River's Edge
484 – 490 Boston Post Road
Wayland, Massachusetts

RTN 3-36013

RIVER'S EDGE RAM STATUS REPORT NO. 2

MAY 7, 2021

PREPARED FOR:
Alta River's Edge, LLC
91 Hartwell Avenue
Lexington, MA 02421

SUBMITTED TO:
Massachusetts Department of Environmental Protection
Northeast Regional Office
205B Lowell Street
Wilmington, MA 01887

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VERTEX PROJECT NO: 67404

RELEASE TRACKING NUMBER (RTN): 3-36013

May 7, 2021

Massachusetts Department of Environmental Protection
Northeast Regional Office
205B Lowell Street
Wilmington, MA 01887

Subject: **Release Abatement Measure Status Report No. 2**
River's Edge Development
484-490 Boston Post Road
Wayland, Massachusetts
VERTEX Project No. 67404
Release Tracking Number 3-36013

Attention Bureau of Waste Site Cleanup:

The Vertex Companies, Inc. (VERTEX) prepared this Release Abatement Measure (RAM) Status Report No. 2 for the release listed by the Massachusetts Department of Environmental Protection (MassDEP) under Release Tracking Number (RTN) 3-36013. The release condition associated with the RTN is semi-volatile organic compounds (SVOCs), lead, antimony, and copper in soil and dissolved nickel, dissolved arsenic, and ammonia in groundwater at the above-referenced property (the Site). This Status Report was prepared VERTEX on behalf of Alta River's Edge, LLC, an Eligible Person as defined by the Massachusetts Contingency Plan (MCP) pursuant to the request of the MassDEP and in accordance with 310 CMR 40.0441, 40.0443(3), and 40.0445.

This report covers the period from March 26, 2021 to April 16, 2021. This report was prepared in accordance with the provisions contained in 310 CMR 40.0445 of the MCP.

Sincerely,

The Vertex Companies, Inc.

Kristen Sarson
Project Manager

William J. Gibbons, PG, LSP
Senior Project Manager

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1.0 INTRODUCTION

On behalf of Alta River's Edge, LLC (Alta), The Vertex Companies, Inc. (VERTEX) prepared this Release Abatement Measure (RAM) Status Report No. 2 in accordance with the provisions contained in section 40.0445 of the Massachusetts Contingency Plan (MCP) for the release referenced under release tracking number (RTN) 3-36013. The RAM Plan for the Disposal Site was submitted to the MassDEP on January 8, 2021. Additional information is also included in this RAM Status Report at the request of the Massachusetts Department of Environmental Protection (MassDEP) in an email on April 22, 2021.This is the second RAM Status Report for the Site.

The Disposal Site associated with RTN 3-36013 (the "Site") consists of two areas on a vacant 8.25-acre parcel of land in Wayland, Massachusetts (the "property") where metals and semi-volatile organcic compounds have been detected in soils at concentrations exceeding the Massachusetts Contingency Plan (MCP) RCS-1 Reportable Concentrations and where dissolved metals and ammonia have been detected in groundwater at concentrations exceeding the MCP RCGW-1 Reportable Concentrations for groundwater[1]. The property is identified by the Town of Wayland Assessor as Map 22, Lot 6 and Alta is currently redeveloping the Site into a multifamily residential community. The latitude and longitude of the approximate center of the property is 42.36413 degrees north and -71.38208 degrees west. A locus map adopted from the 2012 United States Geological Survey, Framingham 7.5 minute Topographic Quadrangle, is provided as Figure 1. A Site Schematic showing the general layout of the Site and property, property boundary, and the area of RAM activities (the RAM Area) is included as Figure 2.

This RAM Status Report has been submitted electronically to the MassDEP with MassDEP RAM Measure transmittal form BWSC-106 under RTN 3-36013.

[1] In response to VERTEX's RAM Status Report No. 1 dated March 31, 2021, the MassDEP has requested certain additional characterization work at the Site. This work is scheduled to be completed in the coming months and will be detailed in the next RAM Status Report.

1.1 Person/Entity Undertaking Response Actions and Licensed Site Professional

PERSON UNDERTAKING RESPONSE ACTIONS	LICENSED SITE PROFESSIONAL
Alta River's Edge, LLC 91 Hartwell Avenue Lexington, MA 02421	William J. Gibbons, PG, LSP The Vertex Companies, Inc. 100 North Washington Street, Suite 302 Boston, MA 02114 Tel: 617-275-5407

2.0 SITE AND RAM AREA DESCRIPTION

The area of the Site is approximately 8.25 acres in Wayland, Massachusetts, identified by the Town of Wayland Assessor as Map 22, Lot 6. The Site is currently undergoing activities to prepare the property for redevelopment. The former Route 20 Septage Facility, and associated structures, that were located on the western portion of the Site are in the process of disassembly and demolition. The remainder of the Site remains undeveloped.

The RAM Area is located on approximately 4-acres in the northern and eastern portion of the Site. The RAM Area was formerly occupied by a stockpile of soil and a former firing range. The stockpile, located in the eastern portion of the RAM Area, consisted of a 32,000 cubic yard of soil containing minor amounts of demolition debris, and crushed asphalt, brick, and concrete generated by the Wayland Department of Public Works (DPW) from projects conducted over many years at locations throughout the Town. The former firing range, located within the northern portion of the RAM Area, was previously used by the Wayland Police Department prior to 2018.

A locus map adopted from the 2012 United States Geological Survey, Framingham 7.5 minute Topographic Quadrangle, is provided as Figure 1 and a Site Schematic showing the general layout of the Site and property, property boundary, and RAM Area is included as Figure 2.

The Site historically consisted of undeveloped cleared land prior to the construction of the firing range sometime prior to the mid-1970s. The southwestern portion of the Site was developed with the septage facility in 1983. Based on available historical records, it appears that the storage of excess DPW soil and waste asphalt, masonry, concrete, and other debris in the RAM Area began following the construction of the septage facility. Operation of the septage facility ended in 2009, and use of the firing range and DPW stockpiling of excess material in the RAM Area ceased in 2017.

3.0 MASSDEP-REQUESTED INFORMATION

Ms. Leticia Ruiz-Boyle of the Northeast Regional Office of the MassDEP Bureau of Waste Site Cleanup requested the following in an email to Mr. Gibbons of VERTEX on April 22, 2021:

1. Identification of the location and frequency of post-excavation confirmatory sampling within the firing range from the sidewalls of the excavated area.
2. Updated information regarding the requested confirmatory soil sampling of the soils beneath the existing 32,000 cubic yard stockpile.
3. Additional information regarding soil samples collected in the locations of the former 4,000-gallon No.2 fuel-oil underground storage tank (UST), 1,000-gallon diesel fuel UST, and two 2,000-gallon ferric chloride solution USTs that were associated with the former Septage Facility.
4. The inclusion of a groundwater elevation contour map.

The requested information is provided in the sections below, the numbering of which corresponds to the numbers of the requested information above.

3.1 Firing Range Post-Excavation Confirmatory Soil Sampling

As indicated in the RAM Status Report No. 1 confirmatory soil samples will be collected along the northern, western, southern, and eastern sidewall of the Firing Range once the area has been fully excavated. Based on the dimensions of the firing range, approximately 115 feet long by 40 feet wide, VERTEX anticipates collecting three samples from the northern sidewall (side of the range), three samples from the western sidewall (end of the range toward which bullets were fired), three samples from the southern sidewall (side of the range), and one sample from the eastern sidewall (end of the range from where the shooters fired) for a total of 10 confirmatory horizontal delineation samples. The anticipated locations for these sidewall samples are shown on Figure 3A. VERTEX plans on collecting these samples during the next RAM Status reporting period.

On May 8, 2019, VERTEX oversaw the advancement of 11 test pits within impacted areas of the firing range to assess the vertical depth of metals impacts within the firing range. Eight test pits, identified as V-301 through V-308, were advanced within the area east of the firing range berm to total depths of 6 feet below ground surface (bgs). The remaining three test pits, identified as V-309 through V-311, were advanced through the berm to depths of 2 feet below the berm into the underlying native soil (e.g. 2 feet below the base of the berm). Additionally, VERTEX advanced three soil borings, identified as V-312 through V-314, to a total depth of 4 feet bgs in the western edge of the firing range, beyond the firing range berm. VERTEX collected one composite sample from each boring from 2 to 4 feet bgs. The location of the vertical delineation samples completed within the firing range are shown on Figure 3B.

Each of these vertical delineation samples were placed into laboratory-supplied sample containers and submitted to Con-Test for the following analysis:

- Total antimony, copper, and lead by USEPA Method 6010.

Based on laboratory analytical results, antimony, copper, or lead were not detected at concentrations exceeding the applicable MCP RCS-1 Reportable Concentrations in samples V-301 through V-314, effectively delineating the impacts within the firing range soils to 0 to 2 feet bgs.

In one vertical delineation sample collected from 0 to 2 feet below the base of the firing range berm (V-310), toxicity characteristic leaching procedure (TCLP) extractable lead concentrations were detected at concentrations exceeding the Resource Conservation and Recovery Act (RCRA) threshold of 5 milligrams per liter (mg/L) for classification of characteristic hazardous wastes. To further delineate this impact, on April 12, 2021, VERTEX collected an additional composite sample in the same location as V-310 from 2 to 4 feet below the base of the firing range berm. The sample was placed into laboratory-supplied sample containers and submitted to Con-Test for total lead analysis by USEPA Method 6010. Total lead was detected in sample V-402 (2-4') at 23 mg/kg, below the applicable MCP RCS-1 Reportable Concentration. A summary of the vertical soil sample analytical results is presented on Table 1.

The efficacy of the excavation in remediating the firing range will be demonstrated with the 15 pre-excavation samples noted above and the 10 post-excavation sidewall samples to be collected.

3.2 Confirmatory Soil Sampling from Below the 32,000 Cubic Yard Stockpile

VERTEX conducted confirmatory sampling from the remaining soils below the 32,000 cubic yard stockpile following export. Information regarding the confirmatory sampling is included in Section 4.1 of this report.

3.3 Former Wayland/Sudbury Septage Treatment Facility UST Areas Soil Sampling

As indicated in the December 2, 2020 Phase I Initial Site Investigation Report prepared by CMG Environmental Services, the Town of Wayland removed four former USTs associated with the former septage facility on December 17, 1998. The USTs removed were a 4,000-gallon No. 2 fuel-oil UST, 1,000-gallon diesel-fuel UST, and two 2,000-gallon ferric chloride solution USTs, and were all located adjacent to each other immediately north of the septage facility building. Documentation pertaining to soil conditions observed during the removal of the USTs was not available.

In April 2019, to investigate the potential for oil and hazardous materials (OHM) releases from the former USTs, VERTEX advanced five soil borings, identified as V-104 and V-108 through V-111 within the area of the former USTs, with one of the borings through the center of the former UST area completed as a permanent monitoring well (V-104(MW)). Soil samples were collected from each of the borings and were screened with a 10.6 electron volts (eV)_photoionization detector (PID) for the presence of total ionizable organic volatiles (TOVs). The PID was calibrated with 100 part per million by volume (ppmv) isobutylene gas standard to provide readings of TOVs as benzene equivalents. PID readings are not considered actual TOV concentrations in the soil samples but are useful indicators of relative TOV concentrations between locations. The maximum PID reading obtained from the five UST soil borings was 2.3 ppmv obtained at a depth

of 0 to 5 feet bgs in boring V-108. Four soil samples (from borings V-108 through V-111) and one groundwater sample (from monitoring well V-104(MW)) were collected and submitted for laboratory analysis. Soil samples were collected from soil borings V-108 through V-111 at 0 to 5 feet bgs, 5 to 10 feet bgs, 5 to 10 feet bgs, and 0 to 10 feet bgs, respectively. The soil samples were analyzed for total petroleum hydrocarbons (TPH) by United States Environmental Protection Agency (USEPA) Method 8100 and the following soil characterization parameters:

- Volatile organic compounds (SVOCs) by USEPA Method 8260;
- Semi-VOCs (SVOCs) by USEPA Method 8270;
- MCP 14 metals by USEPA Method series 6000 and 7000;
- Polychlorinated biphenyls (PCBs) by USEPA Method 8082 with Soxhlet extraction; and
- Ignitability, corrosivity, reactivity (cyanide/sulfide), and specific conductivity.

The groundwater sample was collected in accordance with USEPA low flow methods and was analyzed for the following parameters:

- VOCs by USEPA Method 8260;
- SVOCs by USEPA Method 8270;
- Total MCP 14 metals, total manganese, and total copper by USEPA Method series 6000 and 7000;
- PCBs by USEPA Method 8082;
- Ammonia/nitrogen by USEPA Method SM 19-22;
- Chloride, nitrite, and nitrate by USEPA Method 300;
- Total nitrogen by USEPA Method SM 19-22;
- Phosphorus/orthophosphate by USEPA Method SM 21-22; and
- Dissolved arsenic USEPA Method series 6000 and 7000.

Based on the soil and groundwater analytical data collected from the areas of the former USTs, constituents of concern were not identified exceeding applicable MCP Reportable Concentrations. The analytical results for the soil and groundwater samples collected from the

former UST area are presented on Table 2 and 3, respectively. The locations of the VERTEX soil borings and monitoring wells and the former location of the USTs are shown on Figure 2.

3.4 Groundwater Elevation Survey

On May 15, 2019, Allen & Major Associates, Inc. (Allen & Major) of Woburn, Massachusetts performed a property-wide survey which included the location and elevation of the top of casing of the on-site monitoring wells. This elevation survey and depth to groundwater measurements collected in April 2019 were used to calculate groundwater flow directions at the property. A copy of the April 2019 groundwater elevation contour map is included as Figure 5 in this RAM Status Report. Based on the Allen & Major's survey, groundwater appears to generally flow from west to east across the property toward the Sudbury River. Local areas of flow to the northeast are expected in the northern part of the property near the northerly abutting wetlands.

4.0 RELEASE ABATEMENT MEASURE STATUS

The RAM Plan, submitted to the MassDEP on January 8, 2021, outlined the methods to be used to comply with the MCP environmental management requirements for excavation activities.

4.1 RAM Activities

RAM activities completed at the Site from March 26, 2021 to April 16, 2021 were completed in accordance with the RAM Plan and are described further below:

- Continued excavation, and transportation to approved facilities for the 32,000 cubic yard stockpile;
- Stabilization of lead in Firing Range soil and soil in stockpile characterization cell E7;
- Post-stabilization confirmatory soil sampling and analysis; and
- Confirmatory sampling and analysis of native soils under the 32,000 cubic yard stockpile.

4.1.1 Soil Excavation and Off-site Reuse and Recycling

During this RAM period, approximately 1,847 truckloads of soil were shipped off-site. Documentation and weight slips from the receiving facilities up until the end of this RAM period are included in Appendix A.

Up until the end of this RAM period (inclusive of the previous RAM period), soil excavated from the RAM Area was transported under Material Shipping Records (MSRs) and MassDEP Bills of Ladings (BOLs) to the following facilities:

- Approximately 713 truckloads have been transported to Dudley Reclamation Project RCS-1 Facility in Dudley, Massachusetts under MSRs;
- Approximately 856 truckloads have been transported to Dudley Reclamation Project RCS-2 Facility in Dudley, Massachusetts under MSRs;
- Approximately 206 truckloads have been transported to the Southbridge unlined landfill in Southbridge, Massachusetts under BOL (eDEP transaction number 1262371);
- Approximately 29 truckloads have been transported to the Winchendon unlined landfill in Winchendon, Massachusetts under BOLs (eDEP transaction number 1272340); and

- Approximately 43 truckloads have been transported to the Ondrick Asphalt Batch Recycling Facility in Chicopee, Massachusetts under BOLs (eDEP transaction number 1262624).

Remaining soils in the originally 32,000 cubic yard stockpile and firing range are anticipated to be transported under MSRs and BOLs for off-site reuse and disposal during the next RAM period.

4.1.2 TCLP Lead Soil Stabilization and Post Stabilization Confirmation

As described in the March 30, 2021 RAM Status Report, TCLP extractable lead concentrations exceeding the RCRA threshold of 5 mg/L for classification of characteristic hazardous wastes was detected in the firing range soils up to a depth of 2 feet bgs and in soil located in portion of characterization cell E-7 at depths of 0 to 10 feet bgs within the 32,000 cubic yard stockpile. Based on these detections, the soil in these two areas was stabilized to render the soil non-hazardous prior to excavation and off-site disposal.

On April 12, 2021, VERTEX oversaw the stabilization of the TCLP impacted soils within the former firing range. A 75% phosphoric acid solution (Phos-75) at a dose rate of 0.5% by volume was applied as a spray from a wand applicator and mechanically mixed with the soil using an excavator bucket. Soil was treated in accordance with the definitions of in-situ treatment as included in the August 2010 MassDEP Technical Update "Considerations for Managing Contaminated Soil: RCRA Land Disposal Restrictions and Contained-In Determinations." Soil treatment remained within the footprint of the former firing range at all times, and any soil that was excavated and stockpiled was placed on polyethylene sheeting (remaining within the footprint of the former firing range). Following stabilization, six 5-point composite confirmatory samples were collected at a frequency of approximately 1 sample per 100 tons of stabilized soil, and the stabilized soil was covered with polyethylene sheeting. Post stabilization samples were submitted to ESS Laboratory (ESS) of Cranston, Rhode Island for TCLP extraction and lead analysis. A summary of the post-stabilization confirmatory soil analytical results is included in Table 4, and a copy of the laboratory analytical reports are included in Appendix B.

On April 13, 2021, VERTEX oversaw the stabilization of the TCLP impacted soils within characterization cell E-7 of the 32,000 cubic yard stockpile. A 75% phosphoric acid solution (Phos-75) at a dose rate of 0.5% by volume was applied as a spray from a wand applicator and mechanically mixed with the soil using an excavator bucket. Soil was treated in accordance with the definitions of in-situ treatment and remained within the footprint of cell E-7. During and following stabilization, stockpiled soil was placed on polyethylene sheeting within cell E-7. Following stabilization, two 5-point composite confirmatory samples were collected at a frequency of approximately 1 sample per 100 tons of stabilized soil, and the stabilized soil was covered with polyethylene sheeting. Post stabilization samples were submitted to ESS for TCLP extraction and lead analysis. A summary of the post-stabilization confirmatory soil analytical results is included in Table 4, and a copy of the laboratory analytical reports are included in Appendix B.

Based on the analytical results of the post-stabilization confirmatory soil samples, stabilization successfully reduced TCLP-lead concentrations to less than 5 mg/L in the samples collected from both the firing range and cell E-7. The stabilized firing range and cell E-7 soils are scheduled to be disposed of off-site during the next RAM period.

4.1.3 Confirmatory Sampling Beneath 32,000 cubic yard Stockpile

Within the 32,000 cubic yard stockpile, concentrations of polycyclic aromatic hydrocarbons (PAHs) were detected at concentrations exceeding the applicable MCP RCS-1 Reportable Concentrations in eight characterization cells (A5, C1, C3, C6, D1, D6, E3, and F3) at the 5 to 10 foot bgs interval. Additionally, total lead was detected at a concentration exceeding the applicable MCP RCS-1 Reportable Concentration in cell E7 at the 5 to 10 foot bgs. The 5 to 10 foot bgs depth interval within the stockpile was in contact with the underlying native soils. The location of the characterization cells was professionally surveyed by Allen & Major prior to the collection of characterization samples.

After the soil in the cells was excavated and transported off-site, VERTEX identified the area of cells A5, C1, C3, C6, D1, D6, E3, E7, and F3. The location of the cells was identified using the latitude and longitudinal coordinates provided by the surveyor and a Trimble Geo 7X handheld global positioning system. To confirm that the extent of soil with concentrations of PAHs or total lead exceeding MCP RCS-1 Reportable Concentrations has been removed, VERTEX will collect and analyze confirmatory samples from the remaining soil surface. During this RAM Period, VERTEX collected two confirmatory soil samples from beneath cells C1 and D1. The two composite soil samples were made up of five approximately equal-volume aliquots of soil collected from depths of 0 to 6-inches below ground. The aliquots were mixed in a stainless-steel bowl and placed into laboratory-supplied sample containers. The soil samples, designated as TP-C1-Conf and TP-D1-Conf, were submitted to Con-Test for laboratory analysis of PAHs by USEPA Method 8270. Based on the laboratory analytical results, PAHs were not detected in either sample at concentrations exceeding applicable MCP RCS-1 Reportable Concentrations. A summary of the post-excavation confirmatory soil analytical results is included in Table 6, and a copy of the laboratory analytical reports are included in Appendix B. The completed and proposed confirmatory sampling locations are depicted on Figure 4D.

Confirmatory samples are scheduled to be collected beneath the remaining seven cells during the next RAM period. Information regarding the sample collection and analytical results will be included in the next RAM Status Report.

4.2 Environmental Monitoring

4.2.1 Groundwater On-Site Monitoring – TCLP Soil Stabilization

Monitoring Well Installation

On March 26, 2021, VERTEX oversaw the advancement of two soil borings to depth of 20 feet bgs; one soil boring (V-201) was advanced between the 32,000 cubic yard stockpile and the wetland to the north, and the other (V-202) was advanced between the firing range and the northerly abutting wetlands. The borings were advanced by Geosearch, Inc. of Sterling,

Massachusetts using direct-push drilling techniques (i.e. Geoprobe). The two soil borings were completed as groundwater monitoring wells, identified as V-201(MW) and V-202(MW). The wells were constructed of bottom-plugged 10-foot lengths of 2-inch diameter machine-slotted polyvinyl chloride (PVC) screen followed by PVC riser to grade. The borehole annulus of each well was finished with a clean, uniform-grade silica sand pack, bentonite seal, and native backfill, and the wells were completed at the surface with a 3-foot steel riser and cement surface seals.

Following installation, the monitoring wells were developed using dedicated submersible ProAcvitve Waterspout I pumps capable of pumping a high volume of water at a high flow rate to remove silt and sediment from the well and sand pack.

The location of the new and existing monitoring wells are depicted on Figure 2.

Pre-Stabilization Groundwater Sample Collection and Analysis

On March 29, 2021, following well development and prior to any soil stabilization, VERTEX gauged the depth to groundwater within wells V-201(MW), V-202(MW), and existing monitoring well V-106(MW) using a water-level indicator probe. Monitoring well V-106(MW) was selected as an upgradient monitoring well for the measurement of background groundwater conditions, upgradient of soil stabilization areas. Following gauging, groundwater samples were collected from the three monitoring wells in general accordance with USEPA low-flow sampling techniques. Wells were purged using dedicated polyethylene tubing and a peristaltic pump. Drawdown of the groundwater in the well and water quality parameters, including temperature, pH, conductivity, dissolved oxygen, oxygen reduction potential, and turbidity, were recorded every 3 to 5 minutes until readings were stable within allowable levels over three consecutive readings. Following stabilization, groundwater samples were collected in laboratory-supplied pre-cleaned containers, stored on ice, and transferred under chain of custody to Con-Test Analytical Laboratories (Con-Test) of East Longmeadow, Massachusetts for the following laboratory analyses:

- Dissolved antimony, copper, and lead by USEPA Method 6010;

- Total phosphorus by USEPA Method SM 18-20 4500; and
- pH.

A summary of groundwater analytical results is presented on Table 5, and a copy of the laboratory analytical report is included in Appendix B.

Post-Stabilization Groundwater Sample Collection and Analysis

On April 16, 2021, following soil stabilization activities within the firing range and characterization cell E-7, VERTEX gauged the depth to groundwater within monitoring wells V-201(MW), V-202(MW), and V-106(MW) using a water-level indicator probe and collected groundwater samples by the same methods used on March 29, 2021. As conducted on March 29, 2021, groundwater samples were collected, stored, and transferred under chain of custody, to Con-Test for the following laboratory analyses:

- Dissolved antimony, copper, and lead by USEPA Method 6010;
- Total phosphorus by USEPA Method SM 18-20 4500; and
- pH.

Based on the analytical results, the soil stabilization activities did not impact groundwater. Total phosphorus concentrations were higher in the April 16, 2021 groundwater sample collected from upgradient monitoring well (V-106(MW)). Total phosphorus was detected at 67 micrograms per liter (µg/L) in the pre-stabilization sample collected from monitoring well V-202 (MW) but was not detected in the post-stabilization sample. Additionally, dissolved antimony and lead were not detected at concentrations exceeding applicable MCP Method 1 GW-1 or GW-3 standards (there is no published MCP Method 1 standards for dissolved copper).

A summary of groundwater analytical results is presented on Table 5, and a copy of the laboratory analytical report is included in Appendix B.

4.2.2 Ambient Air Readings

Monitoring of ambient air for dust was conducted during the excavation of the of the 32,000 cubic yard stockpile and the stabilization activities of TCLP-lead impacted soils in the former firing range area and cell E7. VERTEX conducted continuous dust monitoring using DustTrak monitors at locations upwind and downwind of the excavation. A maximum dust action level of 0.15 milligrams per cubic meter (mg/m^3) of dust particles having diameters less than 10 micrometers (PM_{10}) was established for the stockpile RAM Activities. A PM_{10} maximum dust action level of 0.063 mg/m^3 was established for the for the firing range RAM activities. The average dust levels over each one-hour work period were monitored for real-time exceedances of the action levels. A log of dust monitoring activities performed during this RAM status reporting period is provided in Table 7.

The real-time dust monitoring at the perimeter of the Site detected average downwind dust levels at concentrations exceeding the 0.15 mg/m^3 action level on April 5, 2021 due to inclement weather conditions (i.e. strong winds with gusts in excess of 35 miles per hour) and dry conditions. Site activities on April 5, 2021 included the excavation and off-site transportation of characterized cells within the 32,000 cubic yard stockpile to the Dudley Reclamation Facility in Dudley, Massachusetts under MSR. OHM exceeding MCP RCS-1 Reportable Concentrations were not detected in the cells being handled on April 5, 2021; remediation waste was not handled during the inclement weather conditions.

Measured one-hour average dust concentrations measured on April 5, 2021 exceeded the action level during three one-hour intervals with on-hour average dust concentrations of 0.218 mg/m^3, 0.321 mg/m^3, and 0.279 mg/m^3, being recorded to the 10:00AM to 11:00AM, 12:00PM to 1:00PM, and 1:00PM to 2:00PM intervals, respectively. Following the exceedances, dust controls were implemented, and access and haul roads were scrubbed, which lowered dust levels. Exceedances of the dust action level were not identified on other days during this RAM period.

4.3 Future RAM Activities

VERTEX anticipates that the following future RAM activities will be conducted within the RAM Area:

- The 32,000 cubic yard stockpile will continue to be excavated and transported to approved off-site facilities;
- The stabilized soils as discussed in Section 4.1 will be transported and disposed at Waste Management Turnkey Recycling and Environmental Enterprises (TREE) in Rochester, New Hampshire;
- VERTEX will collect confirmatory soil samples from beneath the seven cells within the 32,000 cubic yard stockpile where PAHs or total lead were detected exceeding MCP RCS-1 Reportable Concentrations; and
- The completion of additional Site characterization as recommended by the MassDEP and/or as appropriate in accordance with professional standards of care.

The next RAM Status Report is scheduled to be submitted on November 8, 2021.

5.0 ADDITIONAL INFORMATION

VERTEX is not aware of other new significant site information or data generated during this RAM period, necessary to complete this Status Report.

6.0 LSP OPINION

The LSP Opinion required by 310 CMR 40.0445(2)(e) is presented on the MassDEP RAM Transmittal Form BWSC-106 that accompanies this submittal. This report and BWSC-106 Transmittal Forms are being submitted electronically to the MassDEP via the eDEP online filing system.

7.0 LIMITATIONS

Our professional services have been performed, our findings obtained, and our conclusions and/or recommendations prepared in accordance with customary principles and practices in the fields of environmental science and engineering. This warranty is in lieu of all other warranties either expressed or implied. VERTEX is not responsible for the independent conclusions, opinions or recommendations made by others based on the field exploration and laboratory test data presented in this report. Our professional opinion and the conclusions contained herein are based solely on the scope of work conducted.

It must be recognized that environmental investigations are inherently limited in the sense that conclusions are drawn, and recommendations developed from information obtained from limited research and site investigation. All Site subsurface conditions were not field investigated as part of this study and may differ from the conditions described herein. Additionally, the passage of time may result in a change in the environmental characteristics at this Site and surrounding properties. This report does not warrant against future operations or conditions, nor does this report warrant against operations or conditions present of a type or at a location not investigated.

Our interpretation of the available historical information and documents reviewed, as described in this report, were also considered in the conclusions. The results of the chemical analyses that were performed on a limited number of samples of environmental media were reviewed and interpretations had been made in the text, contingent on their validity. VERTEX relied upon but did not attempt to independently verify the validity or accuracy of the findings and conclusions noted in the documentation reviewed.

The MassDEP is required to audit response actions at Disposal Sites by M.G.L. Chapter 21E s. 3A(o). This law mandates that MassDEP audit a statistically significant number of all the sites that are required to pay annual compliance assurance fees. Regulations that govern the audit process are contained in the MCP (310 CMR 40.1100). M.G.L. c. 21E and the MCP also give

the MassDEP the authority to inspect sites, collect environmental samples, and require that pertinent site information be submitted. Due to the inherent flexibility in interpreting the applicable laws, regulations and policies, the audits are often subjective and dependent on the opinion of the auditor. As a result, the auditor could require additional assessment of the Site and/or remedial action. Based on these considerations, VERTEX is not and will not be responsible for costs or other possible ramifications of any additional work required by the MassDEP or any other government or private entity.

This report is intended for the sole use of Alta River's Edge, LLC for submittal to the MassDEP. This report, in whole or in part, shall not be relied upon by any other party other than Alta River's Edge, LLC and the MassDEP, nor used in whole or in part by any other party without the written consent of The Vertex Companies, Inc. The scope of services performed during the investigation documented herein may not satisfy the needs of other users, and any use or re-use of this document or the findings, conclusions, or recommendations is at the sole risk of said user.

FIGURES

APPENDIX A:

RECEIVING FACILITY WEIGHT SLIPS

APPENDIX B:

LABORATORY ANALYTICAL REPORTS