest a wind chill factor of 32° F or lower. Workers must be briefed on the signs and symptoms of frostbite and on preventive measures if work is performed when the ambient temperature is below 32° F.

Frostbite occurs when skin tissue and blood vessels are damaged from exposure to temperatures below 32° F. It most commonly affects the toes, fingers, earlobes, chin, cheeks and nose, body parts that are often left uncovered in cold temperatures. Frostbite can occur gradually or rapidly. The speed with which the process progresses depends upon how cold or windy the temperature conditions are and the duration of exposure to those conditions.

Frostbite has three stages of progression:

- Frostnip
- Superficial Frostbite
- Deep Frostbite

Frostnip - In this stage, the individual experiences a pins and needles sensation with the skin turning very white and soft. No blistering occurs. This stage produces no permanent damage and may be reversed by soaking in warm water or breathing warm breath on the affected area.

Superficial Frostbite - In this stage, blistering may occur. The skin feels numb, waxy and frozen. Ice crystals form in the skin cells and the rest of the skin remains flexible.

Deep Frostbite - This is the most serious stage of frostbite. In this stage, blood vessels, muscles, tendons, nerves and bone may be frozen. This stage can lead to permanent damage, blood clots and gangrene, in severe cases. No feeling is experienced in the affected area and there is usually no blistering. Serious infection and loss of limbs frequently occurs after frostbite reaches this stage. However, even with deep frostbite, some frozen limbs may be saved if medical attention is obtained as soon as possible.

Frostbite risk can be reduced by practicing the following:

- Wear several layers of clothing when in extremely cold conditions since the air pockets between the layers will help to retain warmth.
- Limit the use of alcohol and smoking tobacco. Alcohol causes the blood to cool quickly and tobacco inhibits circulation to extremities.

- Avoid going outdoors during extremely cold weather.
- When outside, shield the face and other body parts from the cold wind and temperatures by wearing protective clothing, scarves, earmuffs, gloves, etc.
- Wear waterproof skin moisturizer on exposed areas.
- Do not spend extended periods in extreme temperatures when exhausted, or when wet.

If, after being in extremely cold conditions, any of the following are experienced, seek emergency care.

- skin swelling
- loss of limb function and absence of pain
- drastic skin color changes
- blisters
- slurred speech
- memory loss



Inorganic Chemicals, Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs) and petroleum products

Previous investigations indicate that subsurface soils located on some portions of the Site may potentially be contaminated with hazardous waste including metals, VOCs, SVOCs and petroleum-based products. These contaminants may be encountered during regarding activities during construction of the site as it is developed into a recreational beach volleyball complex.



Physical Hazards

The operation of heavy equipment poses hazards. Physical hazards may be associated with the malfunction, misuse, or improper operation of such equipment. Personnel not directly involved with equipment operation should stand a safe distance away from the machinery. Personnel should wear hard-hats whenever working within established work zones. Personnel should be aware of these physical obstacles at all times and take the necessary precautions to avoid them while at the Site.



General Construction

The greatest potential hazard at most sites is related to the operation of heavy equipment, especially in the case of malfunction, misuse or improper operation. Personnel not directly involved with equipment operation should stand a safe distance away from the machinery. Personnel should wear hard-hats and steel toe boots when working near heavy equipment and any time there is a potential hazard from overhead or falling objects.



Noise

Elevated noise levels may be encountered during the project due to construction equipment. Persons working in close proximity to construction equipment shall wear sufficient hearing protection. This equipment may include foam earplugs or foam earmuffs. Hand signals must be used for communication in these situations. Hand signals shall be established and practiced prior to donning protective hearing equipment.

Chemical Exposures

Table 3 summarizes the more toxic chemicals known or suspected to be present as at the site, including the associated symptoms of acute exposure to such contaminants. Since additional unsuspected hazards may exist at the Site, periodic evaluation of site conditions will be performed during all on-site activities.

**Table 3
Known and Suspect Chemical Contaminants
Former Portsmouth Landfill
Portsmouth, Rhode Island**

Chemical Contaminants*	Potential Hazards	OSHA std. (8-Hour TWA)	NIOSH std. (8-Hour TWA)
PAHs	Toxic by inhalation and skin contact. May cause dermatitis, bronchitis and is a carcinogen. Affects respiratory system, skin, bladder and kidneys. Lung, kidney and skin cancer.	0.2 mg/m ³	0.1 mg/m ³
Volatile Organics	Toxic by ingestion, inhalation, skin absorption, and contact. Irritant to eyes, nose. Headache, dilated pupils, tearing, confusion, dizziness, and nervousness may occur. Affects eyes, respiratory system, skin, heart, liver and central nervous system (CNS). Liver and kidney cancer in animals.	Benzene – 1 ppm Ethylbenzene, Xylene – 100 ppm	Benzene – 0.1 ppm
Beryllium	Toxic by inhalation, and skin contact. Irritant to eyes. Berylliosis (inhalation chronic exposure), weakness, chest pain, cough, clubbing of fingers.	0.002mg/m ³	0.0005 mg/m ³
Cadmium	Toxic by inhalation and ingestion. Inhalation: pulmonary edema; Ingestion: cough, chest tightness, substernal pain, headache, chills, muscle aches, nausea, vomiting, diarrhea, anosmia (loss of sense of smell), emphysema, proteinuria, mild anemia.	0.005mg/m ³	None
Lead	Toxic by ingestion, inhalation, and skin contact. Irritant to eyes. Weak, insomnia, facial pallor, malnutrition, constipated, abdominal pain, colic, anemia, gingival lead line, tremor, encephalopathy, kidney disease, hypotension.	0.050 mg/m ³	0.1 mg/m ³
Arsenic	Toxic by inhalation, ingestion, and contact. Irritant to throat and lungs. Coughing, shortness of breath, weakness, gray skin, nausea, vomiting, and diarrhea. A "pins and needles" sensation in hands and feet. Direct skin contact may cause redness and swelling.	0.01 mg/m ³	0.002 mg/m ³

* See Appendix (NIOSH Pocket Guide) for chemical properties and hazards.



Symptoms of Chemical Exposure

On-site workers should be aware of the specific symptoms of acute chemical exposure listed in **Table 3**. In general, workers should also be aware of some indications of toxic effects of chemical exposure which are described below:

Observable by others:

- Changes in complexion, skin discoloration
- Lack of coordination
- Changes in demeanor
- Papillary response
- Changes in speech pattern
- Difficulty breathing
-

Non-observable by others:

- Headaches
- Dizziness
- Blurred vision
- Cramps
- Irritation of eyes, skin, or respiratory tract
- Nausea
- Chills



First Aid

General first aid procedures for exposure include, but are not limited to, the following procedures:

- If contaminant contacts the eyes, irrigate immediately with large amounts of water;
- If contaminant contacts skin, wash with soap and water promptly;
- If contaminant is inhaled, move the exposed person to fresh air at once. If the worker's breathing has stopped, perform artificial respiration ONLY if appropriately trained and currently certified by the Red Cross or equivalent. Request appropriate medical attention as soon as possible by dialing 911.

On-site personnel shall keep a First-Aid kit at the Site during site assessment activities.

On-Site Control

A Site safety officer will be designated to coordinate access control to the work zone. No unauthorized personnel should enter the work zone to perform waste site cleanup activities without appropriate 40 hour OSHA site worker safety training. Control boundaries have been established as follows:

- **Exclusion Zone:** A 10-foot perimeter around the soil excavations will be treated as the Exclusion Zone. All equipment will be decontaminated in this zone prior to being transferred to the Support Zone.
- **Contaminant Reduction Zone:** A designated area outside of the Exclusion Zone will be treated as the Contaminant Reduction Zone.
- **Support Zone:** The remainder of the Site outside of the Contaminant Reduction Zone will be considered the Support Zone.

On-Site Personnel

Site Safety Officer:	<u>To be determined</u>
Regulatory Authority:	<u>RIDEM – Office of Waste Management 401-222-2797</u>
State Agency Reps.:	<u>RIDEM – Christopher Walusiak, P.E.</u>
Local Agency Reps.:	<u>N/A</u>
Contractors:	<u>To be determined</u>
APE Contact:	<u>Art Palmer</u>
Emergency Contact:	<u>To be determined</u>
Work party(ies) consisting of two people will perform tasks.	
Rescue Team (in entries to IDLH environment):	<u>N/A</u>
Decontamination Team:	<u>N/A</u>



Action Levels and Personnel Protection

The initial level of personnel protection will be Level D. Level C is not expected to be needed on site for this remedial action.

Level D personnel protection will include:

- Chemical-resistant or leather gloves.
- Boots/shoes, leather or chemical-resistant, steel toe and shank.
- Safety glasses or chemical splash goggles (optional unless required for specific job function).
- Hardhat.
- Hearing Protection.

Level C personnel protection will include:

- Tyvek coveralls
- Air purifying respirator with dust and organic vapor cartridge (full-faced mask)
- Hard hat
- Boots/shoes, steel toe and shank
- Chemical-resistant outer boots
- Inner and outer gloves
- Hearing protection

Field monitoring action levels are presented in the following table.

Location	Action Level	Response
Work Area	10 ppm TVOC in the ambient air	Shut down operations and verify proper operation of equipment. Allow area to equilibrate with background air quality and then re-start operations. If conditions above 10 ppm persist, VHB personnel should leave the work area and the Project Manager should be contacted. It is possible that personnel may upgrade to level C
Work Area	10 mg/m3 particulate	Shut down operations and verify proper operation of equipment. Allow area to equilibrate with background air quality and then re-start operations. If conditions above 10 ppm persist, VHB personnel should leave the work area and the Project Manager should be contacted. It is possible that personnel may upgrade to level
Exclusion Zone	Any detection of TVOC in the ambient air	Modify work practices to minimize volatilization of contaminants
Exclusion Zone	5 ppm TVOC	Stop work until controls are identified that will reduce volatilization of contaminants. Do not restart work unless authorized by the project manger, department director, and/or the health and safety coordinator.

General Safety Requirements

All persons entering and/or working on the site shall follow the following General Safety Procedures:

- No employee or subcontractor may be allowed on-site without the prior knowledge and consent of the Site Safety Officer and review of these Health and Safety Procedures. All VHB personnel engaged in this project will sign the Health and Safety plan to acknowledge that they have read and understand the Health and Safety Plan.
- There will be no activities conducted on-site without sufficient backup personnel. At a minimum, two persons must be present at the site.
- All contractor or subcontractor personnel shall bring to the attention of the Site Safety Officer or Supervisors any unsafe condition or practice associated with the site activities that they are unable to correct themselves.
- There will be no smoking, eating, drinking, chewing gum or tobacco, or applying cosmetics in the restricted area.

- Hands shall be thoroughly cleaned prior to smoking, eating or other activities outside the restricted area.
- Team members must avoid unnecessary contamination (i.e., walking through known or suspected "hot" zones or contaminated puddles, kneeling or sitting on the ground, leaning against potentially contaminated barrels or equipment).
- Respiratory devices may not be worn with beards, long sideburns, or under other conditions that prevent a proper seal.
- No visitors will be allowed access without the knowledge and consent of the Site Manager and/or Safety Officer. All visitors will be required to be briefed on safety procedures and will be required to be escorted while on-site.
- All excavations will be conducted in compliance with EPA/OSHA and RIDEM Standards. Excavation greater than four feet deep which require people to work in the excavation will have sides sloped no greater than 45° (1 to 1) or be shored pursuant to OSHA.

Personal Protective Equipment

Based on an evaluation of potential hazards, the following levels of personal protection have been designated for the applicable work areas or tasks.

Location	Job Function	Level of Protection				
Exclusion Zone	Groundwater Monitoring and Total Fluids Extraction	A	B	C	D	Other
Contaminant Reduction Zone	Decontamination	A	B	C	D	Other
Support Zone	Field Vehicle and Supplies	A	B	C	D	Other

Decontamination Procedures

All non-expendable equipment will be cleaned according to Standard Operating Protocols. This protocol includes:

- Rinse with tap water
- Wash with Alconox detergent (or soap) and water
- Rinse with distilled or tap water

The decontamination procedure for Level D requires the disposal of gloves, tyvek suits (if used), and boot covers (if used) in plastic lined containers on-site. All non-

disposal equipment used on-site that becomes contaminated will be cleaned by the protocol referenced above.

The decontamination procedures to be utilized for Level C site conditions will consist of the following nine-step process:

- All sampling devices, monitoring instruments and other equipment used on-site will be segregated into piles on polyethylene sheeting and decontaminated as necessary.
- Outer boots and gloves will be washed with soap and water and then rinsed with water or appropriately disposed.
- Tape around the outer boots and gloves will be removed and deposited into a polyethylene-lined container.
- Outer boots will be removed and placed on polyethylene sheeting.
- Outer gloves will be removed and disposed of in polyethylene-lined containers.
- Tyvek coveralls will be removed and disposed of in polyethylene-lined containers.
- Respirator will be removed and washed with clean water and sanitizer.
- Inner gloves will be removed and disposed in a polyethylene-lined container.
- Worker's hands and face will be washed with soap and water or non-toxic hand cleaning solutions before leaving the Site.

Additional personnel and equipment leaving the Exclusion Zone shall be thoroughly decontaminated. The standard Level D Decontamination Protocol shall be instituted at the decontamination stations.

Emergency Medical Care

The following are qualified on-site First Aid Responders and/or EMTs: None

First Aid equipment is available on-site at the following locations:

First Aid Kit: Located in field vehicle

Emergency EyeWash: Water is kept in the field vehicle

Emergency Shower: Water is kept in the field vehicle

Other (Specify): _____

Site Resource(s) and Locations:

Water Supply: VHB will provide water and additional water supplies are available on-Site.

Telephones: Portable telephone in field vehicle

Communication Systems: mobile telephone

Other: _____

Emergency Procedures

On-site personnel will use the following standard emergency procedures. These procedures may be modified as appropriate and required for each incident. The Site Safety Officer will be notified of any on-site emergencies and will be responsible for ensuring that the appropriate procedures are followed.

- **Fire/Explosion:** The fire department will be notified and all personnel moved to a safe distance from the involved area.
- **Personal Protective Equipment Failure:** If any site worker experiences a failure or malfunction of personal protective equipment that adversely affects the protection factor, that person and his/her buddy will immediately leave the Exclusion Zone. Re-entry will not be permitted until the equipment has been repaired or replaced.
- **Other Equipment Failure:** If any other equipment on-site fails to operate properly, the Site Manager and Site Safety Officer will be notified and will then evaluate the effect of such failure on continuing operations. If the failure affects personnel safety or prevents completion of the investigation activities, all personnel will leave the Exclusion Zone until the situation is remedied through appropriate action(s).

Signature Page

I have read, understood, and agree to comply with the provisions set forth in this Site-specific Health and Safety Plan and as reviewed in the Health and Safety Briefing by the Site Safety Officer.

Site Safety Officer	Signature	Date
---------------------	-----------	------

Approved By:

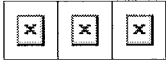
Project Manager	Signature	Date
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VHB Site Personnel

Signature	Affiliation	Date



Emergency Hospital Route



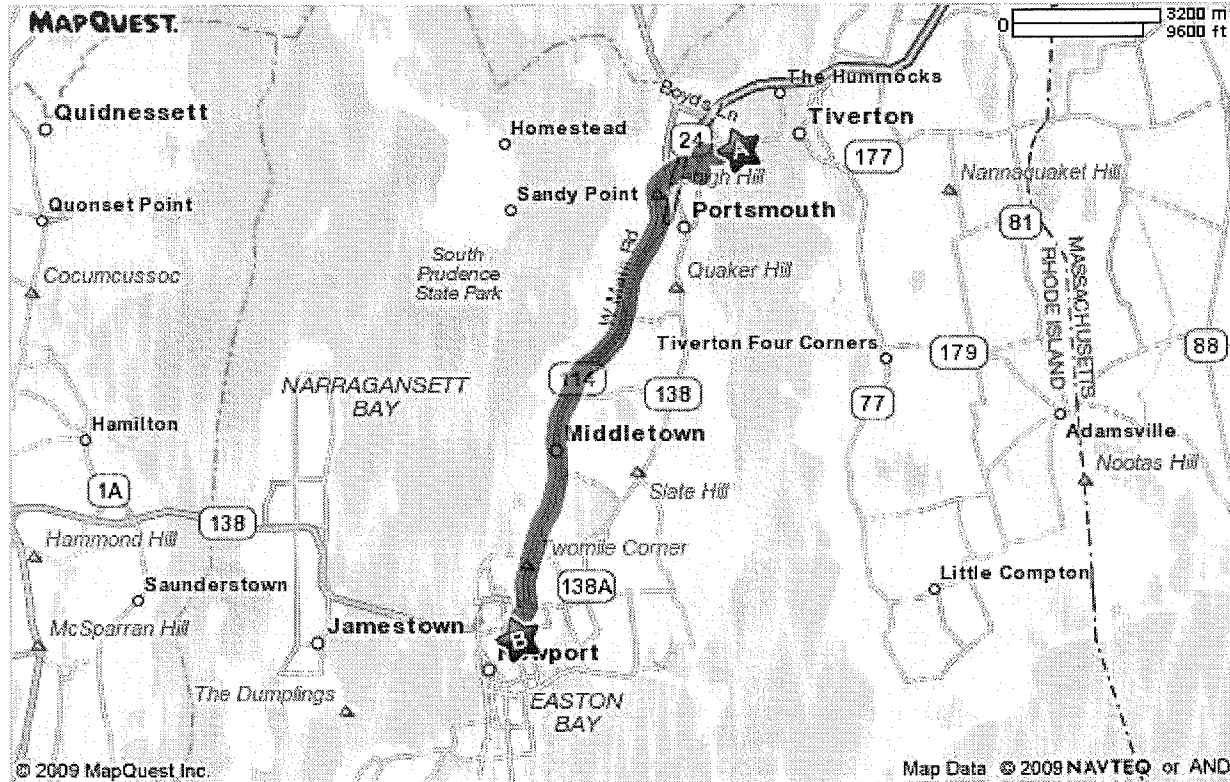
MAPQUEST.

Notes

Trip to Newport Hospital

11 Friendship St, Newport, RI 02840 - (401) 846-6400
10.43 miles - about 23 minutes

Route Map [Hide](#)



All rights reserved. Use subject to License/Copyright | [Map Legend](#)

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Hazardous Substance Fact Sheets for Suspected Site Contaminants



Centers for Disease Control and Prevention
Your Online Source for Credible Health Information

September 2005

NIOSH Publication Number 2005-149

Search the Pocket Guide

SEARCH

Enter search terms separated by spaces.

Arsenic (inorganic compounds, as As)

Synonyms & Trade Names Arsenic metal: Arsenia

Other synonyms vary depending upon the specific As compound. [Note: OSHA considers "Inorganic Arsenic" to mean copper acetoarsenite and all inorganic compounds containing arsenic except ARSINE.]

CAS No. 7440-38-2 (metal)		RTECS No. CG0525000 (metal)		DOT ID & Guide 1558 152 ☞ (metal) 1562 152 ☞ (dust)	
Formula As (metal)		Conversion		IDLH Ca [5 mg/m³ (as As)] See: 7440382	
Exposure Limits NIOSH REL : Ca C 0.002 mg/m³ [15-minute] See Appendix A OSHA PEL : [1910.1018] TWA 0.010 mg/m³				Measurement Methods NIOSH 7300 ☞ , 7301 ☞ , 7303 ☞ , 7900 ☞ , 9102 ☞ ; OSHA ID105 ☞ See: NMAM or OSHA Methods ☞	
Physical Description Metal: Silver-gray or tin-white, brittle, odorless solid.					
MW: 74.9	BP: Sublimes	MLT: 1135°F (Sublimes)	Sol: Insoluble	VP: 0 mmHg (approx)	IP: NA
Sp.Gr: 5.73 (metal)	FLP: NA	UEL: NA	LEL: NA		
Metal: Noncombustible Solid in bulk form, but a slight explosion hazard in the form of dust when exposed to flame.					
Incompatibilities & Reactivities Strong oxidizers, bromine azide [Note: Hydrogen gas can react with inorganic arsenic to form the highly toxic gas arsine.]					

Exposure Routes inhalation, skin absorption, skin and/or eye contact, ingestion	
Symptoms Ulceration of nasal septum, dermatitis, gastrointestinal disturbances, peripheral neuropathy, resp irritation, hyperpigmentation of skin, [potential occupational carcinogen]	
Target Organs Liver, kidneys, skin, lungs, lymphatic system	
Cancer Site [lung & lymphatic cancer]	
Personal Protection/Sanitation (See protection codes) Skin: Prevent skin contact Eyes: Prevent eye contact Wash skin: When contaminated/Daily Remove: When wet or contaminated Change: Daily Provide: Eyewash, Quick drench	First Aid (See procedures) Eye: Irrigate immediately Skin: Soap wash immediately Breathing: Respiratory support Swallow: Medical attention immediately
Respirator Recommendations (See Appendix E) NIOSH At concentrations above the NIOSH REL, or where there is no REL, at any detectable concentration: (APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode (APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus Escape: (APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted acid gas canister having an N100, R100, or P100 filter. Click here for information on selection of N, R, or P filters. Any appropriate escape-type, self-contained breathing apparatus <u>Important additional information about respirator selection</u>	
See also: INTRODUCTION	

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








September 2005

NIOSH Publication Number 2005-149

Search the Pocket Guide

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Enter search terms separated by spaces.

<h1>Lead</h1>					
Synonyms & Trade Names Lead metal, Plumbum					
CAS No. 7439-92-1		RTECS No. OF7525000		DOT ID & Guide	
Formula Pb		Conversion		IDLH 100 mg/m³ (as Pb) See: 7439921	
Exposure Limits NIOSH REL *: TWA (8-hour) 0.050 mg/m ³ See Appendix C [*Note: The REL also applies to other lead compounds (as Pb) -- see Appendix C.] OSHA PEL *: [1910.1025] TWA 0.050 mg/m ³ See Appendix C [*Note: The PEL also applies to other lead compounds (as Pb) -- see Appendix C.]			Measurement Methods NIOSH 7082  , 7105  , 7300  , 7301  , 7303  , 7700  , 7701  , 7702  , 9100  , 9102  , 9105  OSHA ID121  , ID125G  , ID206  See: NMAM or OSHA Methods 		
Physical Description A heavy, ductile, soft, gray solid.					
MW: 207.2	BP: 3164°F	MLT: 621°F	sol: Insoluble	vp: 0 mmHg (approx)	IP: NA
Sp.Gr: 11.34	FLP: NA	UEL: NA	LEL: NA		
Noncombustible Solid in bulk form.					
Incompatibilities & Reactivities Strong oxidizers, hydrogen peroxide, acids					
Exposure Routes inhalation, ingestion, skin and/or eye contact					
Symptoms lassitude (weakness, exhaustion), insomnia; facial pallor; anorexia, weight loss, malnutrition; constipation, abdominal pain, colic; anemia; gingival lead line; tremor; paralysis wrist, ankles; encephalopathy; kidney disease; irritation eyes; hypertension					

Target Organs Eyes, gastrointestinal tract, central nervous system, kidneys, blood, gingival tissue

Personal Protection/Sanitation (See protection codes)

Skin: Prevent skin contact

Eyes: Prevent eye contact

Wash skin: Daily

Remove: When wet or contaminated

Change: Daily

First Aid (See procedures)

Eye: Irrigate immediately

Skin: Soap flush promptly

Breathing: Respiratory support

Swallow: Medical attention immediately

Respirator Recommendations

(See Appendix E)

NIOSH/OSHA

Up to 0.5 mg/m³:

(APF = 10) Any air-purifying respirator with an N100, R100, or P100 filter (including N100, R100, and P100 filtering facepieces) except quarter-mask respirators.

[Click here](#) for information on selection of N, R, or P filters.

(APF = 10) Any supplied-air respirator

Up to 1.25 mg/m³:

(APF = 25) Any supplied-air respirator operated in a continuous-flow mode

(APF = 25) Any powered, air-purifying respirator with a high-efficiency particulate filter.

Up to 2.5 mg/m³:

(APF = 50) Any air-purifying, full-facepiece respirator with an N100, R100, or P100 filter.

[Click here](#) for information on selection of N, R, or P filters.

(APF = 50) Any supplied-air respirator that has a tight-fitting facepiece and is operated in a continuous-flow mode

(APF = 50) Any powered, air-purifying respirator with a tight-fitting facepiece and a high-efficiency particulate filter

(APF = 50) Any self-contained breathing apparatus with a full facepiece

(APF = 50) Any supplied-air respirator with a full facepiece

Up to 50 mg/m³:

(APF = 1000) Any supplied-air respirator operated in a pressure-demand or other positive-pressure mode

Up to 100 mg/m³:

(APF = 2000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode

Emergency or planned entry into unknown concentrations or IDLH conditions:

(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode

(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

Escape:

(APF = 50) Any air-purifying, full-facepiece respirator with an N100, R100, or P100 filter.
[Click here](#) for information on selection of N, R, or P filters.
Any appropriate escape-type, self-contained breathing apparatus

[Important additional information about respirator selection](#)

See also: [INTRODUCTION](#) See ICSC CARD: [0052](#) See MEDICAL TESTS: [0127](#)

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Enter search terms separated by spaces.

<h3>Coal tar pitch volatiles</h3>		
<p>Synonyms & Trade Names Synonyms vary depending upon the specific compound (e.g., pyrene, phenanthrene, acridine, chrysene, anthracene & benzo(a)pyrene). [Note: NIOSH considers coal tar, coal tar pitch, and creosote to be coal tar products.]</p>		
CAS No. 65996-93-2	RTECS No. GF8655000	DOT ID & Guide 2713 153 (acridine)
	Conversion	IDLH Ca [80 mg/m ³] See: 65996932
<p>Exposure Limits NIOSH REL : Ca TWA 0.1 mg/m³ (cyclohexane-extractable fraction) See Appendix A See Appendix C OSHA PEL : TWA 0.2 mg/m³ (benzene-soluble fraction) [1910.1002] See Appendix C</p>		<p>Measurement Methods OSHA 58 See: NMAM or OSHA Methods </p>
<p>Physical Description Black or dark-brown amorphous residue.</p>		
<p>Properties vary depending upon the specific compound.</p>		
<p>Combustible Solids</p>		
<p>Incompatibilities & Reactivities Strong oxidizers</p>		
<p>Exposure Routes inhalation, skin and/or eye contact</p>		
<p>Symptoms dermatitis, bronchitis, [potential occupational carcinogen]</p>		
<p>Target Organs respiratory system, skin, bladder, kidneys</p>		
<p>Cancer Site [lung, kidney & skin cancer]</p>		

Personal Protection/Sanitation (See protection codes)

Skin: Prevent skin contact
Eyes: Prevent eye contact
Wash skin: Daily
Remove: No recommendation
Change: Daily

First Aid (See procedures)

Eye: Irrigate immediately
Skin: Soap wash immediately
Breathing: Respiratory support
Swallow: Medical attention immediately

Respirator Recommendations

NIOSH

At concentrations above the NIOSH REL, or where there is no REL, at any detectable concentration:

(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode

(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

Escape:

(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister having an N100, R100, or P100 filter.

Click here for information on selection of N, R, or P filters.

Any appropriate escape-type, self-contained breathing apparatus

Important additional information about respirator selection

See also: INTRODUCTION See ICSC CARD: 1415 See MEDICAL TESTS: 0054

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Trichloroethylene					
Synonyms & Trade Names Ethylene trichloride, TCE, Trichloroethene, Trilene					
CAS No. 79-01-6		RTECS No. <u>KX4550000</u>		DOT ID & Guide 1710 <u>160</u> ☞	
Formula ClCH=CCl ₂		Conversion 1 ppm = 5.37 mg/m ³		IDLH Ca [1000 ppm] See: <u>79016</u>	
Exposure Limits NIOSH REL : Ca See Appendix A See Appendix C OSHA PEL †: TWA 100 ppm C 200 ppm 300 ppm (5-minute maximum peak in any 2 hours)				Measurement Methods NIOSH 1022 ☞ , 3800 ☞ ; OSHA 1001 ☞ See: <u>NMAM</u> or <u>OSHA Methods</u> ☞	
Physical Description Colorless liquid (unless dyed blue) with a chloroform-like odor.					
MW: 131.4	BP: 189°F	FRZ: -99°F	Sol: 0.1%	VP: 58 mmHg	IP: 9.45 eV
Sp.Gr: 1.46	FLP: ?	UEL(77°F): 10.5%	LEL(77°F): 8%		
Combustible Liquid, but burns with difficulty.					
Incompatibilities & Reactivities Strong caustics & alkalis; chemically-active metals (such as barium, lithium, sodium, magnesium, titanium & beryllium)					
Exposure Routes inhalation, skin absorption, ingestion, skin and/or eye contact					
Symptoms irritation eyes, skin; headache, visual disturbance, lassitude (weakness, exhaustion), dizziness, tremor, drowsiness, nausea, vomiting; dermatitis; cardiac arrhythmias, paresthesia; liver injury; [potential occupational carcinogen]					
Target Organs Eyes, skin, respiratory system, heart, liver, kidneys, central nervous system					

Cancer Site [in animals: liver & kidney cancer]	
Personal Protection/Sanitation (See protection codes) Skin: Prevent skin contact Eyes: Prevent eye contact Wash skin: When contaminated Remove: When wet or contaminated Change: No recommendation Provide: Eyewash, Quick drench	First Aid (See procedures) Eye: Irrigate immediately Skin: Soap wash promptly Breathing: Respiratory support Swallow: Medical attention immediately
Respirator Recommendations NIOSH At concentrations above the NIOSH REL, or where there is no REL, at any detectable concentration: (APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode (APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus Escape: (APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister Any appropriate escape-type, self-contained breathing apparatus <u>Important additional information about respirator selection</u>	
See also: <u>INTRODUCTION</u> See ICSC CARD: <u>0081</u> See MEDICAL TESTS: <u>0236</u>	

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<h1>Tetrachloroethylene</h1>					
Synonyms & Trade Names Perchloroethylene, Perchloroethylene, Perk, Tetrachloroethylene					
CAS No. 127-18-4		RTECS No. <u>KX3850000</u>		DOT ID & Guide 1897 160	
Formula Cl ₂ C=CCl ₂		Conversion 1 ppm = 6.78 mg/m ³		IDLH Ca [150 ppm] See: <u>127184</u>	
Exposure Limits NIOSH REL : Ca Minimize workplace exposure concentrations. <u>See Appendix A</u> OSHA PEL †: TWA 100 ppm C 200 ppm (for 5 minutes in any 3-hour period), with a maximum peak of 300 ppm				Measurement Methods NIOSH 1003 ; OSHA 1001 ; See: <u>NMAM</u> or <u>OSHA Methods</u>	
Physical Description Colorless liquid with a mild, chloroform-like odor.					
MW: 165.8	BP: 250°F	FRZ: -2°F	Sol: 0.02%	VP: 14 mmHg	IP: 9.32 eV
Sp.Gr: 1.62	FLP: NA	UEL: NA	LEL: NA		
Noncombustible Liquid, but decomposes in a fire to hydrogen chloride and phosgene.					
Incompatibilities & Reactivities Strong oxidizers; chemically-active metals such as lithium, beryllium & barium; caustic soda; sodium hydroxide; potash					
Exposure Routes inhalation, skin absorption, ingestion, skin and/or eye contact					
Symptoms irritation eyes, skin, nose, throat, respiratory system; nausea; flush face, neck; dizziness, incoordination; headache, drowsiness; skin erythema (skin redness); liver damage; [potential occupational carcinogen]					
Target Organs Eyes, skin, respiratory system, liver, kidneys, central nervous system					

Cancer Site [in animals: liver tumors]	
Personal Protection/Sanitation (See protection codes) Skin: Prevent skin contact Eyes: Prevent eye contact Wash skin: When contaminated Remove: When wet or contaminated Change: No recommendation Provide: Eyewash, Quick drench	First Aid (See procedures) Eye: Irrigate immediately Skin: Soap wash promptly Breathing: Respiratory support Swallow: Medical attention immediately
Respirator Recommendations NIOSH At concentrations above the NIOSH REL, or where there is no REL, at any detectable concentration: (APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode (APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus Escape: (APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister Any appropriate escape-type, self-contained breathing apparatus <u>Important additional information about respirator selection</u>	
See also: <u>INTRODUCTION</u> See ICSC CARD: 0076 See MEDICAL TESTS: 0179	

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cis-1,2-Dichloroethylene; CASRN 156-59-2

Health assessment information on a chemical substance is included in IRIS only after a comprehensive review of chronic toxicity data by U.S. EPA health scientists from several Program Offices and the Office of Research and Development. The summaries presented in Sections I and II represent a consensus reached in the review process. Background information and explanations of the methods used to derive the values given in IRIS are provided in the Background Documents.

STATUS OF DATA FOR cis-1,2-Dichloroethylene

File First On-Line 12/01/1990

Category (section)	Status	Last Revised
Oral RfD Assessment (I.A.)	no data	
Inhalation RfC Assessment (I.B.)	no data	
Carcinogenicity Assessment (II.)	on-line	02/01/1995

I. Chronic Health Hazard Assessments for Noncarcinogenic Effects

I.A. Reference Dose for Chronic Oral Exposure (RfD)

Substance Name — cis-1,2-Dichloroethylene
 CASRN — 156-59-2

Not available at this time.

I.B. Reference Concentration for Chronic Inhalation Exposure (RfC)

Substance Name — cis-1,2-Dichloroethylene
 CASRN — 156-59-2

Not available at this time.

II. Carcinogenicity Assessment for Lifetime Exposure

Substance Name — cis-1,2-Dichloroethylene
 CASRN — 156-59-2
 Last Revised — 02/01/1995

Section II provides information on three aspects of the carcinogenic assessment for the substance in question; the weight-of-evidence judgment of the likelihood that the substance is a human carcinogen, and quantitative estimates of risk from oral exposure and from

inhalation exposure. The quantitative risk estimates are presented in three ways. The slope factor is the result of application of a low-dose extrapolation procedure and is presented as the risk per (mg/kg)/day. The unit risk is the quantitative estimate in terms of either risk per ug/L drinking water or risk per ug/cu.m air breathed. The third form in which risk is presented is a drinking water or air concentration providing cancer risks of 1 in 10,000, 1 in 100,000 or 1 in 1,000,000. The rationale and methods used to develop the carcinogenicity information in IRIS are described in The Risk Assessment Guidelines of 1986 (EPA/600/8-87/045) and in the IRIS Background Document. IRIS summaries developed since the publication of EPA's more recent Proposed Guidelines for Carcinogen Risk Assessment also utilize those Guidelines where indicated (Federal Register 61(79):17960-18011, April 23, 1996). Users are referred to Section I of this IRIS file for information on long-term toxic effects other than carcinogenicity.

II.A. Evidence for Human Carcinogenicity

II.A.1. Weight-of-Evidence Characterization

Classification — D; not classifiable as to human carcinogenicity

Basis — Based on no data in humans or animals and generally nonpositive results in mutagenicity assays.

II.A.2. Human Carcinogenicity Data

None.

II.A.3. Animal Carcinogenicity Data

None.

II.A.4. Supporting Data for Carcinogenicity

cis-1,2-Dichloroethylene did not yield positive results for a Salmonella typhimurium spot test assay in the absence of mammalian liver homogenates; however, this compound did cause a dose-dependent increase in mutations in a host-mediated assay (Cerna and Kypenova, 1977). cis-1,2-Dichloroethylene at a medium concentration of 2.9 mM produced no positive results in a mutagenicity assay for Escherichia coli K12 (Greim et al., 1975). Galli et al. (1982a) reported no positive results for cis-1,2-dichloroethylene in point mutation, mitotic gene conversion and mitotic recombination assays (all for Saccharomyces cerevisiae). In addition, it did not yield positive results in an in vivo (intravenous) host-mediated mutagenicity assay (Galli et al., 1982b). cis-1,2-Dichloroethylene did not induce chromosomal aberrations in mouse bone marrow in vivo (Cerna and Kypenova, 1977).

II.B. Quantitative Estimate of Carcinogenic Risk from Oral Exposure

None.

II.C. Quantitative Estimate of Carcinogenic Risk from Inhalation Exposure

None

__II.D. EPA Documentation, Review, and Contacts (Carcinogenicity Assessment)

__II.D.1. EPA Documentation

Source Document — U.S. EPA, 1984

The 1984 Health Effects Assessment document has received Agency Review and has been approved for publication as an EPA document.

__II.D.2. EPA Review (Carcinogenicity Assessment)

Agency Work Group Review — 09/07/1989

Verification Date — 09/07/1989

Screening-Level Literature Review Findings — A screening-level review conducted by an EPA contractor of the more recent toxicology literature pertinent to the cancer assessment for cis-1,2-Dichloroethylene conducted in September 2002 did not identify any critical new studies. IRIS users who know of important new studies may provide that information to the IRIS Hotline at hotline.iris@epa.gov or (202)566-1676.

__II.D.3. EPA Contacts (Carcinogenicity Assessment)

Please contact the IRIS Hotline for all questions concerning this assessment or IRIS, in general, at (202)566-1676 (phone), (202)566-1749 (FAX) or hotline.iris@epa.gov (internet address).

__III. [reserved]

__IV. [reserved]

__V. [reserved]

__VI. Bibliography

Substance Name — cis-1,2-Dichloroethylene

CASRN — 156-59-2

Last Revised — 12/01/1990

__VI.A. Oral RfD References

None

_VI.B. Inhalation RfC References

None

_VI.C. Carcinogenicity Assessment References

Cerna, M. and H. Kypenova. 1977. Mutagenic activity of chloroethylenes analyzed by screening system tests. *Mutat. Res.* 46(3): 214-215.

Galli, A., C. Bauer, G. Bronzetti, et al. 1982a., Attivita genetica dell' 1,2-dichloroetilene. a) Studio in vitro. *Boll. Soc. Ital. Biol. Sper.* 58: 860-863. (Ital.)

Galli, A., C. Bauer, G. Bronzetti, et al. 1982b. Attivita genetica dell' 1,2-dichloroetilene. b) Studio in vivo: Effecto sugli enzimi microsomiali. *Boll. Soc. Ital. Biol. Sper.* 58: 864-869. (Ital.)

Greim, H., G. Bonse, Z. Radwan, D. Reichert and D. Henschler. 1975. Mutagenicity in vitro and potential carcinogenicity of chlorinated ethylenes as a function of metabolic oxirane formation. *Biochem. Pharmacol.* 24(21): 2013-2017.

U.S. EPA. 1984. Health Effects Assessment for cis-1,2-Dichloroethylene. Prepared by the Office of Health and Environmental Assessment, Environmental Criteria and Assessment Office, Cincinnati, OH for the Office of Solid Waste and Emergency Response, Washington, DC.

_VII. Revision History

Substance Name — cis-1,2-Dichloroethylene
CASRN — 156-59-2

Date	Section	Description
12/01/1990	II.	Carcinogen assessment on-line
12/01/1990	VI.	Bibliography on-line
01/01/1992	IV.	Regulatory Action section on-line
02/01/1995	II.D.3.	Primary contact changed
04/01/1997	III., IV., V.	Drinking Water Health Advisories, EPA Regulatory Actions, and Supplementary Data were removed from IRIS on or before April 1997. IRIS users were directed to the appropriate EPA Program Offices for this information.
12/03/2002	II.D.2.	Screening-Level Literature Review Findings message has been added.
02/09/2004	I., II.	This chemical is being reassessed under the IRIS Program.

VIII. Synonyms

Substance Name — cis-1,2-Dichloroethylene

CASRN — 156-59-2

Last Revised — 12/01/1990

- 156-59-2
- Ethene, 1,2-dichloro-, (Z)-
- (Z)-1,2-Dichloroethene
- (Z)-1,2-DICHLOROETHYLENE
- cis-DICHLOROETHYLENE
- CIS-1,2-DICHLOROETHYLENE
- CIS-1,2-DICHLOROETHENE
- cis-1,2-DICHLOROETHYLENE
- Ethene, 1,2-dichloro-, (Z)-
- Ethylene, 1,2-dichloro-, (Z)-
- HSDB 5656
- NSC 6149
- 1,2-CIS-DICHLOROETHYLENE

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
COASTAL RESOURCES MANAGEMENT COUNCIL
ENGINEERING REVIEW**

PAGE: 1 of 2

DATE: 8/30/2010

TO: Grover J. Fugate, Executive Director
DEPT: Coastal Resources Management Council
FROM: Richard M. Lucia
DEPT: CRMC Permitting Section

SUBJ: The following application, Category B Category A Maintenance

CRMC File Number: 2010-06-028 Name: AP Enterprises, LLC

Location: Park Avenue, Former Portsmouth Town Landfill

Water Type\Name: Type 2 Low Intensity Use, Old Orchard Cove and Sakonnet River

Coastal Features: coastal beach, coastal bluff, coastal wetlands and seawall.

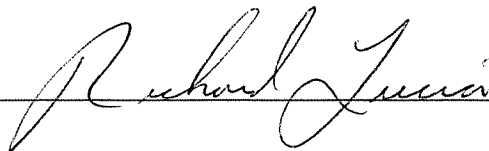
Previous Files: P.D. 2006-07-034

Project Description: Construct a formal cap on the former Kidd Disposal Site and Portsmouth Town Landfill. Cap will consist of at least 100,000 cubic yards of fill (two to six feet thick).

STAFF ANALYSIS

The project site (approximately 18 acres) is located at the former Kidd Disposal Site and Portsmouth Town Landfill. The site is currently vacant and consists of a mixed vegetative cover. The coastal features bordering the site are coastal wetlands and bluffs. A Preliminary Determination (CRMC File #2006-07-034) was previously submitted for capping the landfill and subsequent development of the site as a volleyball and recreational area. The current proposal has been scaled back to only cap the landfill with fill without any development proposed at this time. Please note that the Preliminary Determination stated that a public access plan (Reference RICRMP Section 335, Protection and Enhancement of Public Access to the Shore) be provided with a subsequent application for an Assent; however as this project is not considered a redevelopment project a public access plan was not submitted at this time. Staff recommends that any future application for development of this site should require a public access plan in accordance with the RICRMP Section 335.

Signed



Principal Civil Engineer

The purpose of this project is to mitigate impacts to receiving waters by capping the regulated soil area and landfilled waste. Closure will consist of placement of a regulated soil cap system and revegetation of slope and bank area. Three relatively small freshwater wetlands (Wetland #3 approximately 1,647 square feet, Wetland #4 approximately 1,898 square feet, and Wetland #5 approximately 633 square feet) that have formed a depression on the landfill surface are to be filled. Additionally a 100' coastal buffer zone is proposed along the shoreline. Please reference the Biologist staff report regarding the fill of the wetlands and buffer zone requirements.

The applicant has properly demonstrated that the post-development peak runoff rates and volumes will be less than or equal to the pre-development peak runoff rates and volumes for 2-yr, 10-yr, 25-yr and 100-yr rainfall events to abutting residential properties or the roadways. Please note that Post development rate and volume of stormwater to tidal waters will exceed post development rates, however a variance is not required since this flow will be directed non-erosively to tidal waters (Reference RICRMP Section 300.6.B.6).


Please note that at this time, a Water Quality Certificate, a Remedial Action Work Plan (RAWP), and a Beneficial Use Determination (BUD) approval have not been obtained from RIDEM. The applications for the RAWP and BUD documents have been submitted to RIDEM but final approval for each item has not been issued as public hearing have not been completed. The applicants' consultant, VHB, Inc. has stated that RIDEM has informally stated that will approve the RAWP and BUD documents pending the completion of a public hearing to be held on September 8, 2010. Staff recommends a stipulations regarding obtaining these documents prior to issuance of a Coastal Assent in accordance with RICRMP Section 300.6.C.3 Treatment of Sewage and Stormwater, Prerequisites *"The Council shall formally review proposed actions only after all other applicable state/local requirements have or will be met. However, the Council will comment on preliminary plans for major facilities to assist in the planning process."*

As this project should be an improvement in water quality there are no objections to the submitted closure plan, provided that the staff stipulations are strictly adhered to.

Recommended Stipulations:

E-1 (RL)- Prior to issuance of the Coastal Assent a RIDEM Water Quality Certificate shall be obtained. Additionally, all pertinent approvals from RIDEM Office of Waste Management shall be obtained prior to issuance of the Coastal Assent.

E-2 (RL)- In addition to a CRMC Assent, any redevelopment project of this site per RICRMP Section 335, Protection and Enhancement of Public Access to the Shore shall require a public access plan.

Signed  Principal Civil Engineer



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
COASTAL RESOURCES MANAGEMENT COUNCIL

BIOLOGIST SIGN-OFF

TO: Grover J. Fugate
DEPT: Executive Director, CRMC
FROM: Amy L. Silva
DEPT: CRMC PERMITTING SECTION
SUBJECT: Category B Application

PAGE: 1
DATE: August 31, 2010

CRMC File Number: 2010-06-028 **Name:** AP Enterprises LLC
Location: Park Avenue, Portsmouth **AP:** 20|25 **Lot(s):** 1,13,2|2
Water Type/Name: Type 2 Low Intensity Use, Boyds Marsh - Portsmouth
Coastal Feature: coastal wetland, coastal bluff, coastal beach, seawall
Project Description: Site remediation of former Kidd Disposal Site/Portsmouth Town Landfill.
Remediation to consist of a 100,000 cubic yard soil cap.

REVIEW COMMENTS:

This application requests site remediation/closure of an area previously utilized as landfill. The closure proposed is a soil cap of at least 100,000 cubic yards to be placed two to six feet thick over the landfill area. The area is currently undeveloped and exists in a vegetated state. As currently proposed, three isolated freshwater wetlands will be permanently altered, representing a loss of 4,178ft² of wetland. There is no mitigation proposed with this application.

The proposal has also been submitted to DEM for a Water Quality Certificate, a Remedial Action Work Plan (RAWP), and a Beneficial Use Determination (BUD). According to Section 300.6.C.3, "*The Council shall formally review proposed actions only after all other applicable state/local requirements have or will be met*". As of the date of this writing, none of the DEM approvals have been issued. Through contact with reviewers at DEM, staff learned that a public hearing is scheduled for September 8, 2010, and approvals are anticipated to be issued thereafter. Staff was not sent copies of these plans and cannot confirm that DEM is reviewing the same plans submitted to this office. The applicant's agent assures staff that DEM is reviewing the same plans/information. Staff would suggest that the CRMC Assent be held until all DEM Permits be issued. Modification of this assent may be necessary once DEM Permits are obtained.

A Preliminary Determination was issued for this site in 2006 (2006-07-034). The proposal at the time of the PD submission was remediation of the entire property as well as significant commercial development (sports complex/arena). The PD requested both a full 200 foot buffer zone and a public access plan in any future submission for review/permitting. This application for closure/remediation does not cap the entire property, and does not include either a buffer zone proposal or public access plan. The submitted narrative references a 100 foot buffer zone, and a 100 foot buffer zone is depicted on the site plans reviewed, but there is no

Signed _____

Staff Biologist

CRMC File Number: 2010-06-028

Name: AP Enterprises LLC

detail as to re-vegetation, demarcation of the buffer or why the buffer zone proposed is 100 feet and not the 200 feet recommended in the PD. Staff believes that a 100 foot buffer is sufficient for the purposes of the landfill closure/remediation. The adequacy of the buffer zone shall be re-visited upon submission for any development in the future.

The submitted narrative states that a “minimum of 100 feet of Buffer Zone between the work areas and the Shoreline Feature” will be maintained and that “A limit of disturbance in the form of staked hay bales and silt fencing will be placed along the 100 foot Buffer Zone”. Additionally, the narrative also states that “no earthwork will be conducted” and that the project will “not alter any existing landforms within 100 feet of the Coastal Feature”. However, the plans reviewed (“Grading Plan” C-1) show grading occurring within the depicted 100 foot area in some locations, and the Limit of Disturbance is immediately adjacent to the 100 foot buffer along the entire length of the LOD on the subject property. Having the LOD at the base of the proposed slope and immediately adjacent to the proposed buffer zone is likely to result in impact to the buffer zone area. Utilizing heavy machinery to place the fill in accordance to the plan without disturbing the 100 foot area is unlikely.

It should be noted that Boyd’s marsh is a large coastal marsh which likely provides significant habitat functions. The northern portion of the marsh as well as almost the entire edge exhibit stands of *Phragmites*, typically a sign of freshwater intrusion. The proposed runoff for the closure directs flow toward the marsh which could encourage *Phragmites* growth. It appears as though the pervious and vegetated nature of the cap combined with the buffer zone proposed is sufficient to minimize impacts to the marsh. See engineer’s report for analysis of drainage.

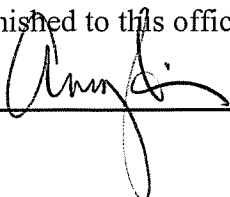
The submitted narrative also states that all disturbed areas will be seeded and mown annually to eliminate woody vegetation and protect the integrity of the cap. At a minimum, the entire 100 foot Buffer Proposed should remain in a permanently undisturbed state. While not depicted on the plan, the narrative references removal of solids from within the 100 foot area utilizing cables. Staff requested further information from the consultant on this proposal, to determine potential impacts to the proposed undisturbed buffer area. Removal of solids from within the 100 foot buffer would be considered disturbance to the buffer zone, however the applicant’s agent states that removal will likely be done by hand and will consist of removal of tires and shopping carts and other such debris (addendum letter dated Sept. 3, 2010) with little disturbance to vegetation or soils.

Shortly after the close of the public notice period, one letter was received. While not an objection, the abuttor stated concern for the amount of fill and wanted assurances that fill would not impact her property. Proper use and monitoring of erosion and sedimentation controls depicted on the submitted plans should eliminate and impacts to any adjacent properties.

The capping of the site represents an environmental improvement to a previously disturbed site. Provided that the plan meets all DEM remediation requirements, there are no biological objections to this proposal. Staff defers to the Council on the question of appropriate Buffer Zone width/Buffer Zone discrepancy. In addition to standard stipulations, staff suggests the following additional stipulations:

B1 The CRMC assent shall be held in abeyance until all other DEM/state approvals have been obtained and furnished to this office. Modification of this assent may be necessary.

Signed _____



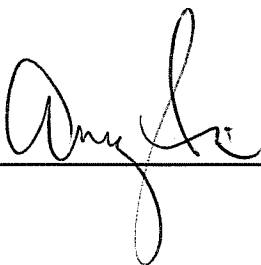
Staff Biologist

CRMC File Number: 2010-06-028

Name: AP Enterprises LLC

- B2 The Buffer Zone shall remain in a permanently undisturbed state. The Buffer Zone shall be 100 feet in width, and permanently demarcated prior to construction. Removal of large debris within the buffer zone shall be done primarily by hand, utilizing cable pull only if necessary. There shall be little to no disturbance of soil or vegetation within the buffer zone. Should soil or vegetation disturbance be required, the CRMC shall be notified at least 24 hours in advance, and informed of erosion control methods to be utilized and/or revegetation planned for any areas to be more than minimally disturbed.
- B3 The 100 foot buffer zone required by this assent is considered sufficient for the landfill closure/remediation only. The adequacy of the buffer zone shall be re-considered for any future applications for development of the property.

Signed



Staff Biologist

September 28, 2010

REMEDIAL APPROVAL LETTER

Mr. Arthur Palmer
AP Enterprises, LLC
28 Teal Drive
Wakefield, RI 02879

RE BUD Application & Remedial Action Work Plan Response to Comments of August 10, 2010
Former Portsmouth Landfill Plat 20 Lots 1,2,13 and Plat 25- Lot 2
Portsmouth, Rhode Island

Dear Mr. Palmer:

In April 2001 the Rhode Island Department of Environmental Management created the Landfill Closure Program (LCP) to investigate and remediate inactive or abandoned solid waste landfills throughout Rhode Island. The purpose of the LCP is to integrate the investigation and remediation/closure requirements in the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (Remediation Regulations) and the Rules and Regulations for Composting Facilities and Solid Waste Management Facilities (Solid Waste Regulations) in order to eliminate and/or control threats to human health and the environment in a timely and cost effective manner. A **Remedial Approval Letter** is a document used by the Department to approve remedial actions at contaminated sites that do not involve the use of complex engineered systems or techniques (e.g., groundwater pump and treat systems or soil vapor extraction systems).

In the matter of the above referenced site, the Department has on file the following documents submitted on behalf of the AP Enterprises which fulfill the Remedial Action / Landfill Closure requirements of the Landfill Closure Program, and are consistent with the Solid Waste Regulations and Sections 8 and 9 of the Remediation Regulations:

1. Site Investigation Report, Former Portsmouth Town Dump, submitted by VHB, dated January 2006;
2. Supplemental Site Investigation Report, Former Kidd Disposal Site, Portsmouth Town Landfill submitted by VHB, dated January 2006;
3. Beneficial Use Determination Application- Former Portsmouth Landfill, Plat 20, Lots 1,2,13 and Plat 25 Lot 2, Portsmouth, RI, submitted by VHB, dated 8/11/2010.
4. Remedial Action Work Plan, Former Kidd Disposal Site, Portsmouth Town Landfill, Submitted by VHB, dated March 2010;

5. BUD Application and Remedical Action Work Plan Response to Comments, submitted by VHB, dated August 10, 2010.

The Department approves the RAWP, provided that all activities and procedures detailed in the RAWP (as modified by the Response to Comments of 8/10/2010), policies, and mandates are strictly followed. It is the Department's understanding that the remedial action / landfill closure will include the following:

- As detailed in the Beneficial Use Determination Application and acceptance, the project will involve the import of 64,000 cubic yards grading and shaping material meeting the method 1 RIDEM Industrial Commercial Standards overlain by 36,000 cubic yards of clean soils meeting RIDEM residential exposure criteria.
- Construction of a final soil cap that will meet both cover requirements (2 feet) and slope requirements (minimum 3% and maximum 33%).

The following conditions, also contained within the Beneficial Use Determination Approval of September 20, 2010, are required regarding closure:

1. The Department shall receive notification 72 hours prior to the commencement of closure construction activities.
2. All work must be performed in accordance with all applicable regulations and the Department approved Remedial Action Work as modified by the Response to Comments dated July 8, 2010- Portsmouth Landfill, submitted by VHB received 8/11/2010 and must be consistent with Section 11.00 (Remedial Action) of the Remediation Regulations.
3. Grading and shaping material shall consist of soils meeting the method 1 RIDEM Industrial Commercial Standards shall be managed in accordance with the Remedial Action Work Plan and will be sampled at a frequency of once every 2,500 cubic yards as detailed in your response to comments referenced above. These will be covered with a landfill cap as described below:
4. AP Enterprises will construct a landfill cap within the defined limit of waste to close the landfill in accordance with the Solid Waste Regulations and the Remediation Regulations. The source of the cover material will be evaluated to demonstrate that it does not contain contaminants at concentrations above Method 1 Residential Criteria.

All clean fill imported to the site shall be sampled prior to delivery and placement. Clean fill and loam shall be sampled for arsenic at a minimum frequency of one sample per 1000 cubic yards. One-quarter of the total number of compliance samples of clean fill and loam shall be sampled for total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and 13 priority pollutant metals. All

clean fill utilized onsite shall be compliant with the Department's Method 1 Residential Direct Exposure Criteria (RDEC) pursuant to the Remediation Regulations. The Closure Report shall include all original laboratory analytical sampling results from the fill demonstrating compliance with the RDEC and either a statement from the facility that provides the clean fill attesting to the materials origin and suitability or written certification by an Environmental Professional that the fill is not jurisdictional and is suitable for the cap.

5. Placement of the final landfill cap shall commence not later than 90 days after final receipt of the grading and shaping material and finish within one year.
6. Results of all environmental sampling shall be sent to Mark M. Dennen, Office of Waste Management (OWM), 235 Promenade Street, Providence, RI 02908.
7. The OWM shall be immediately notified of any Site or operation condition that results in non-compliance with this BUDA.
8. Any interruptions of the remedial action shall be reported to Mark M. Dennen at the Office of Waste Management by telephone within one (1) working day and in writing within seven (7) days of occurrence.
9. All waste derived from the implementation of the Remedial Action Work Plan / Closure Plan shall either be managed in accordance with the approved Beneficial Use Determination Variance Application, or disposed of in accordance with the Department's Rules and Regulations for Hazardous Waste Management, and the Solid Waste Regulations. In the event waste is disposed of off-site, documentation of proper disposal shall be provided to the Office of Waste Management.
10. AP Enterprises shall submit quarterly updates to the Department with the following information:
 - Name, address, and quantity received of each source of material
 - An explanation and photographs of construction activities and sedimentation control measures that have been done at the site
 - Sampling that has been done on material received
 - An explanation of any complaints that have been received
 - An updated schedule of timelines to completion of project
11. No Hazardous waste shall be accepted from any off-site sources for treatment, storage or disposal at the Site.
12. An Institutional Control in the form of an Environmental Land Use Restriction (ELUR) for the Site will be recorded in the Town of Portsmouth Land Evidence Records at the time of this projects completion and will specify all the site conditions, restrictions and emergency provisions in order to meet the appropriate Remedial Objectives as defined in the Remediation Regulations and Solid Waste Regulations. Be advised that, because the ELUR is part of the remedy, the Department will require (as will be stated in the ELUR) that the property owner submit an annual inspection report by a qualified environmental

professional. This report will be subject to review by the Department. A recorded copy of the Department approved ELUR must be forwarded back to the Office of Waste Management (OWM) prior to issuance of the Interim Letter of Compliance.

At this time, the Office offers its concurrence with the proposed remedial action for the property. The Office approves the draft ELUR and post closure monitoring protocols in the RAWP provided that all activities and procedures detailed in the RAWP, as modified by your Response to comments of 8/10/2010 are strictly followed. Please be advised that any significant revisions to the RAWP must be submitted in writing to the Department for review, and must be approved by the Department prior to implementation. Any problems associated with the remediation must be reported to the Department by telephone within one (1) working day and in writing within five (5) working days.

No later than thirty (30) days following the completion of the Remedial Action, a Closure Report detailing the remedial actions and the current status of the property shall be submitted to the Department for review and approval. Upon approval of the Closure Report, and receipt of a copy of the stamped and recorded Department-approved ELUR for the property, the Department will issue an Interim Letter of Compliance for the property.

This Remedial Approval Letter does not remove your obligations to obtain any other necessary permits from other local, state, or federal agencies. **Please notify the Department at least forty-eight (48) hours in advance of any remedial work.**

If you have any questions or are in need of any clarification regarding this document, please contact me by telephone at (401) 222-4700 ext. 7112 or by e-mail at mark.dennen@dem.ri.gov.

Sincerely,

Authorized by,

Mark M. Dennen, C.P.G.
Principal Environmental Scientist
Office of Waste Management

Laurie Grandchamp, P.E.
Supervising Engineer
Office of Waste Management