

CERTIFIED MAIL

February 27, 2007

Alan Sepe, Acting Director Department of Public Properties City of Providence 25 Dorrance Street Providence, RI 02903

RE: Comments - Remedial Action Work Plan Implementation Status Letter Nos. 1 & 2 and Order of Approval Addendum, Proposed Providence Public School Site – Parcel B Formerly a portion of the Gorham/Textron Dump site, 333 Adelaide Avenue, Providence City of Providence Tax Assessor's Office Plat 51, Lot 323, Parcel B Case No. 2005-029 (Formerly part of Case No. 97-030)

Dear Mr. Sepe:

On 24 February 2004, the Rhode Island Department of Environmental Management (the Department) enacted the amended Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, (the Remediation Regulations). The purpose of these regulations is to create an integrated program requiring reporting, investigation and remediation of contaminated sites in order to eliminate and/or control threats to human health and the environment in an efficient manner.

In the matter of the above referenced site, the Department's Office of Waste Management (OWM) has received the following documents submitted on behalf of the City of Providence (the City):

- A. <u>RAWP Implementation Status Letter No. 1, Former Gorham Manufacturing Facility, Parcel B, 333 Adelaide Avenue, Providence, Rhode Island, Case No. 2005-029, (RAWP Status Letter 1), prepared by EA Engineering, Science, and Technology, Inc. (EA), dated September 28, 2006; and</u>
- B. RAWP Implementation Status Letter No. 2, Former Gorham Manufacturing Facility, Parcel B, 333 Adelaide Avenue, Providence, Rhode Island, Case No. 2005-029, (RAWP Status Letter 2), prepared by EA, dated December 13, 2006.

The Department will address the specific items raised in the RAWP Status Letters wherever appropriate in this letter. The Department and EA however, significantly disagree on their respective interpretations of the proper implementation of the Remedial Action Work Plan (RAWP) and the intentions of the June 9, 2006 Order of Approval (Order). Therefore, the Department will clarify these misunderstandings, particularly with regard to proper demonstration of compliance, by issuing the attached Order of Approval Addendum (OA Addendum).

Proposed Providence Public School, Former Gorham Textron Dump Site 333 Adelaide Avenue, Providence, RI Comments - Remedial Action Work Plan Implementation Letters 1 and 2 Page 1 of 5 February 27, 2007 Case No. 2005-029 (Formerly Part of Case No. 97-030) The following comments address items in RAWP Status Letter 1:

- 1) Regarding Item 1, <u>Indoor Methane Alarm System Components</u>, the Department acknowledges the need to change component vendors and concurs with the proposal provided that, as indicated by EA, "all RAWP design features and RIDEM Order of Approval (OA) conditions will be met and that the change in vendor will only affect the components of the system."
- 2) Regarding Item 2, Indoor Air Action Levels for VOCs, the Department acknowledges EA's contention that it could not find an analytical laboratory that could achieve the Reporting Limits (RLs) of the Connecticut Residential Proposed Target Indoor Air Concentrations (TACs) for five (5) of the volatile organic compounds (VOCs) included in the TO-15 compound list. The Department concurs with revising the remedial Action Level of the five listed VOCs (1,2-Dichloroethane, Ethylene dibromide, 1,1,1,2-Tetrachloroethane, 1,1,2,2-Tetrachloroethane, and Bromodichloromethane) to the Selective Ion Monitoring (SIM) procedure RLs, until such time as laboratory technology allows detection of the TACs, or an alternative laboratory capable of lower reporting limits is identified. Prior to each analytical sampling round, EA or the City's environmental contractor at the time of the sampling, shall contact the laboratory to determine their ability to achieve reporting limits consistent with the TACs, and document the results of each inquiry in its quarterly monitoring and compliance sampling reports. Once reporting limits consistent with the TACs are achievable, they shall become the required reporting limit, remedial objective and remedial Action Level for VOCs in air.
- 3) Regarding Item 3, Engineered Cap in Vicinity of North and West Property Boundaries of Parcel B, the Department concurs with the proposed plans for the property boundary fencing and capping as described.
- 4) Regarding Item 4, Engineered Cap in Historic Fill Areas to be Paved, the Department concurs with EA's supposition that the area known or suspected to be subject to the Solid Waste Regulations and under the jurisdiction of the Solid Waste Program, is the area presented as the "fill area" on Figure 2 (Site Plan and Areas of Concern), and is consistent with the intent of requirement 6.b of the Order.

The following comments address items in RAWP Status Letter 2:

- 5) Regarding page 2, <u>Location of Main System Components and Monitoring Locations</u>, the Department has addressed this item in the attached OA Addendum.
- 6) Regarding page 3, <u>Proposed Sub-Slab and Indoor Air Sampling Locations</u>, the Department has addressed this item in the attached OA Addendum.

As previously stated, the Department and EA significantly disagree in their respective interpretations of the proper implementation of the RAWP and the intentions of the June 9, 2006 Order. During recent discussions, EA advised the Department that EA was interpreting the Order in a manner that distinguished "compliance monitoring" from "sampling." According to EA's interpretation, "compliance monitoring" required only the use of field screening instruments and that more sensitive laboratory analysis was

required only where the Order called for "sampling." No such distinction was intended by the Department in its drafting of the Order. It has always been the Department's intention that the RAWP and Order require the City to conclusively demonstrate that both sub-slab air and indoor air comply with the selected remedial objective Action Levels of the TACs. While the use of field screening instruments is an accepted practice in the industry to approximate overall levels of contamination, their use as a "compliance" tool at this site is not appropriate because the current generation of field screening instruments are not capable of detecting the individual contaminants of concern at the selected Action Levels. In order to demonstrate "compliance" as required by the RAWP and Order, EA must use a detection method that is capable of detecting the appropriate contaminants at the required levels. The revisions to the Order detailed in the attached OA Addendum address these issues, and the Department's reasoning is further clarified below.

In issuing the Order approving the RAWP, the Department interpreted EA's references to "compliance monitoring" in the RAWP to include sampling and analysis, which is why the Department used that language in the Order. This miscommunication between EA and the Department did not become apparent until the issue was raised for discussion during a Public Meeting on February 5, 2007. It should be noted that both the members of the community and the representatives of the Agency for Toxic Substances and Disease Registry (ATSDR), have indicated that they too construed the "monitoring" of sub-slab and indoor air to involve analytical compliance sampling. In fact, ATSDR based their health effects evaluation, conclusions and recommendations in the December 4, 2006, Health Consultation – Providence High School Parcel B, on that interpretation.

It remains the Department's position that it is necessary to properly characterize and measure the concentrations of individual VOCs in indoor air and to track changes in those concentrations over time. During our discussions, both the Department and EA agreed that the priority at the site is to ensure that VOC concentrations in the indoor air of the school building are controlled and maintained at a level below the TACs. Clearly the only way to positively confirm that indoor air VOC concentrations are below levels that would pose a risk is to measure those levels with an appropriately sensitive analytical method. These concerns are reflected in the increase in indoor air sampling locations vs. sub-slab locations detailed in the attached OA Addendum.

EA indicated that it expects to detect sub-slab exceedances of the TACs. Part of EA's justification for proposing to use the less sensitive photoionization detector (PID) technology to "monitor" air is that they anticipate that cumulative concentrations of VOCs will be at high enough levels in sub-slab air to be consistently and reliably detected with a part-per-billion (ppb) PID. The Department acknowledges that there may be some benefit to using a ppb PID in conjunction with sub-slab sampling and analysis to determine if a correlation can be established which could then be used in the future to justify a move to periodic sub-slab VOC "monitoring" vs. sub-slab "sampling" and analysis.

Very high levels of VOC vapors were detected during soil gas monitoring performed at the site in January 2005. Very high VOC concentrations were also reported in soil vapor sampling analysis conducted in February and June of 2005. The soil across the majority of the site was subsequently subjected to considerable disturbance during pre-construction preparation activities in August and September of 2005. Maximum concentrations of VOCs detected during soil gas testing conducted after this site disturbance in

October 2005, indicated VOC concentrations were lower by over three (3) orders of magnitude. Since the source of the VOC vapors has not been removed, it is logically presumed that the soil gas levels were artificially lowered by the site disturbance and it is anticipated that the VOC soil gas levels will eventually rebound over time. Therefore, it is particularly important to measure the VOC concentrations in sub-slab air and to track the rebound status in order to properly evaluate the effectiveness of the system under expected best case (current) and worst case (future rebound) conditions.

The Department requests that the City initiate the required air compliance monitoring and compliance sampling in accordance with the Order and OA Addendum as soon as possible, but no later than the week of March 12, 2007.

In addition, the community has verbally and in writing requested the development of an operations and testing manual regarding the locations, schedules, and protocols for monitoring, sampling and analysis to be performed at the site. The Department does not believe that this request is unreasonable as all of these activities are part of the approved remedy and public record. EA indicated its intention at the February 5, 2007 Public Meeting to prepare a manual following the Department's responses to the RAWP Implementation Letters. Please prepare an operations and testing manual based upon the requirements of the Order and attached OA Addendum.

Please review the stipulations of the attached OA Addendum thoroughly to ensure your compliance with the requirements. The Order and OA Addendum place primary responsibility for the construction, operation, maintenance and monitoring of the approved RAWP on the City. In order to enable the Department to monitor the City's compliance with the RAWP, the Order and OA Addendum require the City to notify the Department of any condition that is non-compliant with the Order or the OA Addendum or that constitutes an interruption of the RAWP. In order to maintain compliance with the Order, the OA Addendum and the RAWP, the City's responsibilities under the Order and OA Addendum necessarily include the responsibility to respond to and correct non-compliant conditions in a timely, proactive and professional manner that minimizes non-compliance with the Order, OA Addendum and RAWP, and protects human health and the environment.

If you have any questions regarding this matter, please contact me at (401) 222-2797 x7109.

This OA Addendum shall be recorded in the land evidence records of the City of Providence within 30 days of execution as required by law, and a recorded copy must be returned to the Department within 7 days of recording.

Sincerely,

Joseph T. Martella II

Senior Engineer, Office of Waste Management

cc: Terrence D. Gray, P.E., Assistant Director, RIDEM/AW&C

Leo Hellested, P.E., Chief, RIDEM/OWM

Kelly J. Owens, RIDEM/OWM

Brian Wagner, Esq., RIDEM/OLS

Richard Enander, PhD, RIDEM/OTCA/Risk Assessment

Christopher Walusiak, RIDEM/OWM

Douglas McVay, RIDEM/OAR

Barbara Morin, RIDEM/OAR

Robert Vanderslice, PhD, RIDOH

Frank Battaglia, EPA - Region 1

Tammie A. McRae, ATSDR

Richard A. Sullivan, ATSDR

Hon. David N. Cicilline, Mayor, City of Providence

Senator Juan M. Pichardo, District 2

Representative Thomas Slater

Councilman John J. Lombardi

Councilman Leon F. Tejada

Thomas Deller, City of Providence

Dr. Donald Evans, Superintendent, Providence Schools

Mary McClure, President - Providence School Bd.

Sara Rapport, Esq., City of Providence

James Ryan, Esq, PS&H

Peter M. Grivers, EA

Gregory L. Simpson, Textron

Gerald Petros, Esq., Hinkley Allen

Steven Fischbach, Esq., RILS

Knight Memorial Library - Project Repository

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

In the matter of Remedial Action Approval at:
Proposed Providence Public School Site – Parcel B
(Formerly a portion of the Gorham/Textron Dump site)
333 Adelaide Avenue, Providence, RI, Plat 51, Lot 323 (the Site)

Case No. 2005-029

ORDER OF APPROVAL ADDENDUM

In the above entitled matter wherein the following documents have been filed by or on behalf of the City of Providence (City), in its capacity as owner and Responsible Party for the remediation of property located at 333 Adelaide Avenue, Providence, or are otherwise on record with the Rhode Island Department of Environmental Management (the Department):

- 1. Remedial Action Work Plan, Former Gorham Manufacturing Facility, Parcel B, Adelaide Avenue, Providence, Rhode Island, prepared by EA Engineering, Science, and Technology, Inc. (EA), dated April 2006, received April 26, 2006;
- 2. Electronic mail from EA to the Department, Re: Gorham ... Proposed Indoor Air Sampling, dated April 28, 2006;
- 3. Department Comment Letter, Re: Remedial Action Work Plan Comments Proposed Providence Public School Site, (Former) Gorham Textron Dump Property, 333 Adelaide Avenue, Parcel B, Providence, City of Providence Tax Assessor's Office Plat 51, Lot 323, Parcel B, Case No. 2005-029 (Formerly part of Case No. 97-030), dated May 23, 2006;
- 4. Response to RAWP Comments, Former Gorham Manufacturing Facility, Parcel B, 333

 Adelaide Avenue, Providence, Rhode Island, Case No. 2005-029, prepared by EA, dated May 25, 2006;
- 5. Letter from EA to the Department, Re: <u>Draft ELUR for Parcel B Former Gorham Manufacturing Facility</u>, <u>Parcel B</u>, 333 <u>Adelaide Avenue</u>, <u>Providence</u>, <u>Rhode Island</u>, <u>Case No. 97-030 (Including Case No. 2005-029 and Case No. 2005-059)</u>, including a draft copy of the proposed Environmental Land Usage Restriction, delivered in PDF format via e-mail, dated June 7, 2006; and
- Letter from Mark V. Dunham, Chief Financial Officer, Providence School Department, Re: <u>Response to RAWP Comment No. 6, Former Gorham Manufacturing Facility, Parcel B, 333</u> <u>Adelaide Avenue, Providence, Rhode Island, Case No. 2005-029</u>, dated June 6, 2006, received via facsimile machine on June 8, 2006.

Subsequent to the Department issuing the original Order of Approval dated June 9, 2006, the following documents were also filed by or on behalf of the City:

- 7. <u>RAWP Implementation Status Letter No. 1, Former Gorham Manufacturing Facility, Parcel B, 333 Adelaide Avenue, Providence, Rhode Island, Case No. 2005-029</u>, (RAWP Status Letter 1), prepared by EA, dated September 28, 2006; and
- 8. <u>RAWP Implementation Status Letter No. 2, Former Gorham Manufacturing Facility, Parcel B, 333 Adelaide Avenue, Providence, Rhode Island, Case No. 2005-029, (RAWP Status Letter 2), prepared by EA, dated December 13, 2006.</u>

In addition, the Agency for Toxic Substances and Disease Registry (ATSDR), has submitted the following document regarding the site:

9. Health Consultation – Providence High School Parcel B, (a/k/a Former Gorham Site), Providence, Rhode Island, EPA Facility ID: RID001195015, prepared by ATSDR, dated December 4, 2006.

Subject to the conditions herein, these documents fulfill the requirements of Section 9.00 (Remedial Action Work Plan) of the Department's <u>Rules and Regulations</u> for the Investigation and <u>Remediation of Hazardous Materials Releases</u> (<u>Remediation Regulations</u>), as amended February 24, 2004, and describe a plan to remediate existing contamination pursuant to 23-19.14-1 et seq. and the Department's <u>Remediation Regulations</u>, amended February 24, 2004 in accordance therewith.

It is the Department's intent that all conditions set forth in the Order of Approval (Order) dated June 9, 2006, shall remain in full force and effect unless specifically altered by this Order of Approval Addendum (OA Addendum). This OA Addendum continues to place primary responsibility for the construction, operation, maintenance and monitoring of the approved Remedial Action Work Plan (RAWP) on the City. As the responsible party and performing party, the City is expected to implement the RAWP in an expeditious and professional manner that prevents non-compliance with the Order, OA Addendum and RAWP, and protects human health and the environment. For the convenience of the City and its contractors and consultants the changes made to the Order by this OA Addendum have been highlighted below using boldfaced type and include a reference to the original paragraph of the Order as applicable.

Upon consideration thereof, and in accordance with Rule 10.1 (Remedial Action Approvals) of the <u>Remediation Regulations</u>, the Department approves said RAWP through this OA Addendum, subject to the following amended conditions:

- 1) All conditions set forth in the Order of Approval dated June 9, 2006, shall remain in full force and effect unless specifically altered by this OA Addendum.
- 2) Sampling and laboratory analysis of all media involved in the Remedial Action shall be conducted in accordance with the requirements of the RAWP, the Order and this OA Addendum [Ref. Order ¶ 5].

- 3) The Site remedy as described in the RAWP and Order shall also incorporate the following [Ref. Order ¶ 6]:
 - a) All work, operations, activities, **monitoring and sampling** shall be performed to ensure that the applicable remedial objectives for the site are achieved for all hazardous substances at the site, so as to manage actual or potential risks to human health and the environment [Ref. Order ¶ 6.a].
 - b) Construction, installation, maintenance and continuous operation of an active sub-slab ventilation (SSV) system designed to extract soil vapor from under the building, and to prevent the accumulation and/or buildup of methane gas or volatile organic compounds (VOCs), and to ensure levels of methane and or VOCs are maintained below applicable "Action Levels." The SSV system shall also be equipped with an alarm system, and system operation and maintenance will include periodic monitoring and compliance sampling of methane and VOC levels below the building, within the building, and in the extracted soil vapor measured at each of the stack pipes venting through the building roof [Ref. Order ¶ 6.c].
 - c) Following the installation of the sub-slab ventilation system, its proper operation shall be evaluated by periodic compliance sampling with analytical laboratory testing to demonstrate compliance with the Department approved performance criteria in the final RAWP, the Order, and this OA Addendum, and also to verify actual emission values in order to determine if treatment, a permit, or registration of the SSV system is required under the Department's Office of Air Resources (OAR) Air Pollution Control (APC) Regulation No. 9 [Ref. Order ¶ 6.d].
 - d) Implementation of a long-term vapor and air monitoring and compliance sampling program sufficient to ensure site conditions are maintained in compliance with the applicable remedial objectives. Said monitoring and compliance sampling program shall include at a minimum [Ref. Order ¶ 6.e]:
 - i) Incorporation of remedial "Action Levels" as follows:
 - (1) Within buildings, the remedial Action Level shall be 1 percent of the methane lower explosive limit (LEL).
 - (2) Under buildings, the remedial Action Level shall be 10 percent of the methane LEL.
 - (3) The remedial Action Level for VOCs shall be the Connecticut Residential Proposed Target Indoor Air Concentrations (TACs). An appropriate analytical method shall be selected with a detection limit (DL) or reporting limit (RL) sufficiently sensitive to allow proper comparison of detected VOC concentrations to each applicable TAC (e.g. speciated VOCs using EPA method TO-15 with the Selective Ion Monitoring [SIM] procedure RLs, or equivalent). Since no analytical laboratory to date has been identified which can reliably achieve the TAC RLs for five (5) of the VOCs (1,2-Dichloroethane, Ethylene dibromide, 1,1,1,2-Tetrachloroethane, 1,1,2,2-Tetrachloroethane, and Bromodichloromethane),

their <u>provisional</u> remedial Action Levels shall be their respective SIM procedure RLs, until such time as laboratory technology allows detection of the TACs, or an alternative laboratory capable of lower detection levels is identified. Prior to each analytical sampling round, the City's environmental contractor shall contact the laboratory to determine their ability to achieve detection limits consistent with the TACs. The results of each inquiry shall be documented in the quarterly monitoring and compliance sampling reports. Once reporting limits consistent with the TACs are achievable for the five listed VOCs, they shall become the required reporting limit, remedial objective and remedial Action Level for those VOCs in air [Ref. Order ¶ 6.e.i.(3)].

- ii) The location of the eight (8) interior continuous methane monitors/alarms (i.e. continuous within the buildings), as well the eight (8) sub slab sample collection locations (MP-1 through MP-8) shall be as described in RAWP Status Letter 2, Appendix B (Figure Illustrating Monitoring System Component Locations) and Appendix C (Figure Illustrating Proposed Sub-Slab Sampling Locations) [Ref. Order § 6.e.ii].
- iii) The location of the eight (8) interior VOC sampling locations, shall be proximate to the eight (8) interior methane monitoring locations described in RAWP Status Letter 2. The Summa canister samples shall be collected in a manner such that the canister intake is at an elevation approximately two (2) feet above floor level, and the samples shall be analyzed for VOCs by EPA TO-15 SIM. The locations are identified in RAWP Status Letter 2, Appendix B (Figure Illustrating Monitoring System Component Locations).
- iv) The location of the four (4) sub-slab VOC sampling locations shall be MP-1, MP-2, MP 5 and MP-7 as identified in RAWP Status Letter 2, Appendix C (Figure Illustrating Proposed Sub-Slab Sampling Locations). Samples shall be analyzed for VOCs by EPA TO-15 SIM.
- v) Performance of baseline ambient air monitoring and compliance sampling within the subsurface slab area and the building interior shall be conducted, prior to system start up and any occupancy, to evaluate concentrations of methane and VOCs at the site [Ref. Order ¶ 6.e.iii].
- vi) A "complete round" of compliance monitoring for methane and compliance sampling and analysis for VOCs shall indicate performance of methane monitoring and VOC sampling and analysis at all previously specified monitoring and sampling locations in the sub-slab and interior air.
- vii) The schedule for periodic compliance monitoring and compliance sampling shall be as follows [Ref. Order ¶ 6.e.iv]:
 - (1) Prior to sub-slab venting system start-up, performance of a complete round of compliance monitoring for methane and compliance sampling and analysis for VOCs in the sub-slab and interior air;
 - (2) One (1) week after sub-slab venting system start-up, performance of a complete round of compliance monitoring for methane and compliance sampling and analysis for VOCs in the sub-slab, interior air and at each of the stack pipes venting through the building roof;

- (3) Following the first sampling round collected after sub-slab venting system start-up, the required monitoring/sampling frequency shall be revised to every thirty (30) days and each periodic event shall include performance of a complete round of compliance monitoring for methane and compliance sampling and analysis for VOCs in the sub-slab and interior air;
- (4) Four (4) weeks prior to the proposed opening of the school to students, the required monitoring/sampling frequency shall be revised to weekly and each periodic event shall include performance of a complete round of compliance monitoring for methane and compliance sampling and analysis for VOCs in the sub-slab and interior air;
- (5) Four (4) weeks following occupation of the school by students, the required monitoring/sampling frequency may be adjusted to every thirty (30) days, provided that there are no exceedances of the applicable remedial Action Levels for VOCs or methane. Each periodic monitoring/sampling event shall continue to include performance of a complete round of compliance monitoring for methane and compliance sampling and analysis for VOCs in the sub-slab and interior air;
- (6) After successfully demonstrating one year of continuously compliant system operation (i.e. there are no exceedances of the applicable remedial Action Levels for VOCs or methane), the City may petition the Department to decrease the required compliance monitoring and compliance sampling frequency.
- (7) Following the first sampling round collected after sub-slab venting system start-up, the required monitoring/sampling frequency at each of the stack pipes venting through the building roof shall be revised to quarterly for the first year of system operation, and each periodic event shall include performance of compliance monitoring for methane and compliance sampling and analysis for VOCs. Following each monitoring/sampling round, the actual measured emission values shall be used to calculate the cumulative emissions from all three venting pipes in order to determine if treatment, a permit, or registration for the SSV system is required by the OAR. Depending upon the results of actual measured emissions and OAR requirements, the City may petition the Department to decrease the required compliance monitoring and compliance sampling frequency at each of the stack pipes venting through the building roof, if appropriately supported by the data.
- viii) Periodic monitoring of methane and compliance sampling and analysis of VOCs shall continue at the specified rate as long as a source of contamination exists [Ref. Order ¶ 6.e.ix].
- e) Preparation and submission of quarterly air monitoring and compliance sampling reports in accordance with the Order and this OA Addendum, and including the recording of the following parameters [Ref. Order ¶ 6.f]:

- i) The concentrations of methane and VOCs detected in each sample collected and analyzed during **periodic** monitoring and sampling activities for the current reporting period [Ref. Order ¶ 6.f.i].
- ii) A summary table of the concentrations of methane and VOCs detected in each sample collected and analyzed during prior reporting periods.
- iii) The occurrences of any alarm activations during the quarter and the resulting activities performed in response to the alarm activation.
- iv) The occurrences of any remedial Action Level exceedances during the quarter and resulting activities performed in response to the exceedance.
- v) The system operational status during the quarter, particularly noting the length of any system shutdown due to power failure, system malfunction, repairs, scheduled maintenance, etc.
- vi) A schedule that includes the anticipated delivery date of the next monitoring and compliance sampling report submittal [Ref. Order ¶ 6.f.vi].
- vii) An evaluation of the status of VOC soil gas rebound in sub-slab soil vapor.
- viii) An evaluation of the cumulative emissions from all three venting pipes in order to determine if treatment, a permit, or registration for the SSV system is required by the OAR.
- f) Preparation and submission of a Remedial Action Closure Report documenting the work performed and including at a minimum the following items [Ref. Order ¶ 6.i]:
 - i) A post remediation survey of the entire site with as-built plans demarcating the exact location (e.g. vertical and horizontal extent and type) of the installed engineered controls, including: geotextile fabric, clean fill, utilities, structures, basins, swales, the storm water detention pond, the SSV system, and all monitoring and sampling locations [Ref. Order ¶ 6.i.i].
 - ii) Analytical results and summary of all post remediation/post construction methane, VOC and air monitoring and sampling performed to date, demonstrating compliance with the requirements of the Order and this OA Addendum [Ref. Order ¶ 6.ii].
 - iii) All original laboratory analytical data results from the remedial activities, compliance and confirmation sampling, and clean fill sampling as applicable.
 - iv) A statement from the facility or environmental consultant attesting to the origin of the clean fill and/or loam, and suitability consistent with the RAWP, **the Order and this OA Addendum**. Any organic topsoil utilized shall conform to the general vegetated top cover criteria outlined in Rule 2.2.12 of the Solid Waste Regulations [Ref. Order ¶ 6.iv].
- 4) All RAWP activities shall be performed in compliance with all appropriate OAR Rules and Regulations, including but not limited to the monitoring, **sampling**, **evaluation** and control of any air emissions and the timely acquisition of any required Air Pollution Control Permits (Air Permits) [Ref. Order ¶ 11].

- 5) The City, its representatives, employees, agents and contractors shall adhere to the timelines established in the Order as well as the following revised timeline in its management, operation and maintenance of the Site [Ref. Order ¶ 19].
 - a) All exceedances of the "Action Levels" established in the Order and this OA Addendum that are detected during any site monitoring or sampling activity (including but not limited to monitoring or sampling of sub-slab ventilation systems, interior air, or interior methane monitors/alarms) shall be reported to the OWM immediately and responded to immediately by the City [Ref. Order ¶ 19.e].
- 6) The City shall have this OA Addendum recorded in the City of Providence, land evidence records of the subject property within thirty (30) days of execution of this OA Addendum [Ref. Order ¶ 23].
- 7) There shall be <u>no occupation or use</u> of any building, facility or grounds on the Site until all the requirements described in the RAWP, **the Order and this OA Addendum** have been met to ensure that the applicable remedial objectives for the site are achieved for all hazardous substances, so as to manage actual or potential risks to human health and the environment for students, workers, clients, visitors and trespassers at the Site [Ref. Order ¶ 24].

Subject to future revisions or amendments by the Department, the Order and this OA Addendum shall remain in full force and effect for as long as said RAWP shall be operated and maintained in a condition satisfactory to the Department. Failure to comply with all points outlined in the Department approved RAWP and stipulated in the Order and this OA Addendum shall result in the issuance of a Notice of Violation and Order against the City.

The Order and this OA Addendum shall be subject to modification or revocation in accordance with law.

Entered as an approval by the Department this $\frac{27}{1}$ day of February, 2007.

Bv.

Leo Hellested, P.E.

Chief, Office of Waste Management

Department of Environmental Management