

RELEASE ABATEMENT MEASURE COMPLETION REPORT

SOIL REMOVAL REMEDY IMPLEMENTED AT THE WALSH FIELD ATHLETIC COMPLEX

NEW BEDFORD, MASSACHUSETTS

Release Tracking Number 4-15685

Prepared for:

City of New Bedford
133 William Street
New Bedford, Massachusetts 02740

Prepared by:

TRC Environmental Corporation
Wannalancit Mills
650 Suffolk Street
Lowell, Massachusetts 01854
(978) 970-5600

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Release Abatement Measure Completion Report

Soil Removal Remedy Implemented at the Walsh Field Athletic Complex

Parker Street Waste Site
New Bedford, Massachusetts

Release Tracking Number (RTN) 4-15685

TRC Project Number: 115058

TRC Environmental Corporation (TRC) is submitting this Release Abatement Measure Completion Report (RAM Completion Report) to the Massachusetts Department of Environmental Protection (MassDEP) on behalf of the City of New Bedford (City) per 310 CMR 40.0446 of the Massachusetts Contingency Plan (MCP). This RAM Completion Report describes impacted soil removal and site restoration activities conducted at the Dr. Paul F. Walsh Field (Walsh Field) Athletic Complex (the Site) under a RAM Plan submitted to MassDEP on October 7, 2009. Walsh Field is part of the Site being managed under MassDEP Release Tracking Number (RTN) 4-15685. MCP Special Project status (310 CMR 40.0060) has been established for RTN 4-15685 and other related RTNs. A Site location map is provided as Figure 1.

An Interim Phase III Remedial Action Plan (RAP) for Walsh Field was prepared by TRC on behalf of the City and submitted to MassDEP on July 29, 2009 (TRC, 2009a). The proposed remedial action alternative identified in the RAP was to 1) remediate soils by excavating the hot spot (located at sample location WFB-4), 2) excavate the soils that contribute to Exposure Point Concentrations (EPCs) in excess of Method 1/Method 2 S-1 soil standards, and 3) place an Activity and Use Limitation (AUL) on the property to prevent potential exposure to impacted soils. The purpose of this RAM Completion Report is to describe the activities undertaken by the City to reduce current and future risks at the Site and achieve a Condition of No Significant Risk. The MassDEP issued conditional approval for the RAM Plan on October 30, 2009. Work performed under the RAM Plan included:

- Excavation of soils by removing the hot spot (located at sample location WFB-4);
- Excavation of soils that contribute to Exposure Point Concentrations (EPCs) in excess of Method 1/Method 2 S-1 soil standards;
- Temporary soil stockpiling and stockpile management (and as needed stabilization);
- Off-site disposal of excavated impacted soils; and
- Backfilling the excavated soil with documented contaminant-free fill material screened in advance for the presence of regulated chemicals.

This RAM Completion Report is organized as follows: Section I (Background) briefly summarizes information on TRC's involvement with the Site, the circumstances of the release and the objectives of this RAM Completion Report. Section II (RAM Completion Report) provides the information content for a RAM Completion Report per the MCP, as set forth in 310

CMR 40.0446. Section III (References) lists information sources relied upon in the preparation of this RAM Completion Report.

Appendices are provided for supporting information including a copy of the MassDEP conditional approval letter (Appendix A), a photograph log of RAM-related activities (Appendix B), laboratory data packages associated with stockpile characterization samples (Appendix C), laboratory data packages associated with imported backfill material (Appendix D), copies of final Bill of Lading shipping documents (Appendix E) and dust monitoring data and field forms (Appendix F).

I. BACKGROUND

Site Description

The Site occupies approximately 22 acres and is located on the south side of Parker Street and south of the School Department maintenance facility, to the east of Hunter Street, and to the north of Maxfield Street, in New Bedford, Massachusetts. The east side of the Site is bordered by Lindsey Street and the City's Department of Public Facilities (DPF) garages (see Figure 1).

Walsh Field is an active athletic complex that contains a football stadium along Maxfield Street, a soccer field that abuts the City's DPF facility, a fenced Varsity baseball field at the corner of Parker and Hunter Streets, the Junior Varsity baseball field abutting the DPF facility between the soccer field and football stadium, and a central area used for athletic practices of various sports including softball, soccer and football.

For the purposes of evaluating risk to human health, Walsh Field was divided into exposure points applicable to the athletic activities that occur at the field as follows:

- WF-1: Football Field Area
- WF-2: Soccer Field Area
- WF-3: Practice Area (including the softball diamond)
- WF-4: Junior Varsity Baseball Field
- WF-5: Varsity Baseball Field

The exposure point area boundaries are illustrated in Figure 2.

Investigation History

In February 2006, The BETA Group, Incorporated (BETA) of Norwood, Massachusetts conducted subsurface investigations at the Site to evaluate the horizontal and vertical extent of soil impacts. A total of 80 soil borings were advanced and 12 0-0.5 foot soil samples were collected by BETA. Soil samples were collected at boring locations where fill was observed at depths less than 2.5 feet below grade. Soil samples collected by BETA were analyzed for polychlorinated biphenyls (PCBs), the eight (8) Resource Conservation and Recovery Act (RCRA) metals, polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), pesticides and herbicides. Impacts at concentrations exceeding the Massachusetts Contingency Plan (MCP) Method 1/Method 2 S-1 standards were detected for arsenic, barium, cadmium, lead, various PAHs, and dibenzofuran.

TRC's investigation effort included soil sampling and analysis in July, August, and September 2008.

TRC contracted New England Geotech of Jamestown, Rhode Island, to perform drilling activities at the Site under TRC field supervision. The borings were advanced using Geoprobe® direct push methods. The samples were visually examined in the field for evidence of impacts

and field screened using the Massachusetts Department of Environmental Protection (MassDEP) jar headspace methodology and a photoionization detector (PID).

By December 2008, TRC advanced a total of 64 soil borings and collected an additional 35 surface soil samples, and two soil stockpile samples. The associated laboratory analytical results of individual soil samples were in excess of MCP Method 1 S-1 standards for PAHs and several heavy metals. Detected PCB concentrations in soil were below the MCP Method 1 S-1 standards for all soil samples submitted. A summary of the data collected was provided in TRC's *Interim Phase II Comprehensive Site Assessment, New Bedford, Massachusetts* dated July 2009, which included data collected on or before December 15, 2008.

Supplemental environmental sampling was conducted at Walsh Field by TRC from February 2009 through July 2009 to delineate areas and support remedial planning. TRC conducted soil sampling along concentric rings (i.e., step-out sampling) around sampling locations identified for potential excavation. The supplemental sampling investigation was performed to pre-define excavation boundaries. A summary of supplemental environmental sampling activities completed at Walsh Field between February 16, 2009 and May 22, 2009 was presented in Appendix A of TRC's *Interim Phase III Remedial Action Plan, New Bedford, Massachusetts* (Phase III) dated July 29, 2009.

On behalf of the City, TRC planned and oversaw the removal of additional impacted soil from Walsh Field under a RAM Plan submitted to MassDEP on October 7, 2009, which was made available for a 20-day public comment period prior to MassDEP approval and subsequent implementation. A copy of the MassDEP conditional approval letter dated October 30, 2010 is provided as Appendix A.

The RAM Plan called for soil excavation at one hot spot location (sample location WFB-4), the excavation of soils that contribute to EPCs in excess of MCP Method 1/ Method 2 S-1 soil standards in the top 3 feet of soil, temporary soil stockpiling and stockpile management (with as-needed soil stabilization), off-site reuse of excavated impacted soils and backfilling of the remedial excavations with documented fill material screened in advance for the presence of regulated contaminants. The RAM Plan also included safety, security and erosion/sedimentation control measures, and air monitoring for fugitive dust emissions and mitigation measures.

The RAM addressed the removal of impacted soils at 13 locations (WFA-11, WFB-11, WFC-13, WFD-13, WFF-5, WFA-10, WFD-6, SB-233, WFG-7, JV-JJ, Post-9, Post-10 and WFB-4), as well as larger portions of the Varsity and Junior Varsity baseball diamonds, across Walsh Field in New Bedford, Massachusetts. TRC found these locations to contain levels of dibenzofuran, PAHs, diesel range organics (DRO), arsenic, cadmium and lead exceeding the MCP Method 1/Method 2 S-1/GW-2 and S-1/GW-3 soil standard (TRC, 2009b).

The objective of the RAM Plan was to excavate the impacted soil within the top three feet of ground surface and backfill with documented contaminant-free fill material such that a condition of No Significant Risk would be achieved in the top three feet of soil in conjunction with an AUL on the property to prevent potential exposure to remaining impacted soils.

The RAM Plan estimated approximately 23,400 square feet of surface area for removal and replacement. The approximate total volume of soil excavated is summarized below, with all impacted soil transported off-site for reuse at licensed facilities.

- WFA-11 – 27.7 cubic yards
- WFB-11 – 34.0 cubic yards
- WFC-13 – 10.1 cubic yards
- WFD-13 – 7.8 cubic yards
- WFF-5 – 7.0 cubic yards
- WFA-10 – 20.6 cubic yards
- WFD-6 – 17.2 cubic yards
- SB-233 – 21.1 cubic yards
- WFG-7 – 11.3 cubic yards
- Junior Varsity Field including JV-JJ, Post-9 and Post-10 – 274.0 cubic yard
- Varsity Field including “hot spot” WFB-4 – 1,852.0 cubic yards

See TRC’s *RAM Plan* (TRC, 2009c) for supporting information (drawings, assumptions and risk calculations, etc.) associated with the RAM-related remedial excavations. For additional information, see TRC’s *RAM Status Reports* (TRC, 2010a and 2010b) submitted to MassDEP on February 2, 2010 and August 4, 2010, respectively.

RAM-related field activities were completed at the Site in October 2010. Site restoration was completed in the Fall of 2010.

II. RELEASE ABATEMENT MEASURE COMPLETION REPORT (310 CMR 40.0446)

This RAM Completion Report is organized according to the information needs set forth under 310 CMR 40.0446(4)(a) through (f) of the MCP.

(a) Description of Release, Site Conditions and Surrounding Receptors

Description

As described previously, Walsh Field is part of the Site being managed under RTN 4-15685. Dibenzofuran, PAHs, DRO, arsenic, cadmium and lead exceeding the MCP Method 1/Method 2 S-1/GW-2 and S-1/GW-3 soil standard have been detected at Walsh Field (TRC, 2009b).

Site Conditions

A Site location map is provided as Figure 1.

The Dr. Paul F. Walsh Field athletic complex is comprised of several athletic fields including a large baseball field near the corner of Hunter and Parker Streets (Varsity Field), a smaller baseball field (Junior Varsity Field), a softball field and general athletic practice area, a soccer field, and a football/track and field complex. There are buildings within Walsh Field including restrooms, a storage building, and maintenance buildings. Approximately 10-percent of the Site is covered by impervious surfaces. The Site occupies approximately 22 acres. The Site is located to the south of Parker Street and the school department maintenance facility, to the east of Hunter Street, and to the north of Maxfield Street. The east side of the Site is bordered by Lindsey Street and a City maintenance yard.

The *Interim Phase II Comprehensive Site Assessment, New Bedford, Massachusetts*, dated July 2009, described the nature and extent of soil impacts relative to the 0 to 1 foot below ground surface horizon, 1 to 3 foot below ground surface horizon and greater than 3 foot below ground surface horizon (TRC, 2009b).

Walsh Field is underlain by topsoil and anthropogenic fill material that includes sandy material with ash. In places, the ash fill includes broken glass, brick fragments, clinker, coal, cinders, and/or metallic fragments. Based on soil borings, the location of the top and bottom of the fill material is varied throughout Walsh Field, ranging from 0.5 to more than 5 feet and 2 to 10 feet below ground surface, respectively. In nearly 50 locations, fill was not identified in the soil borings.

The anthropogenic fill materials are underlain by native dark brown organic peat material, mixed with silt and clay in places from a wetland at Walsh Field that predates the presence of anthropogenic fill. Native soils below the organic peat layer include gray fine silty sands with trace gravel and/or medium sand in places.

Groundwater flows predominantly to the southeast at a gradient of about 2×10^{-3} ft/ft. The groundwater aquifer is unconfined and is present about 4 feet below ground surface. The aquifer

thickness is not known, but is expected to extend down to the underlying bedrock. This aquifer is not categorized as potentially productive.

Based on literature values, the peat layer is expected to exhibit low hydraulic conductivity, on the range of 10^{-6} to 10^{-3} centimeters per second (cm/sec), while glacial outwash deposits having relatively less fine material could exhibit a hydraulic conductivity range of 10^{-3} to 15 cm/sec. The hydraulic conductivity of the ash fill could be as low as approximately 4.4×10^{-5} cm/sec with higher hydraulic conductivities (10^{-1} cm/sec) a possibility depending on the relative amounts of sand and ash. Since the deposition is fairly loose, based on observations made during boring advancement, the hydraulic conductivity of the fill material is estimated to be higher than the underlying peat layer.

The City of New Bedford receives an average of 47.34 inches of precipitation annually (www.fedstats.gov). There are no surface water bodies at Walsh Field.

Surrounding Receptors

The Site lies within 500 feet of the New Bedford High School (NBHS) campus, residential dwellings, a church and various outdoor athletic fields.

Groundwater categories at the Site include actual or potential GW-2, depending upon proximity to occupied structures (groundwater is encountered at approximately 5 feet below ground surface based on groundwater monitoring well installations at Walsh Field by TRC), and GW-3, which applies to all groundwater throughout the Commonwealth. Groundwater impacts associated with the Site are not expected based on the laboratory results of groundwater samples taken from groundwater monitoring wells located at the NBHS portion of the site in August and September 2008. TRC groundwater monitoring results obtained for Walsh Field in March, 2009 also indicate no detections above MCP Method 1 groundwater criteria.

Based on review of on-line MassDEP Priority Resource Map data available from Massachusetts Geographic Information System (MassGIS), the Site is not located within a Current or Potential Drinking Water Source Area (MassGIS, 2008) and therefore the GW-1 groundwater category does not apply.

The Site is not located in a wetland resource area. No other documented sensitive ecological receptor areas (e.g., Areas of Critical Environmental Concern [ACECs]) are known to be located at or near the Site. No municipal or residential wells are known to be in the area.

(b) Description of RAM completed at the Site

RAM activities were carried out during three general phases during 2009 and 2010 including 1) excavation, temporary stockpiling and off-site disposal of the WFB-4 hot spot and soils that contribute to EPCs in excess of MCP Method 1/Method 2 S-1 soil standards with the exception of the Varsity baseball diamond (Fall 2009), 2) Site restoration following spot soil removal activities (Spring 2010), and 3) excavation, temporary stockpiling, off-site disposal and restoration of the Varsity baseball diamond (Summer/Fall 2010). A summary of each phase of RAM activities is provided in the following section.

Fall 2009 Excavations

The following RAM related activities took place discontinuously between November 23 and December 29, 2009 as described in TRC's previous *RAM Status Report* (TRC, 2010a) submitted to MassDEP on February 2, 2010:

- Site preparation including the pre-surveying and mark-out of soil excavation areas and set-up of a soil stockpile containment area prior to removal of any material.
- Excavation of pre-surveyed areas followed by temporary on-site stockpiling of soil.
- Treatment of stockpiled soil by Triumvirate Environmental, Incorporated (TEI) of Somerville, Massachusetts.
- Stockpile management at the completion of each day.
- Removal of treated and characterized stockpiled soils from the Site for reuse (daily cover) at a permitted Massachusetts landfill facility.

TRC provided professional field oversight and conducted dust monitoring and VOC field screening with a photoionization detector (PID) during site set-up, excavation, treatment and removal/hauling of soil. Please refer to Attachment B the RAM Status Report submitted on February 2, 2010 for dust monitoring field logs and data.

Locations were pre-surveyed and marked with wooden stakes by Land Planning, Incorporated of Hanson, Massachusetts using existing survey data. On November 23, 2009, TRC then further delineated the excavation areas according to the plans provided in the RAM Plan.

D.W. White Construction, Incorporated from Acushnet, Massachusetts performed the excavation activities as well as daily containment and maintenance of the excavated soil stockpiles. The stockpile area was set up on November 23 and 25, 2009 in advance of any RAM-related soil excavation activity. The area contained a base layer of 6-mil-thick polyethylene sheeting surrounded by staked hay bales, silt fence and snow fencing (note that snow fence was not used along the fence line abutting the adjacent DPW facility since the existing chain-link fence was considered adequate).

Excavation began on November 25, 2009 at location WFG-7. The excavator loaded the soil into a truck that then moved material from the excavation location to the pre-arranged stockpile area. Upon completion of excavation to the predetermined depth, three feet in this case, a designated clean bucket was utilized to backfill the hole. A clean loader was used to transport backfill material from the stockpile area to the excavation location. Stone dust, that was presumed to be consistent with applicable standards since it was sourced from an unimpacted supply, was used as a backfill material for WFG-7. Each load of material was compacted so as to secure a dense, stable and thoroughly compacted mass. Backfilling operations continued until the fill had been brought up to the finished grade. Each successive excavation was completed in the same fashion. Excavation and backfilling activities progressed in stages across the Site as opposed to performing excavation in all areas prior to any backfilling. This minimized related safety concerns (i.e., open excavations) and the impact of rainfall events on site operations.

Subsequent to the backfilling of WFG-7, the use of the stone dust was suspended pending the receipt of documentation that the material was acceptable for use as backfill per the RAM Plan. A composite sample of the stone dust was collected by TRC and analyzed for semi-volatile organic compounds (SVOCs), PCBs, total petroleum hydrocarbons (TPH), PAHs and MCP Metals. Previously documented sand was used in place of the stone dust while the results of the analyses were obtained. The results of the stone dust analysis indicated concentrations of nickel and chromium in the composite sample above MCP Method 1 S-1 soil standards, which is believed, based on past experience with other Massachusetts granular material suppliers, to be naturally enriched (mineral-related) nickel and chromium. Nonetheless, the stone dust stockpile was then covered and no longer used during RAM related activities. WFG-7 was re-excavated and backfilled using previously documented contaminant-free sand on December 4, 2009. The walls of the excavation were scraped so that no remaining gray stone dust could be seen and was backfilled with clean sand. Due to the potential for elevated concentrations of nickel and chromium in stone dust used as infield cover at the Junior Varsity baseball diamond, the stone dust would not be reused as excavation cover material as planned. Stone dust removed from locations JV-JJ, Post-9 and Post-10 within the Junior Varsity baseball diamond would be treated along with other impacted soils.

Additionally, TEI of Somerville, Massachusetts treated the stockpiled excavated soil using Free Flow Technologies FF-100 treatment material to fix elevated metal concentrations (lead, arsenic). TEI used a loader to mix the material into the existing stockpiles concurrently with the excavation activity.

At the conclusion of each work day the stockpile was securely covered with a minimum of 6-mil-thick polyethylene sheeting, overlapped and weighted to form a continuous waterproof barrier over the material. The cover was maintained throughout the stockpile period to control water entering the stockpiled materials and to limit fugitive dust generation. The Site was secured by the permanent perimeter fence as well as a silt fence and snow fence directly around the stockpile area that limited unauthorized entry and contact with stored materials by trespassers.

All excavations were backfilled before leaving the Site for the day to prevent exposure to impacted soil/fill at depth and as a physical safety precaution. Backfilling of the final excavation was completed on December 4, 2009. The corners of the excavations were surveyed by Land Planning, Incorporated and plotted on an aerial photograph obtained from the Massachusetts Geographic Information System (see Figure 2).

TEI collected post-treatment soil characterization samples when the treatment of material was completed and the stockpiles remained securely covered on-site pending the results of the testing. On December 22, 2009 the Crapo Hill Landfill accepted the material and transport of the soil began the following Monday (December 28, 2009). The hauling of material to the Crapo Hill Landfill was completed on December 29, 2009. A total of 1,052.34 tons of material were transported over two days. See Attachment A of the *RAM Status Report* (TRC, 2010a) submitted to MassDEP on February 2, 2010 for associated soil shipping documents.

Spring 2010 Restoration

As described in the RAM Status Report submitted to MassDEP on August 4, 2010, the following activities, generally focused on Site restoration, were conducted at the Site between March 9 and March 19, 2010.

- Analytical testing of imported loam and stone dust source material in advance of field restoration activities.
- Excavation and stockpiling of previously placed documented contaminant-free backfill material from the upper portion of the spot excavations areas to facilitate placement of documented contaminant-free loam or stone dust (the Junior Varsity baseball diamond, including the JV-JJ, Post-9 and Post-10 excavations, was intentionally left approximately 4 to 6-inches below grade during previous RAM-related activities).
- Removal and stockpiling of sod along the perimeter of the Junior Varsity baseball diamond to create proper grading between the infield and surrounding grass.
- Placement of loam within the upper portion of each of the spot excavation areas and the perimeter of the Junior Varsity baseball diamond (including portions of the JV-JJ, Post-9 and Post-10 excavations), followed by placement and rolling of sod in select portions of the Site (e.g., Varsity baseball diamond, Junior Varsity baseball diamond and football field).
- Placement of documented contaminant-free backfill within the upper portion of the Junior Varsity baseball diamond infield (including portions of the JV-JJ, Post-9 and Post-10 excavations).
- Placement of loam and reseeded of tire tracks/ruts throughout the Site created during previous RAM-related activities.
- Excavation and stockpiling of previously placed backfill material from the upper portion of Immediate Response Action (IRA) area WFE-5 to facilitate placement of loam.
- Stockpile management at the completion of each day and during periods of prolonged inactivity.
- Analytical testing of stockpiled material to determine reuse, recycling and/or disposal options.

TRC provided professional field oversight and conducted dust monitoring and VOC field screening with a PID during site restoration activities. A summary of dust monitoring results can be found as Table 1 and Attachment A of the previous *RAM Status Report* dated August 4, 2010 (TRC, 2010b).

In preparation for the field restoration activities, TEI submitted samples of the loam and stone dust source material for laboratory analytical testing for the following analyses:

- Volatile Organic Compounds via SW-846 Method 8260B
- Semi-volatile Organic Compounds via SW-846 Method 8270C;

- Volatile Petroleum Hydrocarbons/Extractable Petroleum Hydrocarbons via MassDEP methodologies;
- Polychlorinated Biphenyls via SW-846 Method 8082;
- Resource Conservation and Recovery Act (RCRA) 8 Metals via SW-846 Methods 6010B/7471A; and
- Pesticides/Herbicides via SW-846 Methods 8081A/8151A.

The loam source was submitted for laboratory analysis on January 20, 2010, while the stone dust source was submitted for laboratory analysis on February 18, 2010. All analyses were conducted by Con-Test Analytical Laboratory (Con-Test) of East Longmeadow, Massachusetts. Due to a detected total chromium concentration of 72 milligrams per kilogram (mg/kg) in the stone dust sample, the stone dust source subsequently underwent chromium speciation analysis including total chromium, hexavalent chromium, pH and oxidation-reduction potential (ORP) analyses by Con-Test on March 3, 2010. The speciation results demonstrate that the detected chromium is in the trivalent state. Therefore, the trivalent chromium standard applies to the total chromium results. The sample results for the stone dust were below the trivalent chromium Method 1 S-1/GW-2/GW-3 soil standard of 1,000 mg/kg.

The above referenced loam and stone dust source materials were considered contaminant-free sources as all detections encountered were below the MCP Method 1 S-1 soil standards. Analytical data packages associated with the loam and stone dust source sampling can be found in the *RAM Status Report* dated August 4, 2010 (TRC, 2010b).

TEI performed the field restoration activities (e.g., soil excavation, placement of loam and stone dust, placement and rolling of sod, reseeding) as well as daily management and maintenance of the excavated soil stockpile beginning on March 9, 2010.

The upper portion of previously placed backfill material (upper approximately 4 to 6-inches) was excavated from each of ten spot excavations (i.e., WFA-10, WFA-11, WFB-4, WFB-11, WFC-13, WFD-6, WFD-13, WFF-5, WFG-7 and SB-233), as well as the WFE-5 area (remediated during previous IRA activities). Imported contaminant-free loam was placed in each of the excavations to restore the area to the original grade. Sod was added to select portions of the complex (e.g., Varsity baseball diamond [WFB-4 area], Junior Varsity baseball diamond and football field) and rolled to restore each excavation to the surrounding grade. Excavated material was stockpiled on a base layer of polyethylene sheeting (6-mil minimum) and covered with polyethylene sheeting pending characterization analysis.

In addition to removal of previously placed backfill material, portions of the sod in the vicinity of the WFB-4 excavation were also removed. The WFB-4 excavation is located in the outfield of the Varsity baseball diamond. Due to the scheduled start of the high school baseball season in mid-March 2010, the City requested that the tire tracks/ruts created during previous RAM-related activities be removed and restored with sod. As a result, TEI removed the existing (damaged) sod, spread imported loam and placed and rolled new sod in this area. The removed sod was stockpiled on a base layer of polyethylene sheeting (6-mil minimum) and covered with polyethylene sheeting pending characterization analysis.

The existing sod surrounding the Junior Varsity baseball diamond excavation (including portions of the JV-JJ, Post-9 and Post-10 excavations) was removed to facilitate proper grading between the infield material and the adjacent grass. The sod was removed using hand tools and stockpiled on a base layer of polyethylene sheeting (6-mil minimum) and covered with polyethylene sheeting pending characterization analysis. New sod was then placed and rolled along the perimeter of the excavation. The upper portion of the Junior Varsity baseball diamond excavation (including portions of the JV-JJ, Post-9 and Post-10 excavations) was completed with compacted documented contaminant-free stone dust.

During previous RAM-related activities, tire tracks/ruts were created within several portions of the Site as a result of repeated movement of heavy equipment and trucks loaded with excavated material between the various excavations and the designated soil stockpile area. TEI graded the tire tracks/ruts by spreading documented contaminant-free loam in advance of reseeding.

At the conclusion of each work day the stockpiled material was securely covered with a minimum of 6-mil-thick polyethylene sheeting, overlapped and weighted to form a continuous waterproof barrier over the material. The cover was maintained throughout the stockpile period to control water entering the stockpiled materials and to limit fugitive dust generation. The Site was secured by the permanent perimeter fence.

A composite sample of the stockpile material from the field restoration activities was submitted for laboratory characterization analysis by TEI on May 11, 2010. The sample was submitted to Con-Test for VOC, SVOC, PCB, TPH, total RCRA-8 metals, Toxicity Characteristic Leaching Procedure (TCLP) lead and conductivity analysis to determine reuse, recycling and/or disposal options for the material. Due to a detected total chromium concentration of 82 mg/kg, the stockpile material sample subsequently underwent chromium speciation analysis for total chromium, hexavalent chromium, pH and ORP. The speciation results demonstrate that the detected chromium is in the trivalent state. Therefore, the trivalent chromium standard applies to the total chromium results. The sample results for the stockpile sample were below the trivalent chromium Method 1 S-1/GW-2/GW-3 soil standard of 1,000 mg/kg. Furthermore, all other analyte detections were below the MCP Method 1 S-1 soil standards. As a result, the stockpiled material has been targeted by the City for reuse. The analytical data packages can be found in the *RAM Status Report* dated August 4, 2010 (TRC, 2010b).

The following section describes RAM-related activities undertaken since submittal of the previous *RAM Status Report* on August 4, 2010 (TRC, 2010b).

Summer/Fall 2010 Varsity Field Excavation and Restoration

The remaining RAM activities focused on the excavation and treatment of impacted soils from the infield portion of the Varsity baseball diamond at the Walsh Field Athletic Complex. Excavation, treatment, loading and off-site disposal activities occurred at the Varsity baseball diamond between August 16 and September 30, 2010. Reconstruction of the Varsity baseball diamond occurred discontinuously until November 19, 2010. A photograph log depicting Site activities is presented as Appendix B.

On August 16, 2010 the Varsity baseball diamond was prepared for RAM-related excavation activities. Silt fence and hay bales were installed around the perimeter of the field. Surface soil was peeled back and the hay bales were recessed slightly to the abutting the silt fence. The silt fence was installed along the chain link fence along first base path, backstop, and third base path, as well as across portions of the outfield. An electrician removed the conduit and phone line extending along the fence between the first base side dugout and the bullpen. An access gate was cut in the existing chain link fence surrounding the Varsity baseball diamond to provide access to the pre-existing Hunter Street perimeter gate. Silt fence and hay bales were also installed along this access point.

Excavation of the surface base path material began on August 17, 2010 and was completed on August 18, 2010. A CAT 308C excavator was used to remove the top four to six inches of documented clean material from the base paths. Material was excavated until the orange snow fence placed as a marker during previous IRA-related excavation activities was encountered. A description of previous IRA activities is provided in TRC's *IRA Completion Report* submitted to MassDEP on April 10, 2009 (TRC, 2009d). The excavated material was stockpiled near first base and securely covered to prevent fugitive dust migration pending onsite reuse. The orange snow fence marker layer was removed and collected for disposal.

Following removal of the unimpacted base path material, excavation activities continued from the northeast corner of the predetermined excavation footprint (near third base) on August 18, 2010 and progressed southwest across the footprint. A laser level, calibrated to a known elevation, provided relative elevations throughout excavation activities to determine when the excavation had reached 18-inches.

During excavation activities on August 19, 2010, TEI uncovered a small (approximately 35 to 50 gallon capacity) saddle tank near the third base portion of the excavation. The tank was found to be rusty and empty. TRC screened the soils around the edges of the tank using the MassDEP jar headspace method, as well as the void space within the tank with a PID. All PID screening results were non-detect. The tank was segregated on polyethylene sheeting (6-mil minimum) pending off-site disposal as scrap metal.

On August 19, 2010, due to logistical concerns and following MassDEP approval, the decision was made between the City and TEI to stockpile and treat the excavated material within the Varsity baseball diamond rather than the originally proposed area adjacent to the Junior Varsity baseball diamond.

The City contracted David W. White & Son, Incorporated (D.W. White) of Bow, New Hampshire to reconstruct the field following the completion of TEI's excavation activities. During an onsite meeting between the City, TEI and D.W. White on August 25, 2010 the determination was made to discontinue stockpiling within the excavation footprint. In order to allow TEI to continue excavating, while also stockpile management occurred, excavated material would now be treated within the excavation footprint, but stockpiled in right field of the Varsity baseball diamond.

TEI began treating excavated soils on August 26, 2010. Free Flow Technologies FF-100[®] soil stabilization treatment material was delivered to the Site between August 23, 2010 and August

25, 2010 and securely covered with polyethylene sheeting to protect the material from the wind and rain (prior to use the stabilization treatment material cannot be exposed to moisture). The stabilization material was added and mixed using an excavator with a decontaminated bucket. Water sprays were applied to the soil during treatment activities for dust suppression. As noted above, the treated material was stockpiled in the staging area located in right field of the Varsity baseball diamond. The treated material was stockpiled on and secured with polyethylene sheeting (6-mil minimum). Following treatment, the material was transported to the staging area pending off-site disposal. Treatment of the first half of the excavated material was completed on August 30, 2010.

Following completion of stabilization treatment of the first half of the excavated material, excavation of the remaining portion of the Varsity baseball diamond began on August 30, 2010. Impacted soil was stockpiled at the southern edge of the excavation and simultaneously treated and transported to the treated stockpile area in right field. The excavation proceeded in similar fashion to the methodology described above. On August 30, 2010, TEI also began spreading an approximately two inch layer of documented clean base path material across the footprint of the excavation. On September 8, 2010, TEI spread the previously stockpiled base path material targeted for onsite reuse within the excavation footprint. The material was graded using CAT 308C excavator while simultaneously confirming the grade with laser level. Excavation activities were completed on September 8, 2010.

Based on the volume of material excavated, treated and stockpiled, TEI collected composite samples from 12 individual sections (i.e., Sections 1, 1a, 2, 2a, 3, 3a, 4, 4a, 5, 5a, 6 and 6a) of the treated stockpile for disposal characterization. The samples were analyzed for RCRA 8 metals, TPH, PCBs, SVOCs, VOCs, conductivity and/or Toxicity Characteristic Leaching Procedure (TCLP) arsenic and lead. Analytical data reports associated with the stockpile characterization samples are provided as Appendix C.

Analytical results associated with eight stockpile sections (i.e., Sections 3, 3a, 4, 4a, 5, 5a, 6 and 6a) indicated the material was not suitable for disposal in a Massachusetts landfill per the soil criteria in MassDEP Policy #COMM-91-001. Analytical results associated with the remaining four treated stockpile sections (i.e., Sections 1, 1a, 2 and 2a) indicated the material was suitable for disposal in a properly permitted Massachusetts lined landfill. As a result, this material was segregated from the rest of the stockpile for disposal at a local Massachusetts landfill.

TEI sought and received approval from Commercial Recycling Systems (CRS) to dispose of the soil above the MassDEP Policy COMM-97-001 criteria at their asphalt batch facility in Scarborough, Maine. The remaining stockpiled material was accepted by the Greater New Bedford Regional Refuse Management District's Crapo Hill Landfill facility in New Bedford, Massachusetts.

Preparation for off-site transportation of the stockpiled material began on September 20, 2010. A section of the perimeter chain link fence along Hunter Street was opened as a temporary southern access gate to the stockpile staging area in the right field portion of the Varsity baseball field. Hay bales and silt fence were installed from the southwest corner of the Varsity baseball field fence to the southern opening of the new Hunter Street access gate. Documented clean

imported gravel was placed between the Hunter Street access gate and the Varsity baseball diamond as a temporary access road (see Appendix D).

Off-site transportation of treated stockpiled soil material began on September 21, 2010 and was completed on September 30, 2010. A total of 2,511.54-tons of soil were shipped to the CRS facility between September 21, 2010 and September 29, 2010. A total of 813.65-tons of soil were shipped to Crapo Hill between September 28 and September 30, 2010. Copies of the final BOL shipping documents associated with both the CRS and Crapo Hill Landfill facilities are included as Appendix E.

On September 29, 2010, D.W. White began Varsity baseball diamond reconstruction activities including localized regrading to improve the field drainage. The excess soil material was stockpiled pending off-site disposal with the remaining treated soil targeted for shipment to the Crapo Hill Landfill.

Backfilling and restoration continued between October 4, 2010 and October 28, 2010. The excavation footprint was brought to its designed bottom grade with 3/4" Type C gravel borrow. Once a uniform bottom grade was achieved the excavation was lined with geotextile fabric. Different backfill materials were applied to the grassed areas than the base path areas. The backfill materials applied to each area are summarized below and in the following table:

Outfield/Infield Grassed Area		Infield Base Paths	
Depth	Material Description	Depth	Material Description
Surface	Grass Sod	0-4"	Infield Clay
0-10"	Root Zone Mix (70/30)		
10-14"	Vegetative Support Layer (3/8" washed stone)	4-18"	Compacted Gravel Borrow (Type C – 3/4" gravel borrow)
14-18"	Granular Drainage Layer (3/4" crushed stone)		
18" - Geotextile			
>18" - Native Soil or 3/4" gravel borrow grading backfill			

The base path areas, including pitcher's mound, were built up with 14-inches of a 3/4" gravel borrow Type C subgrade material. Material was compacted with a vibratory roller. Four inches of infield base path clay was placed at the surface. Clay bricks were used to build up the pitcher's mound as well as to support the home plate area. The grassed areas were backfilled with 4-inches of a 3/4" crushed stone as a drainage layer, followed by a 4-inch vegetative support layer of 3/8" washed stone material and 10-inches of root zone mix. The surface was completed with rolled grass sod.

All material brought onsite as backfill was documented clean prior to delivery to the Site. Analytical data packages associated with each type of backfill material are included as Appendix D.

Crushed stone (3/4") was added to the existing access road between the pre-existing Hunter Street access gate and Varsity baseball diamond on October 6, 2010 to prevent the tracking of surficial

material onto Hunter Street during wet conditions. Rubber mats that could be rinsed clean were also placed next to the sidewalk.

The temporary southern access gate to Hunter Street, used during treated soil shipment activities, was repaired on October 13, 2010 by Fence America.

On October 28, 2010, Lawhorn Irrigation, Incorporated of Burlington, Massachusetts was onsite to repair those portions of the irrigation system disturbed during excavation of the Varsity baseball diamond.

Following off-site disposal of all stockpiled material, the stockpile area in right field was regraded on November 1, 2010. Hay bales and silt fencing throughout the Site were also removed at this time. The hay bales and silt fence were placed in a roll-off container pending off-site disposal as soil waste.

Following regrading activities, the stockpile area in right field and existing grassed areas along the excavation perimeter were rototilled on November 2, 2010. Documented clean loam (#1-3) was used to complete the areas to final grade. The areas were then covered with rolled sod. The final application of sod across the field was completed on November 19, 2010.

The crushed stone applied to the access road between the pre-existing gate on Hunter Street and the Varsity baseball diamond was removed on November 19, 2010. Gravel and soil were removed from the surface and loaded into a truck. Soil and gravel were transported on public roads around the athletic complex to a temporary storage area adjacent to the Junior Varsity baseball diamond. Accordingly, the material was transported under a BOL which has been included in Appendix E. The material was stockpiled on and covered with 6-mil polyethylene sheeting pending analytical characterization. One stockpile sample was collected for characterization by TRC on November 19, 2010. The sample was submitted to Con-Test for VOCs, SVOCs, PCBs, TPH and total arsenic, cadmium, chromium, lead and mercury analysis. The analytical data package is included in Appendix C. The analytical results indicated that no compounds were detected in excess of the MCP Method 1/Method 2 S-1/GW-2 and S-1/GW-3 soil standards, therefore the material has been targeted by the City for onsite reuse.

(c) Investigatory and Monitoring Data

Investigatory activities were not performed as part of the RAM, but rather in advanced of RAM activities as described herein. However, monitoring activities were conducted during the execution of the RAM, as described below and elsewhere herein.

Active dust suppression was employed during RAM-related soil excavation, treatment and management activities using hoses and water sprays. Potential fugitive dust clouds were captured with heavy mist water sprays.

Fugitive dust levels were also monitored with TSI Model 8520 Dustrak™ Aerosol Monitoring units as described in the RAM Plan. The TSI Dustrak™ units were equipped with size-selective inlet for particles of 10 micrometers in diameter or less (PM₁₀). This instrumentation has an accuracy of 0.001 mg/m³ (1 µg/m³). Background levels were recorded for at least 15 minutes

prior to the start of daily activities. The dust monitoring instruments were placed in weatherproof cases with an omni-directional probe to minimize wind interference. Depending on the daily wind conditions and RAM-related activities taking place, three to six dust monitoring units were deployed to monitor conditions upwind, downwind, adjacent to the nearest property (regardless of wind direction) and/or within the work zone. The dust monitoring units were regularly adjusted, based on changes in the localized wind direction, throughout RAM-related activities. The dust monitoring instruments were zeroed daily before use and at the end of the day. Data were logged at 60-second intervals and downloaded and reviewed daily. The TSI DustTrak™ units were periodically checked by field personnel during RAM-related activities.

No sustained (a sustained reading would consist of a reading lasting 15 minutes or longer) ambient dust levels exceeding the prescribed EPA 24 hour National Ambient Air Quality Standard (NAAQS) action limit of $150 \mu\text{g}/\text{m}^3$ at a downwind sample location (or any other dust monitoring location) were detected during any of the RAM-related activities. Dust suppression was employed throughout RAM-related activities; however, on several occasions the dust suppression activities (i.e., water sprays) were increased to further minimize the dust created from the movement of the Free Flow Technologies FF-100® material and the movement of equipment along the temporary access roads. As noted above, the prescribed action limit was never exceeded. Data was downloaded daily and log sheets were kept; both are included in Appendix F. A summary of dust monitoring results is included as Table 1.

Ambient air was also continuously monitored during all RAM related excavation activities for the presence of VOCs within the breathing zone in the work zone using a PID. MassDEP jar headspace field screening of excavated soil was also conducted periodically during excavation as a precautionary check for the presence of VOCs. The jar headspace samples were capped and allowed to sit for minimum 10 minutes in order for adequate headspace to develop. No sustained PID readings above the 5 parts per million by volume (ppmv) action level were observed within the breathing zone of the work zone. No PID readings above background were detected in the work zone or jar headspace samples throughout the course of the project.

(d) Findings and Conclusions

An Interim Phase III RAP for Walsh Field was prepared by TRC on behalf of the City and submitted to MassDEP on July 29, 2009 (TRC, 2009a). The proposed remedial action alternative identified in the RAP was to 1) remediate soils by excavating the hot spot (located at sample location WFB-4), 2) excavate the soils that contribute to Exposure Point Concentrations (EPCs) in excess of Method 1/Method 2 S-1 soil standards, and 3) place an Activity and Use Limitation (AUL) on the property to prevent potential exposure to impacted soils. The purpose of this RAM Completion Report is to describe the activities undertaken by the City to reduce current and future risks at the Site and achieve a Condition of No Significant Risk.

Soils contributing to the exposure point concentration in excess of Method 1/Method 2 S-1 soil standards have been removed. All soil material has been properly disposed of at permitted facilities (as documented herein). A condition of No Significant Risk has been achieved at the Site that will be documented in the future submittal of a Partial Response Action Outcome (RAO-P) and AUL for the Walsh Field.

(e) Details of and/or Plans for the Management of Remediation Waste, Remedial Wastewater, and/or Remedial Additives

All remediation waste generated during the course of this RAM Plan has been properly stored, treated, characterized, transported and removed from the Site for proper off-site management as described herein.

Backfilling and restoration of the Varsity baseball diamond was completed on November 19, 2010 with the removal and regrading of the temporary access road. As previously noted, following laboratory analytical testing that material has been targeted for onsite reuse. Reseeding of the access road is scheduled for Spring 2011. Following excavation, TEI of Somerville, Massachusetts treated the stockpiled soil using Free Flow Technologies FF-100[®] stabilization material to fix metal concentrations (lead, arsenic) prior to off-site disposal. TEI used a loader to mix the material into the existing stockpiles concurrently with the excavation activities.

TEI collected post-treatment soil characterization samples when the treatment of material was completed and the stockpiles remained securely covered on-site pending the results of the testing. The laboratory results were then compared against Massachusetts reuse, recycling, and disposal criteria in accordance to MassDEP Policy# COMM-97-001 and Interim Policy #WSC-94-400. A copy of laboratory data for all samples has been included in Appendix C. On September 16, 2010, the CRS facility accepted the portion of the material with total arsenic concentrations in excess of Massachusetts landfill criteria. Transport of soil to CRS commenced on September 21, 2010 and was completed on September 28, 2010. On September 23, 2010 the Crapo Hill Landfill accepted the balance of the material, which met Massachusetts landfill criteria, and transport of the soil began September 28, 2010 and was completed on September 30, 2010. A total of 2,511.54-tons of soil were shipped to the CRS facility. A total of 813.65-ton of soil were shipped to Crapo Hill Landfill facility. Shipping documents associated with the transport of impacted material to their respective disposal facilities can be found in Appendix E. Please refer to Appendix A of the RAM Status Report submitted to MassDEP on February 2, 2010 for RAM-related soil shipping documents.

No additional remediation waste, remedial wastewater or remedial additives were managed under this RAM Plan.

(f) Ongoing Activities

Field remedial activities are finished. A condition of No Significant Risk has been achieved at the Site. Following the future submittal of an RAO-P and AUL for the Walsh Field, conditions at the athletic complex can be effectively and safely maintained by the City.

(g) LSP Opinion

The objective of this RAM Completion report is to apprise MassDEP of the completion of the City's activities at the Walsh Field Athletic Complex.

This RAM Completion Report has been prepared in accordance with 310 CMR 40.0446 as set forth in the MCP.

David M. Sullivan

**David M. Sullivan, LSP, CHMM
TRC Environmental Corporation
Licensed Site Professional No. 1488**

February 9, 2011
Date



Stamp

III. REFERENCES

- MassGIS, 2008 Massachusetts Geographic Information System (MassGIS), On-line MassDEP Priority Resource Map. Accessed July 28, 2008.
<http://maps.massgis.state.ma.us/21e/viewer.htm>
- TRC, 2009a *Interim Phase III Remedial Action Plan, New Bedford, Massachusetts.* Prepared for: City of New Bedford, Department of Environmental Stewardship, 133 William Street, New Bedford, Massachusetts. Prepared by: TRC Environmental Corporation, Lowell, Massachusetts. July 2009.
- TRC, 2009b *Interim Phase II Comprehensive Site Assessment. Parker Street Waste Site. New Bedford High School and Dr. Paul F. Walsh Memorial Field. New Bedford, Massachusetts. Release Tracking Number 4-15685.* Prepared for: City of New Bedford. Prepared by: TRC Environmental Corporation. July 20, 2009.
- TRC, 2009c *Release Abatement Measure Plan. Contaminated Soil Removal at the Walsh Field Athletic Complex, New Bedford, Massachusetts. Release Tracking Number 4-15685.* Prepared for: City of New Bedford. Prepared by: TRC Environmental Corporation. October 7, 2009.
- TRC, 2009d *Immediate Response Action Completion Report and Imminent Hazard Evaluation. Walsh Field – Varsity and Junior Varsity Baseball Diamond Soil Removal. Parker and Hunter Streets, New Bedford, Massachusetts. Release Tracking Number 4-21407.* Prepared for: City of New Bedford. Prepared by: TRC Environmental Corporation. April 10, 2009.
- TRC, 2010a *Release Abatement Measure Status Report. Contaminated Soil Removal at the Walsh Field Athletic Complex, New Bedford, Massachusetts. Release Tracking Number 4-15685.* Prepared for: City of New Bedford. Prepared by: TRC Environmental Corporation. February 2, 2010.
- TRC, 2010b *Release Abatement Measure Status Report. Contaminated Soil Removal at the Walsh Field Athletic Complex, New Bedford, Massachusetts. Release Tracking Number 4-15685.* Prepared for: City of New Bedford. Prepared by: TRC Environmental Corporation. August 4, 2010.

TABLES

Table 1
DustTrak Data Summary
Walsh Field
New Bedford, Massachusetts

Date	DustTrak Serial Number	Test ID	DustTrak Location / Notes	Maximum ⁽¹⁾ (mg/m ³) ⁽²⁾	Minimum (mg/m ³) ⁽²⁾	Average (mg/m ³) ⁽²⁾	Comments
8/17/2010	23200	Test 1	Upwind - Positioned near shed south of bathrooms.	0.032	0.021	0.027	
	85200233	Test 1	Work zone - Positioned in front of dugout on third base side.	0.038	0.014	0.020	
	85200085	Test 1	Downwind 1 - Positioned in far left field, northeast corner of Site.	0.134	0.064	0.080	
	85201696	Test 1	Downwind 2 - Positioned behind stands on third base side.	0.093	0.041	0.050	
8/18/2010	85200233	Test 2	Upwind - Positioned near shed south of bathrooms.	0.026	0.010	0.014	
	23200	Test 2	Work zone - Positioned west of first base side dugout.	0.040	-0.002	0.003	
	22621	Test 1	Work zone 2 - Positioned in front of dugout on third base side.	0.108	0.008	0.014	
	85200085	Test 2	Downwind 1 - Positioned in far leftfield in northeast corner of the Site.	0.095	0.019	0.052	
	85201696	Test 2	Downwind 2 - Positioned east of stands on third base side.	0.082	0.009	0.015	
8/19/2010	85200085	Test 3	Upwind - Positioned near shed south of bathrooms.	0.093	0.027	0.070	
	85203252	Test 1	Upwind 2 - Positioned outside fence in right field.	0.052	0.015	0.019	
	22621	Test 2	Work zone - Positioned in front of third base side dugout.	0.015	0.007	0.009	
	23200	Test 3	Work zone 2 - Positioned south of dugout on first base side.	0.098	0.005	0.010	
	85200233	Test 3	Downwind - Positioned near bullpen in left field.	0.191	0.014	0.026	Two momentary (1 minute) spikes noted.
	85201696	Test 3	Downwind 2 - Positioned along hedge line along northern boundary of Site.	0.035	0.010	0.015	
8/20/2010	23200	Test 4	Upwind (morning) & Downwind (afternoon) - Positioned near bathrooms.	0.127	0.015	0.021	
	85201696	Test 4	Work Zone - Positioned near 3rd base dugout.	0.077	0.018	0.025	
	85200233	Test 4	Nearest Property - Positioned near 1st base dugout.	0.071	0.025	0.031	
	22621	Test 3	Downwind (morning) & Upwind (afternoon) - Positioned near 3rd base bullpen.	0.023	0.012	0.015	
	85203252	Test 2	Upwind (morning) & Downwind (afternoon) - Positioned in centerfield.	0.107	0.025	0.033	
8/23/2010	22621	Test 4	Upwind - Positioned in left field of baseball field.	0.008	0.002	0.006	
	85200233	Test 5	Near stockpile - Positioned in center field behind approximate location of second base.	0.088	0.008	0.017	
	23200	Test 5	Downwind of excavation - Positioned near approximate location of first base.	0.036	0.005	0.018	
8/24/2010	23200	Test 1	Upwind - Positioned in back corner of left field.	0.009	0.000	0.004	
	85201696	Test 1	Near stockpile - Positioned in center field behind approximate location of second base.	0.003	0.000	0.001	
	85203252	Test 1	Downwind of stockpile - Positioned outside gate to outfield in right field.	0.013	0.001	0.004	
	85200233	Test 1	Downwind of excavation - Positioned near approximate location of first base.	0.382	0.000	0.009	Momentary spike (0.382 mg/m ³) due to enclosure falling over, not a reflection of fugitive dust.
	85200233	Test 2	Downwind of excavation - Positioned near approximate location of first base.	0.007	0.000	0.000	
8/25/2010	85200233	Test 1	Upwind - Positioned at eastern end of third base side dugout.	0.070	0.000	0.015	
	23200	Test 1	Near stockpile - Positioned in center field adjacent to excavation stockpile.	0.037	0.000	0.004	
	85201696	Test 1	Downwind of stockpile - Positioned in right field near home run fence.	0.005	0.000	0.002	
	85203252	Test 1	Downwind of excavation - Positioned near approximate location of first base.	0.094	0.001	0.004	

Table 1
DustTrak Data Summary
Walsh Field
New Bedford, Massachusetts

Date	DustTrak Serial Number	Test ID	DustTrak Location / Notes	Maximum ⁽¹⁾ (mg/m ³) ⁽²⁾	Minimum (mg/m ³) ⁽²⁾	Average (mg/m ³) ⁽²⁾	Comments
8/26/2010	85200085	Test 1	Upwind - Positioned along hedge line parallel to Hunter Street.	0.094	0.000	0.045	
	23200	Test 1	Near treated stockpile - Positioned in right field adjacent to treated stockpile.	0.176	-0.001	0.007	Momentary (1 minute) spike due to movement of soil stabilization product (not fugitive dust). Dust suppression increased.
	85201696	Test 1	Near excavation stockpile - Positioned in centerfield near approximate location of second base.	0.033	0.001	0.006	
	85200233	Test 1	Downwind of treated stockpile - Positioned in deep centerfield near homerun fence.	0.100	0.008	0.032	
	85203252	Test 1	Downwind of excavation stockpile - Positioned in left field along hay bale and silt fence.	0.379	0.004	0.016	Momentary spikes (three 1 minute) due to movement of soil stabilization product (not fugitive dust). Dust suppression increased.
8/27/2010	85200085	Test 1	Upwind - Positioned near backstop.	0.097	0.003	0.034	
	85200085	Test 2	Upwind - Positioned near backstop.	0.050	0.004	0.012	
	23200	Test 1	Near treated stockpile - Positioned adjacent to treated material stockpile.	0.948	0.001	0.018	Spikes due to mixing of soil stabilization material. Dust suppression increased with additional hoses.
	85203252	Test 1	Near stockpile - Positioned near approximate location of second base.	13.896	0.003	0.109	Spikes due to mixing of soil stabilization material. Dust suppression increased with additional hoses.
	85201696	Test 1	Downwind treated stockpile - Positioned outside fence in right field.	0.035	0.001	0.003	
	85200233	Test 1	Downwind excavation stockpile - Positioned in deep center field.	0.470	0.003	0.010	Spikes due to mixing of soil stabilization material. Dust suppression increased with additional hoses.
8/30/2010	85200233	Test 1	Upwind - Positioned near dugout on third base side.	0.045	0.015	0.018	
	23200	Test 1	Near treated stockpile - Positioned along silt fence line toward right field.	0.354	0.013	0.022	Momentary spikes (two 1 minute) resulted from mowing of adjacent soccer field, not fugitive dust.
	85200085	Test 1	Near work zone stockpile - Positioned near approximate location of second base.	0.053	0.018	0.024	
	85200085	Test 2	Near work zone stockpile - Positioned near approximate location of second base.	0.111	0.031	0.065	
	85201696	Test 1	Downwind treated stockpile - Positioned outside fence in right field.	0.040	0.008	0.010	
	85203252	Test 1	Downwind stockpile - Positioned outside fence in right center field.	0.181	0.014	0.020	Two momentary (1 minute) spikes.
8/31/2010	23200	Test 1	Upwind - Positioned adjacent to backstop.	0.151	0.037	0.047	Upwind unit (one momentary spike).
	85203252	Test 1	Work zone - Positioned near approximate location of second base.	3.093	0.053	0.098	Momentary spikes result of movement of soil stabilization material and/or hose mist. Not fugitive dust.
	85203252	Test 2	Work zone - Positioned near approximate location of second base.	0.551	0.049	0.091	Momentary spikes result of movement of soil stabilization material and/or hose mist. Not fugitive dust.
	85203252	Test 3	Work zone - Positioned in short centerfield behind second base.	0.471	0.047	0.074	Momentary spikes result of movement of soil stabilization material and/or hose mist. Not fugitive dust.
	85200085	Test 2	Near treated stockpile - Positioned in right field adjacent to treated stockpile.	0.332	0.059	0.070	Momentary spikes result of movement of soil stabilization material and/or hose mist. Not fugitive dust.
	85201696	Test 1	Downwind - Positioned in left field.	0.043	0.023	0.028	
9/1/2010	85200233	Test 1	Upwind - Positioned near backstop.	0.073	0.043	0.051	
	85201696	Test 1	Work zone - Positioned near approximate location of second base.	0.047	0.022	0.028	
	23200	Test 1	Near treated stockpile - Positioned adjacent to treated stockpile.	0.095	0.040	0.050	
	85200085	Test 1	Near treated stockpile - Positioned adjacent to treated stockpile.	0.589	0.088	0.134	Momentary spikes occurred during background measurements, movement of soil stabilization material and movement of equipment within unimpacted soil areas. Access road wetting increased.
	85203252	Test 1	Downwind - Positioned south of treated stockpile.	0.072	0.040	0.043	
	85203252	Test 2	Downwind - Positioned south of treated stockpile outside right field fence.	0.048	0.035	0.042	

Table 1
DustTrak Data Summary
Walsh Field
New Bedford, Massachusetts

Date	DustTrak Serial Number	Test ID	DustTrak Location / Notes	Maximum ⁽¹⁾ (mg/m ³) ⁽²⁾	Minimum (mg/m ³) ⁽²⁾	Average (mg/m ³) ⁽²⁾	Comments
9/2/2010	23200	Test 1	Upwind - Positioned along hedge line parallel to Hunter Street.	0.087	0.042	0.060	
	85203252	Test 1	Work zone - Positioned in left field.	0.071	0.040	0.056	
	85200233	Test 1	Near treated stockpile - Positioned adjacent to treated stockpile in center field.	0.242	0.050	0.070	Background condition as site activity was completed at time of spike (0.242 mg/m ³).
	85201696	Test 1	Downwind - Positioned in left center field.	0.056	0.036	0.042	
9/7/2010	22621	Test 1	Upwind - Positioned near bathroom house southeast of field.	0.025	0.000	0.000	
	85200233	Test 1	Work zone - Positioned near approximate location of second base.	0.587	0.012	0.022	Momentary spikes (two 1 minute) during movement of soil stabilization material not related to fugitive dust.
	23200	Test 1	Near treated stockpile - Positioned near centerfield adjacent to treated stockpile.	1.805	0.012	0.027	Momentary spikes during movement of soil stabilization material not related to fugitive dust.
9/8/2010	8523252	Test 1	Upwind - Positioned near bathroom house.	0.032	0.015	0.023	
	23200	Test 1	Work zone - Positioned in left field.	0.176	0.026	0.034	Environmental enclosure inlet clogged resulting in momentary spike. Unit repaired.
	22621	Test 1	Near treated stockpile - Positioned near treated stockpile in center field.	0.001	0.001	0.001	
	22621	Test 2	Near treated stockpile - Positioned near treated stockpile in center field.	0.233	0.029	0.036	Momentary spike a result of movement of unit, not fugitive dust.
	85200233	Test 1	Downwind - Positioned in foul zone of left field.	0.032	0.010	0.018	
9/9/2010	85200233	Test 1	Upwind - Positioned west of bullpen on first base side.	0.033	0.002	0.003	
	85203252	Test 1	Downwind south - Positioned in left center field.	0.022	0.002	0.005	
	23200	Test 1	Downwind north - Position in left field.	0.036	0.002	0.004	
9/10/2010	85200233	Test 1	Upwind - Positioned near dugout on third base side.	0.005	0.001	0.003	
	85203252	Test 1	Work zone - Positioned in right field.	0.041	0.001	0.003	
	22621	Test 1	Downwind - Positioned outside fence towards right field.	0.123	0.002	0.005	
9/16/2010	85200233	Test 1	Work zone - Positioned in front of dugout on first base line.	0.012	0.002	0.003	
	85203252	Test 1	Downwind - Positioned east of the dugout on the third base line.	0.069	0.003	0.006	
9/20/2010	85200233	Test 1	Upwind - Positioned near approximate location of pitchers mound.	0.349	0.005	0.010	Upwind unit. Momentary (1 minute) spike.
	23200	Test 1	Downwind (East) - Positioned outside homerun fence in right field.	0.029	0.003	0.007	
	85203252	Test 1	Downwind (West) - Positioned near right field corner of fence.	0.025	0.003	0.007	
9/21/2010	22621	Test 1	Upwind - Positioned in front of first base side dug out.	0.051	0.002	0.002	
	85200233	Test 1	Downwind Stockpile - Positioned outside homerun fence in right field.	0.068	0.004	0.007	
	85203252	Test 1	Downwind access - Positioned near shed adjacent to access point near bathroom.	0.079	0.003	0.005	
9/22/2010	23200	Test 1	Upwind - Positioned near shed by access point along Hunter Street.	0.053	0.008	0.011	
	22621	Test 1	Work zone - Positioned in front of bullpen on first base side.	0.009	0.004	0.005	
	85200233	Test 1	Downwind loading - Positioned in right field just outside excavation.	0.103	0.017	0.024	
	85203252	Test 1	Downwind Site - Positioned in the northeast corner of the Site.	0.023	0.008	0.011	

Table 1
DustTrak Data Summary
Walsh Field
New Bedford, Massachusetts

Date	DustTrak Serial Number	Test ID	DustTrak Location / Notes	Maximum ⁽¹⁾ (mg/m ³) ⁽²⁾	Minimum (mg/m ³) ⁽²⁾	Average (mg/m ³) ⁽²⁾	Comments
9/23/2010	23200	Test 1	Upwind - Positioned near approximate location of second base.	0.023	0.000	0.006	
	23200	Test 2	Upwind - Positioned near approximate location of second base.	0.003	0.000	0.000	
	85203252	Test 1	Work zone - Positioned in front of bull pen on first base side.	0.470	0.008	0.027	Momentary spikes resulted from truck movement on access road, not impacted soil. Additional dust suppression occurred.
	22621	Test 1	Downwind access - Positioned near access road off of Hunter Street.	0.024	0.007	0.012	
	22621	Test 2	Downwind access - Positioned near access road off of Hunter Street.	0.012	0.002	0.004	
	85200233	Test 1	Downwind stockpile - Positioned outside fence in right field.	0.096	0.006	0.014	
9/24/2010	23200	Test 1	Upwind - Positioned near access gate to Hunter Street.	0.061	0.033	0.043	
	85200233	Test 1	Work zone - Positioned in front of bull pen on first base side.	0.243	0.034	0.049	One momentary spike during background measurements. One additional momentary (1 minute) spike occurred.
	22621	Test 1	Downwind - Positioned along edge of excavation in right center field.	0.040	0.015	0.026	
9/27/2010	85203252	Test 1	Upwind - Positioned behind approximate location of second base.	0.020	0.001	0.010	
	23200	Test 1	Work zone - Positioned near first base side bull pen.	0.028	0.004	0.016	
	85200233	Test 1	Downwind - Positioned near hedges along Hunter Street.	0.028	0.000	0.008	
9/28/2010	22621	Test 1	Upwind - Positioned near homerun fence in center field.	5.920	0.000	0.043	Two momentary spikes a result of upwind (Non-Walsh) activities.
	85200233	Test 2	Positioned near first base side bull pen.	0.058	-0.003	0.032	
	23200	Test 2	Downwind of Stockpile - Positioned near northern gate to field.	0.034	0.011	0.015	
	23200	Test 3	Downwind of Stockpile - Positioned near northern gate to field.	0.050	0.011	0.014	
	85203252	Test 2	Downwind of Excavation - Positioned in front of first base side dugout.	0.028	0.006	0.009	
9/29/2010	85203252	Test 3	Upwind - Positioned outside fence in right field.	0.062	0.013	0.016	
	23200	Test 4	Work zone - Positioned in center field.	0.100	0.007	0.018	
9/30/2010	23200	Test 5	Work zone - positioned near backstop.	0.054	0.020	0.024	
	85203252	Test 4	Downwind stockpile - Positioned west of foul fence.	0.076	0.010	0.012	
	22621	Test 2	Downwind excavation - Positioned in northeast corner of Site	0.060	0.008	0.024	
10/1/2010	22621	Test 3	Upwind position	0.049	0.000	0.012	
	23200	Test 6	Work zone position	0.056	0.006	0.012	
	85203252	Test 5	Downwind position	0.023	-0.007	-0.006	
11/19/2010	85200233	Test 11	Upwind of access road area (near 1st base dugout/spectator area).	0.021	0.006	0.009	Equipment malfunction, only two measurements recorded.
	85202710	Test 10	Upwind of stockpile area (near junior varsity baseball diamond).	0.008	0.007	0.007	
	22621	Test 7	Downwind of access road area (near 1st base bullpen).	0.089	0.004	0.012	
	85203291	Test 9	Downwind of stockpile area (near junior varsity baseball diamond).	0.010	0.005	0.006	

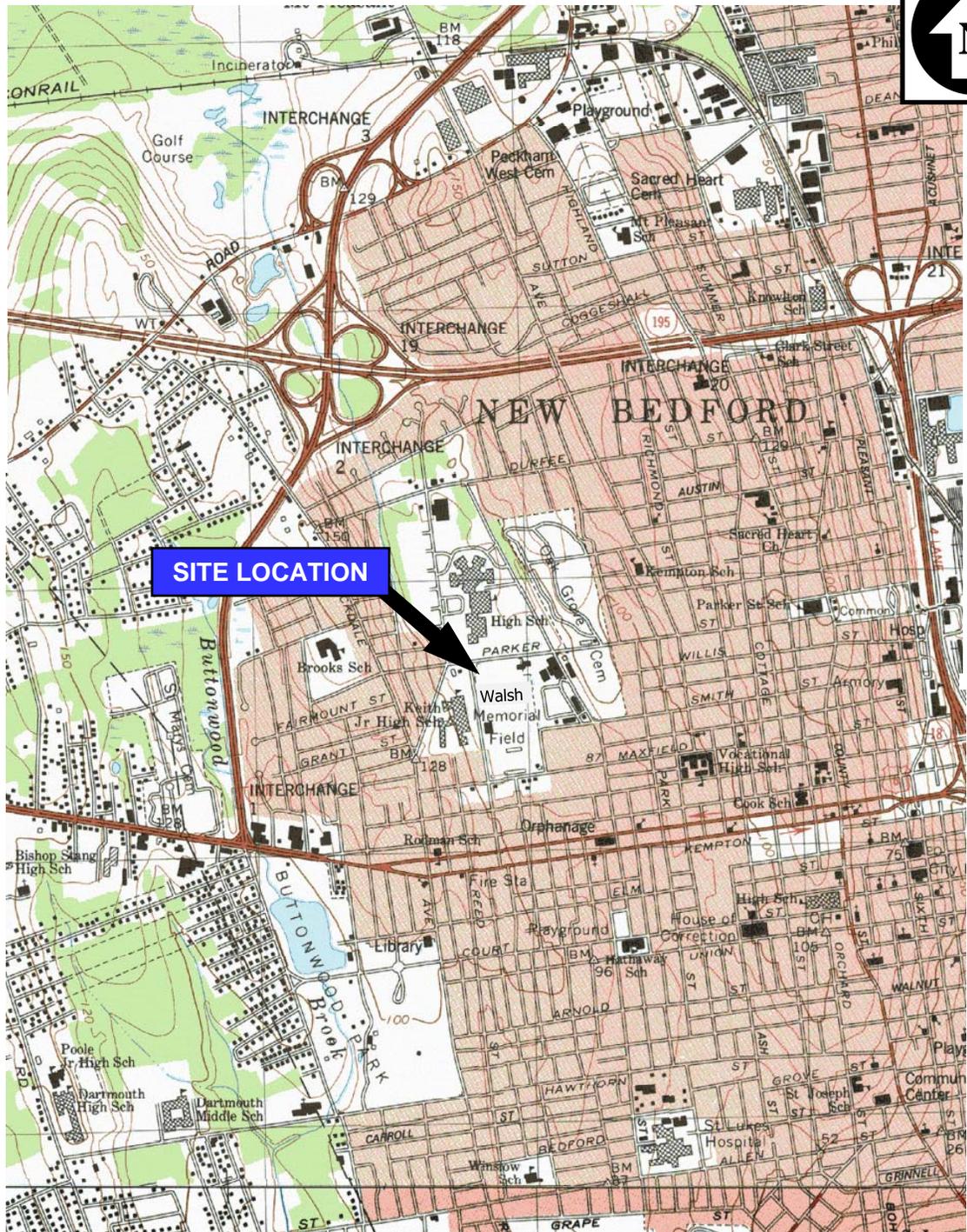
NOTES:

TSI DustTrak™ units equipped with size-selective inlet for particles of 10 micrometers in diameter or less (PM₁₀).

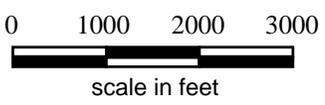
(1) Exceedances listed in Table 1 (bold values) are for one minute intervals. Site action level consists of sustained ambient dust levels that exceed the EPA National Ambient Air Quality Standard (NAAQS) of 150 µg/m³ at downwind sampling locations (a sustained reading would consist of a reading lasting 15 minutes or longer). No exceedances occurred during RAM-related activities.

(2) mg/m³ = milligrams per cubic meter.

FIGURES



BASE MAP IS A PORTION OF THE FOLLOWING 7.5' X 15' USGS TOPOGRAPHIC QUADRANGLES: NEW BEDFORD NORTH, MA, 1979; NEW BEDFORD SOUTH, MA 1977



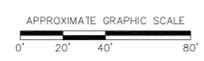
WALSH FIELD NEW BEDFORD, MASSACHUSETTS	
SITE LOCATION MAP	
	Wannalancit Mills 650 Suffolk Street Lowell, MA 01854 978-970-5600
Drawn: HWB	SCALE: AS SHOWN
Checked: DS	Date: SEPT 2008
FIGURE 1	



LEGEND:

- BETA BORINGS
- TRC BORINGS
- SEPTEMBER 10 EXCAVATION
- DECEMBER 09 EXCAVATION
- PRIOR EXCAVATION
- EXPOSURE POINT AREA BOUNDARY & DESIGNATION

NOTES:
 1. ALL BORINGS, WELLS, AND SOIL GAS LOCATIONS ARE PRELIMINARY AND SUBJECT TO CHANGE AND ARE BASED ON SITE CONDITIONS AND BEST PROFESSIONAL JUDGEMENT.
 2. POST10 AND JV-JJ EXCAVATION BORDERS ARE PRE-EXCAVATION. WEATHER LIMITED ABILITY TO ACQUIRE SURVEY DATA FOR THESE LOCATIONS.



ENVIRONMENTAL INVESTIGATION AND RELATED ENVIRONMENTAL CONSULTING SERVICES NEW BEDFORD HIGH SCHOOL & SURROUNDING NEIGHBORHOOD NEW BEDFORD, MASSACHUSETTS	
WALSH FIELD EXCAVATION LOCATIONS	
	Wannalancit Mills 650 Suffolk Street Lowell, MA 01854 (978) 970-5600
DRAWN BY: HWB CHECKED BY: AWD	DATE: SEPT 2010
FIGURE 2	

FILE: T:\E_CAD\115658\WALSH_EXC.VA SEPT. 2010.dwg

APPENDIX A

Copy of MassDEP Conditional Approval Letter



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
SOUTHEAST REGIONAL OFFICE
20 RIVERSIDE DRIVE, LAKEVILLE, MA 02347 508-946-2700

DEVAL L. PATRICK
Governor

TIMOTHY P. MURRAY
Lieutenant Governor

IAN A. BOWLES
Secretary

LAURIE BURT
Commissioner

October 30, 2009

Scott Alfonse, Director
Office of Environmental Stewardship
City of New Bedford – City Hall
133 William Street
New Bedford, Massachusetts 02740

RE: **NEW BEDFORD**
Release Tracking Number: 4-15685
Parker Street Waste Site - Walsh Field
**CONDITIONAL APPROVAL TO
CONDUCT A RELEASE ABATEMENT
MEASURE**

Dear Mr. Alfonse:

On October 7, 2009, the Massachusetts Department of Environmental Protection, Bureau of Waste Site Cleanup (MassDEP), received a Release Abatement Measure Plan (the RAM Plan) related to the Parker Street Waste Site (the Site) submitted in accordance with 310 CMR 40.0000, the Massachusetts Contingency Plan (the MCP). The RAM Plan, prepared on behalf of the City of New Bedford (the City) by TRC Companies, Inc, detailed activities related to contaminated soil removal at the Walsh Field portion of the Site. Activities to be conducted, as described in the RAM Plan, include, but are not limited to: excavation of approximately 2283 tons of soil from eleven discreet areas of the Walsh Field athletic complex; temporary on-Site soil stockpiling and stockpile management; as-needed soil stabilization; off-Site transport and disposal of the excavated soils and backfilling of the excavated areas with fill that has been documented to be free of the presence of regulated contaminants. Air monitoring will be conducted during soil excavation and during soil stabilization if necessary to evaluate ambient conditions and minimize potential exposures to workers and nearby receptors. These components are more fully described in the RAM Plan.

MassDEP acknowledges that the City has posted public notices in the New Bedford Standard Times, O Jornal and El Latino Expresso announcing the RAM and announcing that, concurrent with the implementation of the work, the City will accept and consider written comments related to the RAM. The City will also prepare a summary of, and responses to,

This information is available in alternate format. Call Donald M. Gomes, ADA Coordinator at 617-556-1057, TDD# 866-539-7622 or 617-574-6868.

DEP on the World Wide Web: <http://www.mass.gov/dep>

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written comments received, and will incorporate any substantial and relevant comments into the response actions being conducted.

Pursuant to 310 CMR 40.0443(2), MassDEP hereby provides conditional approval to the City of New Bedford to implement the RAM as detailed in the above referenced submittal, and in accordance with the conditions described herein.

1. The City, or its contractor, shall provide MassDEP a minimum of seventy-two hours notice prior to commencing field work associated with the RAM Plan. When providing such notice, please provide the name and contact cellular phone number of the person responsible for project management and oversight at the Site;
2. As described in the RAM Plan, excavated soils will be stored in a designated temporary on-Site stockpile area pending characterization for off-Site disposal. The soil will be stockpiled on a minimum of 6-mm polyethylene sheeting and will be covered each day with the same. The cover is to be overlapped and weighted to form a continuous waterproof barrier over the excavated soils. Hay bales and/or silt fencing will be placed around the perimeter of the stockpile. The soil stockpile area should be inspected and managed daily to ensure that runoff of excavated material is not occurring and to ensure that fugitive dust generation is limited.
3. As described in the RAM Plan, the perimeter fence surrounding Walsh Field is to be utilized to limit unauthorized entry into the Site. In addition, the soil stockpile area should be segregated from the remainder of the Walsh Field athletic complex by erecting snow fencing or other temporary fencing to prevent access to the soil stockpile area. Finally, work hours are to be limited to ensure that students and visitors to the Walsh Field athletic complex are not present during any excavation, transport or soil stabilization (if necessary) activities.

Please be advised that, pursuant to 310 CMR 40.0445(1), a RAM Status Report must be submitted to MassDEP within one hundred and twenty (120) days from the date of MassDEP's receipt of the RAM Plan, and every six (6) months thereafter until a RAM Completion Report, prepared in full accordance with 310 CMR 40.0446 is submitted.

CLARIFICATION

The RAM Plan states, "when the RAM actions have been completed and a Condition of No Significant Risk has been achieved for soils, an AUL will need to be placed on the property to control certain Site uses and activities" and, "The proposed work to be performed under this RAM serve to expedite the reduction of current and future risks at the Site and achieve a Condition of No Significant Risk." MassDEP acknowledges that the City's goal in conducting the RAM is to achieve, on average, the MCP Category S-1 Cleanup Standards in the top three feet of soil at Walsh Field, thereby achieving a Condition of No Significant Risk for the current use of the Walsh Field portion of the Site. As a point of clarification, in addition to the excavation described in the RAM Plan, if no further remedial actions are taken at the Walsh

Field portion of the Site, an Activity and Use Limitation (AUL) will be required to achieve a Condition of No Significant Risk for the future use and activities at the Walsh Field portion of the Site.

All inquiries regarding this matter should be directed to Molly Cote at the letterhead address or by calling (508) 946-2792. All future communication regarding this matter must reference Release Tracking Number: **4-15685**.

Sincerely,



Leonard J. Pinaud, Chief
State & Federal Site Management Section
Bureau of Waste Site Cleanup

P/MC/re

P:\Documents\SITES\4-15685 NEW BEDFORD\Walsh Field RAM\FINAL RAM APPROVAL 10 30 09.doc

cc: MassDEP-SERO-Data Entry
David Johnston, Acting Regional Director
Millie Garcia-Serrano, Deputy Regional Director
Scott W. Lang, Mayor - City of New Bedford
City of New Bedford - Health Department
Eddie Johnson, President - C.L.E.A.N.
Kim Tisa, USEPA Region 1
David Sullivan, LSP - TRC

APPENDIX B

Photograph Log

City of New Bedford – Walsh Field
Varsity Baseball Diamond – Excavation & Restoration
New Bedford, Massachusetts



Photo 1 - Removal of base path material from Varsity Field (August 17, 2010).



Photo 2 – Stockpiling of base path material near first base (August 17, 2010).

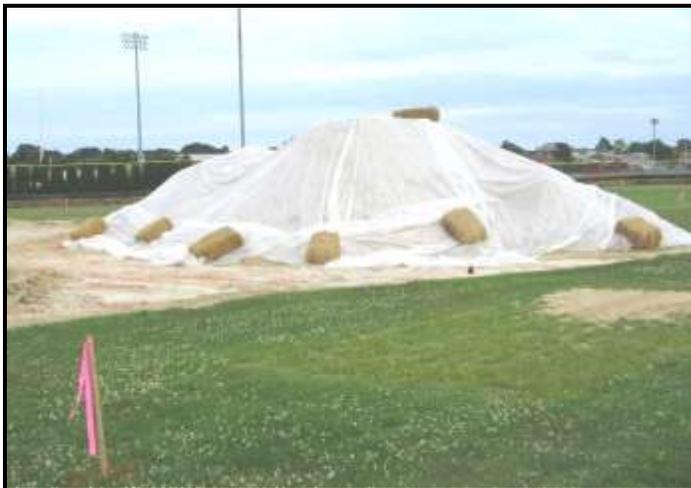


Photo 3 – Base path material stockpile covered and secured at end of day (August 18, 2010).



Photo 4 – Silt fence and hay bales around perimeter of Varsity Field (August 19, 2010).

City of New Bedford – Walsh Field
Varsity Baseball Diamond – Excavation & Restoration
New Bedford, Massachusetts



Photo 5 – Empty saddle tank uncovered in northeast portion of excavation (August 19, 2010).



Photo 6 – View of Varsity Field excavation with polyethylene sheeting covering open hole (August 19, 2010).



Photo 7 - Base of excavation covered with poly (August 20, 2010).



Photo 8 – Delivery of FF-100[®] stabilization treatment material (August 20, 2010).

City of New Bedford – Walsh Field
Varsity Baseball Diamond – Excavation & Restoration
New Bedford, Massachusetts



Photo 9 – View of excavation and TEI shooting grades (August 24, 2010).



Photo 10 - Active dust monitoring with TSI DustTrak™ (August 24, 2010).



Photo 11 – Completion of first half of excavation (August 26, 2010).



Photo 12 – Mixing of FF-100® stabilization treatment material into soil stockpile (August 26, 2010).

City of New Bedford – Walsh Field
Varsity Baseball Diamond – Excavation & Restoration
New Bedford, Massachusetts



Photo 13 – Spreading of base path material in base of excavation (August 30, 2010).



Photo 14 – View of treated stockpile (August 30, 2010).



Photo 15 – Transfer of treated material from excavation stockpile to staging stockpile for off-site disposal (August 31, 2010).



Photo 16 – FF-100[®] stabilization treatment material stockpile securely covered with polyethylene sheeting (September 7, 2010).

City of New Bedford – Walsh Field
Varsity Baseball Diamond – Excavation & Restoration
New Bedford, Massachusetts



Photo 17 – View of excavation to date (September 8, 2010).



Photo 18 – View of staged treated stockpile (September 9, 2010).



Photo 19 – TEI beginning to spread gravel over geotextile in outfield portion of excavation (September 9, 2010).



Photo 20 – Loading of stockpiled treated material for off-site disposal (September 21, 2010).

City of New Bedford – Walsh Field
Varsity Baseball Diamond – Excavation & Restoration
New Bedford, Massachusetts



Photo 21 – Southern access road from Hunter Street adjacent leading to right field stockpile area (September 22, 2010).



Photo 22 – Regrading of area that was not originally excavated to at least 18-inches in right field (September 22, 2010).



Photo 23 – View of stockpile as shipping occurs (September 24, 2010).



Photo 24 - Regrading for improved drainage (September 29, 2010).

City of New Bedford – Walsh Field
Varsity Baseball Diamond – Excavation & Restoration
New Bedford, Massachusetts



Photo 25 – Removal of southern access road to Hunter Street (September 30, 2010).



Photo 26 – Access road to existing gate on Hunter Street (September 30, 2010)



Photo 27 – Completed regrading in northeast portion of field (September 30, 2010).



Photo 28 – Shipping of excavated soil completed (September 30, 2010).

City of New Bedford – Walsh Field
Varsity Baseball Diamond – Excavation & Restoration
New Bedford, Massachusetts



Photo 29 – Securing of Hunter Street access point pending repair of fence (October 1, 2010).



Photo 30 – Clean backfill loaded in and placed on geotextile fabric (October 4, 2010).



Photo 31- Outfield backfilled and graded (October 5, 2010).



Photo 32– Gravel spread across infield (October 8, 2010).

City of New Bedford – Walsh Field
Varsity Baseball Diamond – Excavation & Restoration
New Bedford, Massachusetts



Photo 33- View of base path and grassed areas subgrade materials (October 12, 2010).



Photo 34 – Repaired fence associated with southern access road (October 13, 2010).



Photo 35 – Progress of grading activities (October 13, 2010).



Photo 36 – Progress of grading activities (October 14, 2010).

City of New Bedford – Walsh Field
Varsity Baseball Diamond – Excavation & Restoration
New Bedford, Massachusetts



Photo 37 – Spreading loam in grassed areas (October 22, 2010).



Photo 38 – Progress of grading activities (October 22, 2010).



Photo 39 – Progress of grading activities (October 26, 2010).



Photo 40 – Construction of pitcher's mound (October 28, 2010).

City of New Bedford – Walsh Field
Varsity Baseball Diamond – Excavation & Restoration
New Bedford, Massachusetts



Photo 41 – Sprinkler system repaired and tested (October 28, 2010).



Photo 42 – Grading complete (October 29, 2010).



Photo 43 – Silt fence and hay bales removed (November 1, 2010).



Photo 44 – Removal of Hunter Street access road (November 19, 2010).