

April 5, 2017

LATE FILE

2017 APR -7 P 2: 44

Council President Joseph P. Lopes Members of the City Council City Hall New Bedford, MA 02740

RE: Activity and Use Limitation (AUL) for the New Bedford High School (NBHS) Campus associated with the Parker Street Waste Site (PSWS) Release Tracking Number 4-15685

Dear Council President Lopes and Members of the City Council:

Enclosed, please find a proposed Order authorizing the Mayor to execute, on behalf of the City of New Bedford, an Activity and Use Limitation (AUL) for the New Bedford High School (NBHS) Campus associated with the Parker Street Waste Site (PSWS) and Release Tracking Number 4-15685.

Based upon a Method 3 Risk Assessment performed by TRC, the City's Licensed Site Professional, it has been determined that with the restrictions limiting exposures to soil impacts identified at the NBHS Campus, as set forth in the enclosed AUL, the NBHS Campus poses "No Significant Risk" to health, safety, public welfare or the environment under current conditions. The obligations set forth in the AUL must be undertaken and/or maintained at the property in order to maintain a condition of "No Significant Risk"

Since the AUL must be executed, recorded and properly filed prior to the submission of the Overall Phase II Site Assessment Report for the PSWS, required by April 17, 2017, I respectfully request that prompt attention be given to this matter.

Sincerel

Jonathan

cc:

Michele Paul



CITY OF NEW BEDFORD

IN CITY COUNCIL

April 12, 2017

ORDERED that, the Mayor is hereby authorized to execute, on behalf of the City of New Bedford, an Activities and Use Limitation (AUL) for the New Bedford High School (NBHS) Campus associated with the Parker Street Waste Site (PSWS) and Release Tracking Number 4-15685, in substantially the same form as the attached draft. The New Bedford High School Campus is shown on a plan entitled "ACTIVITY AND USE LIMITATION PLAN OF LAND LOCATED ON HATHAWAY BOULEVARD, PARKER STREET & LIBERTY STREET NEW BEDFORD, MASSACHUSETTS OWNED BY CITY OF NEW BEDFORD OCTOBER 30, 2016 SCALE: 60 FEET TO AN INCH", prepared by Land Planning Inc. 1115 Main Street, Hanson, MA 02341. Said plan is to be record with the Bristol County (S.D.) Registry of Deeds.

NOTICE OF ACTIVITY AND USE LIMITATION New Bedford High School Campus

New Bedford, Massachusetts Release Tracking Number (RTN) 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

2017

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Notification to Property Owner(s) 310 CMR 40.1074(1)(e)

AUL Notification 30-Day Waiver



Disposal Site Name: Parker Street Waste Site

<u>Note</u>: Pursuant to 310 CMR 40.1074(5), upon transfer of any interest in or a right to use the property or a portion thereof that is subject to this Notice of Activity and Use Limitation, the Notice of Activity and Use Limitation shall be incorporated either in full or by reference into all future deeds, easements, mortgages, leases, licenses, occupancy agreements or any other instrument of transfer. Within 30 days of so incorporating the Notice of Activity and Use Limitation in a deed that is recorded or registered, a copy of such deed shall be submitted to the Department of Environmental Protection.

NOTICE OF ACTIVITY AND USE LIMITATION M.G.L. c. 21E, § 6 and 310 CMR 40,0000

DEP Release Tracking No.(s): 4-15685, 4-21847, 4-21872, 4-22409, 4-23526

This Notice of Activity and Use Limitation ("Notice") is made as of this	day of		
, 2017, by the City of New Bedford, 133 Williams Street, New Bedford, B	ristol County,		
Massachusetts, together with his/her/its/their successors and assigns (collectively "Owner").			

WITNESSETH:

WHEREAS, the City of New Bedford, are the owner(s) in fee simple of those certain parcel(s) of land located in New Bedford, Bristol County, Massachusetts with the buildings and improvements thereon, pursuant to deeds recorded with the Bristol Registry of Deeds in Book 1566, Page 1138, and Book 182, Page 47;

WHEREAS, said parcel(s) of land, which is more particularly bounded and described in Exhibit A, attached hereto and made a part hereof ("Property") is subject to this Notice of Activity and Use Limitation. The Property is shown on a plan recorded in the Bristol County Registry of Deeds in Plan Book ______, Plan ______;

WHEREAS, the Property comprises all of a disposal site as the result of a release(s) of oil and/or hazardous material. Exhibit B is a sketch plan showing the relationship of the Property subject to this Notice of Activity and Use Limitation to the boundaries of said disposal site existing within the limits of the Property and to the extent such boundaries have been established. Exhibit B is attached hereto and made a part hereof; and

WHEREAS, one or more response actions have been selected for the Parker Street Waste Site in accordance with M.G.L. c. 21E ("Chapter 21E") and the Massachusetts Contingency Plan, 310 CMR 40.0000 ("MCP"). Said response actions are based upon (a) the restriction of human access to and contact with oil and/or hazardous material in soil and/or (b) the restriction of certain activities occurring in, on, through, over or under the Property. A description of the basis for such restrictions, and the oil and/or hazardous material release event(s) or site history that resulted in the contaminated media subject to the Notice of Activity and Use Limitation is attached hereto as Exhibit C and made a part hereof;

Form 1075: continued

NOW, THEREFORE, notice is hereby given that the activity and use limitations set forth in this Notice of Activity and Use Limitation are as follows:

1. <u>Activities and Uses Consistent with Maintaining No Significant Risk Conditions.</u> The following Activities and Uses are consistent with maintaining a Permanent Solution and a condition of No Significant Risk and, as such, may occur on the Property pursuant to 310 CMR 40.0000.

1.1 Fenced Solar Park:

- (i) Use of the area as a solar park;
- (ii) Emergency repairs of existing utilities not to exceed a two day duration;
- (iii) Such other activities and uses not identified below as being Activities and Uses Inconsistent with the AUL; and
- (iv) Such other activities or uses which, in the Opinion of a Licensed Site Professional (LSP), licensed by the Commonwealth of Massachusetts Board of Registration of Hazardous Waste Site Cleanup Professionals, shall present no greater risk of harm to health, safety, public welfare or the environment than the activities and uses set forth in this Section.

1.2 NBHS Campus, except Fenced Solar Park:

- (i) Any recreational, public, educational, institutional, commercial, industrial, or construction activities and uses that do not cause and/or result in the direct contact with, disturbance of, and/or relocation of the soil/fill located deeper than three feet below grade in landscaped areas or soil/fill at any depth below asphalt pavement, concrete pavement, sidewalks, court surfaces or building floors;
- (ii) Emergency repairs of existing utilities not to exceed a two day duration;
- (iii) Such other activities and uses not identified below as being Activities and Uses Inconsistent with the AUL; and
- (iv) Such other activities or uses which, in the Opinion of a Licensed Site Professional (LSP), licensed by the Commonwealth of Massachusetts Board of Registration of Hazardous Waste Site Cleanup Professionals, shall present no greater risk of harm to health, safety, public welfare or the environment than the activities and uses set forth in this Section.
- 2. <u>Activities and Uses Inconsistent with Maintaining No Significant Risk Conditions</u>. The following Activities and Uses are inconsistent with maintaining a (select one) a Permanent Solution and a condition of No Significant Risk pursuant to 310 CMR 40.0000, and, as such, may not occur on the Property.

- (i) Uses other than the use as a solar park without a site-specific evaluation by an LSP:
- (ii) Excavation activities that exceed a two day duration that result in exposing soil/fill below the crushed stone located above the geotextile fabric without a site-specific evaluation by an LSP;
- (iii) Relocation of soil/fill from any depth below the geotextile fabric to another location within the Site without LSP review and approval;
- (iv) Gardening of agricultural crops for human consumption using Site soil;

- (v) Other private, public, commercial, industrial or construction activities or uses not permitted by Section 1 of this Notice that result in the direct contact with, or disturbance of, the soil/fill from depths below the crushed stone located above the geotextile fabric without supervision of an LSP and the Massachusetts Contingency Plan (310 CMR 40.0000) of MCP.
- 2.2 NBHS Campus, except Fenced Solar Park:
- (i) Single or multi-family residential use;
- (ii) Activities that result in exposing soil/fill below concrete floors, asphalt pavement, concrete pavement, sidewalks, court surfaces or other paved surfaces without a site specific evaluation by an LSP;
- (iii) Relocation of any soil/fill from depths greater than 3 feet from the Site to another location within the Site without LSP review and approval;
- (iv) Gardening of agricultural crops for human consumption using Site soil; and
- Other private, public, commercial, industrial or construction activities or uses not permitted by Section 1 of this Notice that result in the direct contact with, or disturbance of, the soil/fill from depths greater than three feet from the Site without supervision of an LSP and the Massachusetts Contingency Plan (310 CMR 40.0000) of MCP.
- 3. <u>Obligations and Conditions</u>. The following obligations and/or conditions are necessary and shall be undertaken and/or maintained at the Property to maintain a Permanent Solution and a condition of No Significant Risk:
 - 3.1 Fenced Solar Park:
 - (i) Maintain the physical integrity of the crushed stone located above the geotextile fabric;
 - (ii) Maintain the physical integrity of the fence surrounding the solar park;
 - (iii) A Health and Safety Plan (HASP) must be prepared by a Certified Industrial Hygienist (CIH) or other qualified individual sufficiently trained in worker health and safety requirements and implemented prior to the commencement of any activity that is likely to disturb soil/fill immediately below the crushed stone located above the geotextile fabric, except for emergency utility work that is less than a two day duration. Activities conducted immediately below the crushed stone located above the geotextile fabric should be planned with an LSP. The HASP should specify the chemicals at the Site, the types of media present, the extent of impacts, the potential routes of exposure, the appropriate level of personal protective equipment, the type of monitoring required, worker safety monitoring, and hazard communication. Workers must be informed of the requirements of the HASP, and the plan must be available on-Site throughout the course of the project;
 - (iv) Excavation/disturbance of soil/fill below the crushed stone located above the geotextile fabric that exceed a two day duration requires site-specific evaluation by an LSP, who will evaluate if such activity can proceed and maintain a condition of No Significant Risk.
 - (v) No fill/soil is to be relocated from the Site to an off-site (property) location without LSP review and approval.
 - 3.2 NBHS Campus, except Fenced Solar Park:
 - (i) Maintain the physical integrity of all asphalt pavement, concrete pavement, sidewalks, and court surfaces or other paved surfaces;
 - (ii) Maintain the physical integrity of all interior building floors;

- (iii) A Health and Safety Plan (HASP) must be prepared by a Certified Industrial Hygienist (CIH) or other qualified individual sufficiently trained in worker health and safety requirements and implemented prior to the commencement of any activity that is likely to disturb soil/fill greater than 3 feet in landscaped areas or immediately below pavement within the AUL area except for emergency utility work that is less than a two day duration. Activities conducted greater than 3 feet in depth or immediately below pavement should be planned with an LSP. The HASP should specify the chemicals at the Site, the types of media present, the extent of impacts, the potential routes of exposure, the appropriate level of personal protective equipment, the type of monitoring required, worker safety monitoring, and hazard communication. Workers must be informed of the requirements of the HASP, and the plan must be available on-site throughout the course of the project;
- (iv) Excavation/disturbance of soil/fill below three feet and/or below concrete floors, asphalt pavement, concrete pavement, sidewalks, court surfaces or other paved surfaces and buildings requires site-specific evaluation by an LSP, who will evaluate if such activity can proceed and maintain a condition of No Significant Risk.
- (v) No fill/soil is to be relocated from the Site to an off-site (property) location without LSP review and approval.

- 4. <u>Proposed Changes in Activities and Uses</u>. Any proposed changes in activities and uses at the Property which may result in higher levels of exposure to oil and/or hazardous material than currently exist shall be evaluated by a Licensed Site Professional who shall render an Opinion,
- in accordance with 310 CMR 40.1080, as to whether the proposed changes are inconsistent with maintaining a Permanent Solution and a condition of No Significant Risk. Any and all requirements set forth in the Opinion to meet the objective of this Notice shall be satisfied before any such activity or use is commenced.
- 5. <u>Violation of a Permanent or Temporary Solution</u>. The activities, uses and/or exposures upon which this Notice is based shall not change at any time to cause a significant risk of harm to health, safety, public welfare, or the environment or to create substantial hazards due to exposure to oil and/or hazardous material without the prior evaluation by a Licensed Site Professional in accordance with 310 CMR 40.1080, and without additional response actions, if necessary, to maintain a condition of No Significant Risk.

If the activities, uses, and/or exposures upon which this Notice is based change without the prior evaluation and additional response actions determined to be necessary by a Licensed Site Professional in accordance with 310 CMR 40.1080, the owner or operator of the Property subject to this Notice at the time that the activities, uses and/or exposures change, shall comply with the requirements set forth in 310 CMR 40.0020.

6. <u>Incorporation Into Deeds, Mortgages, Leases, and Instruments of Transfer</u>. This Notice shall be incorporated either in full or by reference into all future deeds, easements, mortgages, leases, licenses, occupancy agreements or any other instrument of transfer, whereby an interest in and/or a right to use the Property or a portion thereof is conveyed in accordance with 310 CMR 40.1074(5).

Owner hereby authorizes and consents to the filing and recordation and/or registration of this Notice, said Notice to become effective when executed under seal by the undersigned Licensed Site Professional, and recorded and/or registered with the appropriate Registry(ies) of Deeds and/or Land Registration Office(s).

	In all other respects the terms of the Notice of	of Activity and Use Limitation	n remain unchanged.]
	WITNESS the execution hereof under seal this _	day of	. 20
		Mayor Jona	than F. Mitchell
	COMMONWEALTH OF M	1ASSACHUSETTS	
Bristol, ss		,	2017
	On this day of, 2017, before me, the undersigned notary public, personally appeared Jonathan F. Mitchell, proved to me through satisfactory evidence of identification, which were, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose.		
	as Mayor of the City of New Bedford		
	(official signature and sea	l of notary)	

	The undersigned Licensed Site Professional hereby certifies that in his Opinion this Activity and Use Limitation is consistent with a Permanent Solution and maintaining a
ondition	of No Significant Risk.
Oate:	
	David M. Sullivan [LSP SEAL]
	COMMONWEALTH OF MASSACHUSETTS
/liddlese:	. 2017
	On this day of, 2017, before me, the undersigned notary public, personally appeared David M. Sullivan, proved to me through satisfactory evidence of identification, which were, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose.
	(official signature and seal of notary)
Jpon reco	ording, return to:
33 Willi	ew Bedford am Street ford, MA 02740

EXHIBIT A

Legal Description of Property

LEGAL DESCRIPTION

New Bedford High School Property

NEW BEDFORD, MASSACHUSETTS

Beginning at a corner in the northerly property line between the land of the City of New Bedford, New Bedford High School Campus, and the Commonwealth of Massachusetts;

THENCE: N 82° 34' 00" E a distance of 382.7'+/- to a point in the southerly side line of

Liberty Street;

THENCE: S 28° 16' 30" E a distance of 1,810.4'+/- along the southerly side line of Liberty

Street to a point at the corner of Parker Street:

THENCE: S 82° 26' 50" W a distance of 1,205.9'+/- along the northerly side line of Parker

Street to a point;

THENCE: Northwesterly on a curve to the right, with a radius of 25', a length of 39.3'+/- to

a point in the easterly sideline of Hathaway Boulevard;

THENCE: N 07° 34' 04" W a distance of 1,670.3'+/- along the easterly side line of

Hathaway Boulevard to a point;

THENCE: N 82° 25' 56" E a distance of 206.06'+/- to the point of beginning.

Said site boundary area contains 35.39 +/- acres is shown on a plan entitled: "Activity And Use Limitation Plan Of Land Located On Hathaway Boulevard, Parker Street & Liberty Street New Bedford, Massachusetts" dated: October 30, 2015; Prepared by Land Planning, Inc.; to be recorded at the Bristol County Registry of Deeds Southern District.

EXHIBIT A-1

Legal Descriptions of AUL Portions of the Property

LEGAL DESCRIPTION

New Bedford High School Campus AUL Area

NEW BEDFORD, MASSACHUSETTS

Beginning at a corner in the northerly property line between the land of the City of New Bedford, New Bedford High School Campus, and the Commonwealth of Massachusetts;

THENCE: S 07° 32' 12" E a distance of 306.0' to a point;

THENCE: N 82° 57' 26" E a distance of 290.6' to a point;

THENCE: N 06° 42' 02" W a distance of 308.0' to a point;

THENCE: N 82° 34' 00" E a distance of 87.6' to a point in the southerly side line of Liberty

Street;

THENCE: S 28° 16' 30" E a distance of 1,810.4'+/- along the southerly side line of Liberty

Street to a point at the corner of Parker Street;

THENCE: S 82° 26′ 50″ W a distance of 1,205.9′+/- along the northerly side line of Parker

Street to a point;

THENCE: Northwesterly on a curve to the right, with a radius of 25°, a length of 39.3°+/- to

a point in the easterly sideline of Hathaway Boulevard;

THENCE: N 07° 34' 04" W a distance of 1,670.3'+/- along the easterly side line of

Hathaway Boulevard to a point:

THENCE: N 82° 25' 56" E a distance of 206.06'+/- to the point of beginning.

Said AUL area contains 33.33 +/- acres is shown on a plan entitled: "Activity And Use Limitation Plan Of Land Located On Hathaway Boulevard, Parker Street & Liberty Street New Bedford, Massachusetts" dated: October 30, 2015; Prepared by Land Planning, Inc.: to be recorded at the Bristol County Registry of Deeds Southern District.

LEGAL DESCRIPTION

Fenced Solar Park AUL Area

NEW BEDFORD, MASSACHUSETTS

Beginning at a corner in the northerly property line between the land of the City of New Bedford, NBHS Campus and land of the Commonwealth of Massachusetts:

THENCE: S 07° 32' 12" E a distance of 306.0' to a point;

THENCE: N 82° 57' 26" E a distance of 290.6' to a point:

THENCE: N 06° 42' 02" W a distance of 308.0' to a point:

THENCE: S 82° 34′ 00″ W a distance of 295.1′+/- to the point of beginning.

Said AUL area contains 2.06- +/- acres is shown on a plan entitled: "Activity And Use Limitation Plan Of Land Located On Hathaway Boulevard, Parker Street & Liberty Street New Bedford, Massachusetts" dated: October 30, 2015; Prepared by Land Planning. Inc.; to be recorded at the Bristol County Registry of Deeds Southern District.

EXHIBIT B

Sketch Plan Showing AUL Area

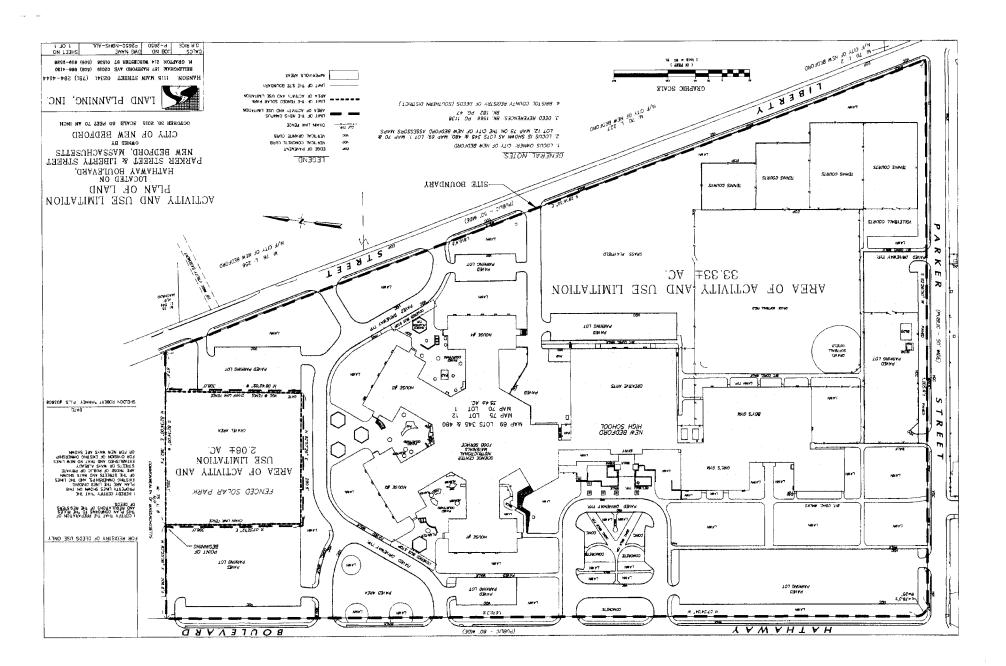


EXHIBIT CActivity and Use Limitation Opinion

Activity and Use Limitation Opinion New Bedford High School Campus, RTN 4-15685

Introduction

In accordance with the requirements of 310 CMR 40.1074, this Activity and Use Limitation (AUL) Opinion has been prepared for the parcel of land located at 230 Hathaway Boulevard, Bristol County, New Bedford, Massachusetts (the Property), and owned by the City of New Bedford, 133 William Street, Bristol County, New Bedford, Massachusetts. As of the date of this Activity and Use Limitation Opinion, the Property is the location of a City of New Bedford High School (NBHS) campus, which includes a Solar Park.

This property is owned by:

The City of New Bedford 133 William Street New Bedford, Massachusetts 02740 Contact: Mayor Jonathan F. Mitchell (508) 979-1410

The purpose of this AUL Opinion is to support a Partial Permanent Solution (PSS-P). This AUL applies to the NBHS campus, including the area used as a fenced solar park (hereinafter the Site).

Site Description

The Site, consists of the NBHS building which is a single 529,192 square foot building (with a footprint of approximately 233,903 square feet) surrounded by paved parking areas. lawn and landscaped areas for recreational use, and paved tennis courts. Approximately 45-percent of the Site is covered by impervious surfaces (e.g., pavement or building). An ice skating rink and isolated wetland area, located along Hathaway Boulevard and Durfee and Liberty Streets, exist beyond the northern boundary of the Site. The NBHS building has three main sections: (1) the gym; (2) the auditorium; and (3) the "Houses". The gym is located at the southern end of the NBHS campus. The grassy area in front (west) of the gym is used for outdoor gym classes. Fenced playing fields (a volleyball court, baseball field, and basketball and tennis courts) are located to the rear (east) of the gym. To the north of the gym is the main entrance to the high school, marked by a flag pole and traffic circle. The auditorium is housed in this central portion of the NBHS building. An unfenced field, used as a practice area, is located to the rear (east) of the auditorium. Further to the north within the NBHS building are the classrooms, arranged as a series of four "Houses" (A-Block) around a central core (B-Block). The grassy outdoor area to the east of the "Houses" is a congregating area for students. The fenced area to the north of the "Houses", between two large parking lots, has been developed as a solar park.

The solar park area is surrounded by a permanent eight foot high chain-link security fence, with lockable access gates. Impacted soil within the top three feet of the southern (landscaped) portion of the solar park was excavated and placed within the fenced portion of the solar park, and six inches of washed, crushed stone was placed across the solar park area to prevent fugitive dust

release.

The Site, subject to this AUL, is an approximately 35.39-acre area within the area managed under RTN-15685. The Site is identified by the City of New Bedford Assessor as the following parcels: map 75 lot 12, map 69 lot 345, 69-460, and map 70 lot 1. The Site is located on the north side of Parker Street between Hathaway Boulevard to the west and Liberty Street to the east, and south of the Hetland Rink property.

Site History

Based on review of historical United State Geological Survey (USGS) topographic maps from 1941 and 1949, wetlands were located at the Site prior to land disturbance and filling activity. On the 1941 (1936 survey data) map and 1949 (1948 survey data) map, the Site was still illustrated as wetland.

Based on review of historical aerial photographs, the Site was subject to land disturbance or disposal activity between and during at least the 1930s and 1960s; with other portions of the area covered by RTN 4-15685 were subject to land disturbance and disposal activities into the early 1970s. The chemical profile of fill materials found at some locations included in RTN 4-15685 are similar to those of industrial landfills indicating that the fill material is associated with dumping from industrial sources, intermixed or combined with fill material meeting the definition of historic fill under the MCP. NBHS was constructed between 1970 and 1972. Materials dredged from New Bedford during the construction of the "Hurricane Dike" were reportedly transported to the Site and used to stabilize the site for construction of the NBHS. Soil/fill displaced for construction of the building's foundation was reportedly transported across Hathaway Boulevard to what was then vacant land (the present-day location of the Keith Middle School [KMS]). During a 2000 environmental investigation prior to the construction of KMS, concentrations of polychlorinated biphenyls (PCBs) above regulatory reporting criteria were detected, triggering a reporting condition to the Massachusetts Department of Environmental Protection (MassDEP). MassDEP assigned RTN 4-15685 to the Parker Street Waste Site

Environmental Investigations

In July 2001, Vanasse Hangen Brustlin, Incorporated (VHB) collected 22 soil samples from 15 sampling locations at the Site. All samples were analyzed for PCBs, Resource Conservation and Recovery Act (RCRA) 8 metals, and three of the samples were also analyzed for semi-volatile organic compounds (SVOCs), and extractable petroleum hydrocarbons (EPH).

Subsurface environmental investigations were conducted at the Site between September 2004 and February 2006. During that time, BETA advanced 343 soil borings and collected 12 surface soil samples (0-6 inches) at the Site. Of these 343 sampling locations, BETA observed fill at 276 locations. BETA identified the presence of the following chemicals: PCBs, metals (arsenic, barium cadmium, chromium, lead, and/or mercury), and Polycyclic Aromatic Hydrocarbons (PAH)s (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, phenanthrene, and/or pyrene).

The following summarizes investigation activities performed by TRC on Behalf of the City of

New Bedford. A detailed description of investigative activities is included in the *Phase II Comprehensive Site Assessment New Bedford High School Campus* dated April 6, 2011 (hereinafter "Phase II").

The majority of TRC's environmental investigations consisted of GeoProbe[®] direct push soil borings using track-, truck-, or dolly-mounted drill rigs to sample soil and observe subsurface soil conditions. Surface soil samples were collected using hand tools. Soil sampling was the primary means of identifying and delineating Site impacts. In addition, TRC installed and sampled seven monitoring wells at the Site in 2008 and 2009 to evaluate metals, PCBs, and PAHs in Site groundwater.

The investigative approach was intended to evaluate the presence or absence of fill and the horizontal and vertical extent of such fill or related impacts. In general, soil borings were advanced and soil samples were collected until native overburden was encountered unless refusal was encountered first. Where native material was submitted for laboratory analysis, two samples of native material from two different depths were typically collected to characterize the native horizon. The lower native sample was retained for analysis contingent upon the results of the upper native horizon analysis in an attempt to delineate the vertical extent of impacts, if present, without having to remobilize sampling teams. The contingent native material was not analyzed if the native material interval above it was found to be below MCP Method 1 S-1 soil standards based on laboratory analysis or as otherwise directed by the LSP. Some relatively shallow soil samples were also collected to supplement data previously collected by others to close potential data gaps and support an evaluation of potential human health risks.

Additional soil sampling was conducted to refine the delineation of impacted areas in support of remedial planning. Based on prior sampling results, delineation soil sampling was conducted along concentric rings (i.e., step-out sampling) surrounding sampling locations identified for potential excavation. Initial (i.e., inner ring) delineation samples were sent for laboratory analysis for potential contaminants of concern (COCs). Based on the laboratory analytical results associated with inner ring delineation samples, additional (outer ring) samples were analyzed. Supplemental investigation and step-out delineation sampling activities were conducted within each Exposure Point (EP) Area to identify the lateral and vertical extent of excavation to achieve the remedial goal (i.e., Exposure Point Concentrations (EPC)s less than or equal to Method 1/Method 2 S-1 soil standards, which were later verified via Method 3). Based on the risk characterization results, the supplemental sampling investigations were focused on a vertical depth of up to three feet below ground surface, targeting surface soils considered to be accessible under the MCP. The excavation limits for targeted locations were determined by recalculating the EPCs for each EP after the samples within the excavation boundaries were eliminated from the data set and replaced with the results from the delineation sampling. confirming that a Condition of No Significant Risk had been achieved for the EPs following excavation.

Dioxin Investigative Sampling

Soil sampling for polychlorinated dibenzo-p-dioxins (PCDDs), polychlorinated dibenzo-furans (PCDFs) and dioxin-like PCBs, which are collectively referred to as dioxins or dioxin-like compounds, was carried out across the NBHS Campus. Sampling and analytical procedures are

outlined in the *Proposed New Bedford High School Dioxin Investigation Technical Approach Memorandum* from TRC to the City dated, March 30, 2010. On April 15, 2010 a total of sixteen samples were collected from five sampling locations and analyzed for dioxins (SW-846 Method 8290) and PCB congeners (SW-846 Method 1668A) by Analytical Perspectives of Wilmington, North Carolina. All samples were also analyzed for PCBs Aroclors by Pace Analytical, Incorporated (Pace; formerly Northeast Analytical, Incorporated) of Schenectady, New York and PAHs, MCP metals and mercury by Con-Test Analytical Laboratory (Con-Test) of East Longmeadow, Massachusetts.

Dioxin and dioxin-like compounds may be formed as part of a combustion process under appropriate conditions. Data collected to date indicate that ash is present in impacted fill at the Site. The five sampling locations targeted were previously sampled locations that were identified as being likely to have the highest concentrations of dioxins and dioxin-like compounds based on a review of available soil data. The soil data indicate that PCBs are the only chlorinated dioxin/dibenzofuran precursor compounds at the Site. There is no other indication in the available analytical data of the presence of any other chlorinated organic compounds with the potential to serve as chlorinated dioxin/dibenzofuran precursors in significant concentrations, based on available data for volatile organic compounds (VOCs), SVOCs, pesticides, and PCBs.

The evaluation of target sample locations was based on the review of existing chemical signatures and geographic coverage within the population of previous soil sample locations. The soil sampling program was designed to collect samples from biased high ("worst case") locations at the Site. Soil sample locations with concentrations greater than regulatory limits for PCBs, PAHs, and/or metals were selected for review. Sample locations were selected based on the presence of ash/cinders, metals enrichment, and PAHs; PCB concentrations greater than regulatory limits; and to provide geographic coverage. The conservative high-biased sampling approach was intended to avoid underestimating risk from exposure to dioxins in Site soil and, in all likelihood, resulted in overestimating risk. At each location, 0 to 1 foot interval and 1 to 3 foot interval samples were collected. A second 0 to 1 foot interval sample, targeting the historic fill, was also collected at each location during the initial investigation of dioxins and dioxin-like compounds.

At the request of MassDEP, additional dioxin investigative sampling was performed as outlined in the *Proposed NBHS Dioxin Follow-up Sampling – Technical Approach* from TRC to the City dated April 13, 2011. On June 7-10, 2011, soil investigative sampling was conducted for PCDDs, and PCDFs and PCB congeners. A total of eighteen samples was collected from nine sample locations and analyzed for chlorinated dioxins (SW-846 Method 8290A) and PCB congeners (SW-846 Method 1668A) by Cape Fear Analytical, LLC (Cape Fear) of Wilmington, North Carolina. The sampling locations included previous sample locations estimated as worst case scenarios based on a review of available soil data collected, and locations that provide data that are representative of potential exposures across the Site. At each sample location, a sample was taken of the top one foot soil interval, and the one to three foot soil interval. Sample locations are identified on Figure 2.

Additional dioxin investigative sampling was performed on October 20, 2011 to delineate dioxin impacted soils in the vicinity of sample location HB-22 from 1-3 feet below surface. Samples were collected at eleven locations in a grid pattern having a 2.5 foot lateral separation for first

two grids and a 5 foot lateral separation for the third grid. Consistent with previous delineation activities, an iterative step-out soil sampling approach was employed. Soil samples were submitted to Cape Fear for chlorinated dioxins analysis (SW-846 Method 8290A). Based on a review of the analytical results and using MCP risk assessment procedures, soil samples HB-22A, HB-22B, HB-22C and HB-22D were determined to represent appropriate excavation bounds.

Following the delineation and subsequent soil excavation, the MassDEP adopted EPA's 2012 reference dose (RfD) for risk estimation of dioxin-like compounds as total toxic equivalents (TEQs) in Method 3 risk characterizations. Consequently, non-cancer health effects associated with the total TEQ EPC became associated with an unacceptable risk for soil exposures within the 0 to 3 foot interval at the NBHS Campus, for the daycare child scenario. The issue primarily resulted from the small size of the total TEQ data set for the 0 to 3 foot soil depth interval as a result of the execution of the RAM-related spot excavation program, coupled with the variability in the remaining data set. The post-excavation data set resulted in an EPC, derived using a 95% UCL of the arithmetic mean, associated with an exposure dose greater than the reference dose for non-cancer health effects for this scenario.

As a result of the updated reference dose, and consistent with discussions between the City and MassDEP, it was deemed appropriate to conduct additional soil investigation activities in the vicinity of location HB-22 in support of supplemental excavation activities. The additional investigation was initiated on February 21, 2014. Land Planning, Incorporated of Hansen, Massachusetts (Land Planning) marked the previous HB-22 excavation limits (i.e., soil sampling locations HB-22A through HB-22D), allowing for pre-marking of supplemental soil boring ("step-out") locations. Step-out soil boring locations extended at 2.5 foot intervals east of location HB-22B (i.e., HB-22F, HB-22J, HB-22N and HB-22R) and south of location HB-22C (i.e., HB-22G, HB-22K, HB-22O and HB-22S). Step-out sampling was not necessary for the HB-22A and HB-22D sampling locations to the west and north, since the total TEQ concentrations identified there were associated with hazard quotients for the daycare child scenario below risk thresholds for non-cancer health effects. Following utility clearance activities (i.e., Dig-Safe and municipal notification), a total of eight soil borings were advanced by New England Geotech of Jamestown, Rhode Island on February 21, 2014.

Soil samples were submitted to Cape Fear for PCB Congener (EPA Method 1668A - World Health Organization [WHO] list) and/or dioxin/furan (EPA Method 8290A) analyses (see Table 2-11). A total of 18 soil samples were collected for potential laboratory analysis. Soil samples were collected from the 1 to 3 foot interval at soil sampling locations HB-22A and HB-22B for PCB Congener analysis. Sample volume was retained from the 0 to 1 foot and 1 to 3 foot intervals at each of the remaining eight soil boring locations; however only samples HB-22F (1-3') and HB-22G (1-3') were initially analyzed for PCB Congeners and dioxins/furans. The remaining sample volume was retained for contingency analysis, pending receipt and review of the initial HB-22F (1-3') and HB-22G (1-3') analytical results. Additional samples were authorized at the discretion of the LSP of Record.

Based on the supplemental soil sampling results, an updated EPC, based on the 95% UCL on the arithmetic mean, was determined to be associated with a hazard quotient below the threshold for non-cancer health effects in the daycare child scenario. The updated risk calculations indicated

that a Condition of No Significant Risk in support of a permanent solution for the NBHS Campus was achieved following the additional soil removal activities carried out in April 2014, as described below.

Groundwater Investigation

Following installation, groundwater samples were collected from seven on-Site monitoring wells. Groundwater samples were collected on the following dates; August 19, 2008 (MW-4 through MW-6), September 16, 2008 (MW-7 and MW-8B), and April 23, 2009 (MW-HH-13, MW-HRC-33). Additional groundwater investigations were performed in connection with the IRA Substantial Release Migration/Critical Exposure Pathway response actions in the vicinity of the Mechanical Room, as discussed in the Phase II. The groundwater data collected from 2010 to 2012 from monitoring wells outside the Mechanical Room (MW-11, MW-12, MW-13, MW-14, MW-15, MW-16, MW-17, MW-18, MW-19, MW-20, MW-21, MW-22, MW-23, MW-24, MW-25, MW-26, MW-29 and MW-30) as part of the IRA Substantial Release Migration/Critical Exposure Pathway response actions were also used in the risk characterization.

Groundwater samples were collected following EPA Region I low stress (low flow) sampling guidelines (USEPA, 2010). During purging activities, water quality parameters were monitored using a YSI 600XL Sonde and 650 MDS data logger and a LaMotte 2020 turbidity meter. Groundwater samples were collected after water quality parameters had stabilized in accordance with the low flow guidance, or after one hour of purging if parameters did not stabilize. A modification of the low flow guidance was the use of peristaltic pumps to collect the samples.

Nature of Site Conditions

The Site is underlain by topsoil and up to approximately 8 feet of anthropogenic fill material that includes sandy material with ash. In places, the ash fill includes broken glass, brick fragments. rubber, slag, coal, cinders, plastic and/or metallic fragments. Location of the top and bottom of fill material is varied throughout the Site, ranging from 0.5 to 8.0 feet below ground surface. In some places no fill was identified. Anthropogenic fill materials are underlain by approximately 0.25 to 6.0 feet of native dark brown organic peat material, mixed with silt and clay in places from the wetland that predates the development of the area. Native soils below the organic peat layer are characterized by gray fine silty sands with trace gravel and/or medium sand in places.

Groundwater at the Site flows predominantly to the southeast at a gradient of about $2x10^{-3}$ ft/hr. The groundwater aquifer is unconfined and is present about 10 feet below ground surface. The unconfined aquifer is composed of ash fill, organic peat, and/or glacial outwash sediments (listed from the ground surface down, as typically observed). The aquifer thickness is not known. This aquifer is not considered 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 material is more difficult to estimate, since the material is heterogeneous in nature and typical approximate ranges of such fill are not found in the available technical references; however, a study of the hydraulic conductivity of ash-sand

mixtures indicates that 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) possible 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 relative to the underlying peat layer.

The City receives an average of 48.36 inches of precipitation annually (http://www.ncdc.noaa.gov/, 1981-2010). Infiltration of rainwater to the aquifer is expected to be lower at the Site relative to other nearby areas given that the Site has more impervious surfaces. There are no surface water bodies on the Site.

Environmental site investigations were performed to characterize the nature and extent of impacts at the Site. The results of the environmental site investigations are described in detail in the following reports:

- Phase II Comprehensive Site Assessment, New Bedford High School Campus at the Parker Street Waste Site, New Bedford, Massachusetts. Prepared for the City of New Bedford. Prepared by TRC, Lowell, Massachusetts. April 2011.
- Release Abatement Measure Completion Report, Soil Excavation and Removal at New Bedford High School, New Bedford, Massachusetts. Release Tracking Number 4-15685. Prepared by: TRC Environmental Corporation, Lowell, Massachusetts June 2014.

In general, the horizontal and vertical extent of PAHs, metals, and PCBs in soil at the Site is generally consistent with the presence of fill-related material. The horizontal and vertical extent of soil impacts detected above MCP Method 1 S-1 soil standards has been characterized via laboratory analysis and field screening (visual, olfactory, jar headspace, and professional judgment). For soil from the 0 to 1 foot horizon, data indicate that the surficial soils were comparatively less impacted or un-impacted.

The results of the analysis of groundwater at all locations of the NBHS portion of the Site for PAHs, PCBs, both total and dissolved MCP metals and mercury indicated that all compounds are below applicable MCP Method 1 standards, with the exception of total lead at MW-5 and MW-HRC-33, which exceeds the GW-3 standard. The total lead concentration is most likely attributable to the lead being adsorbed to, or contained in, particulates in the groundwater sample, and not likely to be dissolved phase lead impacts. In general, the lack of groundwater impacts from the impacts associated with fill (PAHs, PCBs, metals) is consistent with the chemical properties, namely the high sorption potential and limited potential to leach, and/or low solubility of the chemicals.

Conceptual Site Model

Prior to construction of NBHS in the early 1970s, much of the Site was occupied by a wetland. From approximately the 1930s and into the 1970s, portions of the Site were subject to land disturbance and disposal activities.

During the construction of NBHS, organic wetland materials and much of the refuse dumped

over the years were removed from the Site and replaced with a fill material. Some of the fill material appears to be associated with dumping from industrial sources, intermixed or combined with fill material. In addition, materials dredged from New Bedford during the construction of the "Hurricane Dike" were reportedly transported to the Site and used to stabilize the Site for construction of the NBHS.

Chemicals of concern identified in the Site soils are consistent with those attributable to industrial wastes (PCBs, antimony, arsenic, barium, cadmium, chromium, lead, mercury, nickel, vanadium, zinc, various PAHs, and dioxin-like compounds) and historic fill (e.g., coal, coal ash, wood ash and vehicle emission related PAHs, lead, and metals associated with coal). Groundwater monitoring has indicated that these chemicals have not migrated from Site soil to groundwater.

Chemicals of concern identified in the Site groundwater include chlorinated VOCs (principally tetrachloroethene and vinyl chloride) found in the vicinity of monitoring well MW-7. The source of the chlorinated VOCs near MW-7 is unknown but it is presumed to be related to historical disposal at the Site. The extent of chlorinated VOCs in groundwater is limited. These compounds have not been detected in significant concentrations in any of the surrounding monitoring wells (MW-20, MW-22, MW-23, MW-24 and MW-30. Notably, MW-20 and MW-30 are located between MW-7 and NBHS. It is possible that organic materials (peat) observed during construction of MW-7 have served to limit the migration in groundwater as the chlorinated VOCs preferentially adsorb to the organic carbon present in the peat.

TRC has investigated potential preferential migration of groundwater in the vicinity of MW-7 into a north-south running storm sewer line that is located between MW-7 and NBHS. The findings of this investigation were not conclusive. While this may or may not provide a minor transport mechanism for chlorinated VOCs in groundwater, it does not represent a potential preferential pathway for chlorinated VOCs to enter indoor air at NBHS because there are no drain lines connecting the storm drain system to the interior of NBHS.

The groundwater impacts in the vicinity of MW-7 are not contiguous to and are separate from the VOC impacts in the vicinity of the mechanical room in the NBHS building, which are administratively tracked under RTN 4-22409.

Site investigations completed by TRC and others were consistent with the above summarized Conceptual Site Model and identified PCBs, PAHs, metals, dioxin-like compounds and a localized VOC area near MW-7.

Summary of Remedy

To bring the Site remedial activities to closure, the potential risks associated with Site soils were mitigated by remediation activities performed as Immediate Response Actions (IRAs) and a Release Abatement Measure (RAM). Over 7,956 cubic yards of impacted soil were removed as part of IRA and RAM activities to achieve the Partial Permanent Solution with Conditions. A Method 3 risk characterization was used to characterize human health risk at the Site, which determined that a Condition of No Significant Risk has been achieved for the top three feet of soil in unpaved areas.

Reason for Activity and Use Limitation

TRC performed a Method 3 Risk Characterization to evaluate the potential risk posed by conditions at the Site. The Risk Characterization concluded that the Site poses No Significant Risk to health, safety, public welfare, or the environment under current conditions where exposure to the soil is managed (since soil/fill remains at the Site below three feet and at shallower depths beneath exposure barriers). However, a Significant Risk would exist without such management restrictions. Therefore, in order to ensure that such exposures do not occur and that a condition of No Significant Risk be maintained for future activities and uses, an AUL is required to restrict certain activities and uses of the Property.

Barriers to Exposure

A portion of the Property is covered by paving, concrete or buildings. The impervious surfaces isolate and prevent exposure to the underlying fill. The majority of the exterior area of the facility is landscaped. Soils that contribute to EPCs posing a current human health risk in the top three feet of soil at the Site have been excavated and removed from the Site, leaving a three foot layer of soil with EPCs that do not pose a significant risk to human health.

In the solar park area in the northern portion of the Site, a permanent eight foot high chain-link security fence, with lockable access gates was installed to surround the solar park, impacted soil within the top three feet of the southern (landscaped) portion of the solar park was excavated and placed within the fenced portion of the solar park, and six inches of washed, crushed stone was placed across the solar park area to prevent fugitive dust release. Soils within the solar park area do not pose a risk to intermittent workers who may be present at the solar park performing periodic maintenance or repairs.

The potential risks associated with the Site soil were mitigated by the aforementioned risk reduction measures, including spot excavations and the installation of a security fence around the solar park area, and by placing an AUL to prevent potential exposure to soils below the top three feet in the landscaped areas outside the solar park fence, and restricting uses other than a solar park in the fenced solar park area.

Activities and Uses Consistent with the AUL Opinion

- (i) Use of the area as a solar park;
- (ii) Emergency repairs of existing utilities not to exceed a two day duration;
- (iii) Such other activities and uses not identified below as being Activities and Uses Inconsistent with the AUL; and
- (iv) Such other activities or uses which, in the Opinion of a Licensed Site Professional (LSP), licensed by the Commonwealth of Massachusetts

Board of Registration of Hazardous Waste Site Cleanup Professionals, shall present no greater risk of harm to health, safety, public welfare or the environment than the activities and uses set forth in this Section.

NBHS Campus, except Fenced Solar Park:

- (i) Any recreational, public, educational, institutional, commercial, industrial, or construction activities and uses that do not cause and/or result in the direct contact with, disturbance of, and/or relocation of the soil/fill located deeper than three feet below grade in landscaped areas or soil/fill at any depth below asphalt pavement, concrete pavement, sidewalks, court surfaces or building floors;
- (ii) Emergency repairs of existing utilities not to exceed a two day duration;
- (iii) Such other activities and uses not identified below as being Activities and Uses Inconsistent with the AUL; and
- (iv) Such other activities or uses which, in the Opinion of a Licensed Site Professional (LSP), licensed by the Commonwealth of Massachusetts Board of Registration of Hazardous Waste Site Cleanup Professionals, shall present no greater risk of harm to health, safety, public welfare or the environment than the activities and uses set forth in this Section.

Activities and Uses Inconsistent with the AUL Opinion

- (i) Uses other than the use as a solar park without a site-specific evaluation by an LSP:
- (ii) Excavation activities that exceed a two day duration that result in exposing soil/fill below the crushed stone located above the geotextile fabric without a site-specific evaluation by an LSP;
- (iii) Relocation of soil/fill from any depth below the geotextile fabric to another location within the Site without LSP review and approval;
- (iv) Gardening of agricultural crops for human consumption using Site soil:
- (v) Other private, public, commercial, industrial or construction activities or uses not permitted by Section 1 of this Notice that result in the direct contact with, or disturbance of, the soil/fill from depths below the crushed stone located above the geotextile fabric without supervision of an LSP and the Massachusetts Contingency Plan (310 CMR 40.0000) of MCP.

NBHS Campus, except Fenced Solar Park:

- (i) Single or multi-family residential use:
- (ii) Activities that result in exposing soil/fill below concrete floors, asphalt pavement, concrete pavement, sidewalks, court surfaces or other paved surfaces without a site specific evaluation by an LSP;
- (iii) Relocation of any soil/fill from depths greater than 3 feet from the Site to another location within the Site without LSP review and approval;
- (iv) Gardening of agricultural crops for human consumption using Site soil; and
- (v) Other private, public, commercial, industrial or construction activities or uses not permitted by Section 1 of this Notice that result in the direct contact with, or disturbance of, the soil/fill from depths greater than three feet from the Site without supervision of an LSP and the Massachusetts Contingency Plan (310 CMR 40.0000) of MCP.

Obligations and Conditions

- (i) Maintain the physical integrity of the crushed stone located above the geotextile fabric;
- (ii) Maintain the physical integrity of the fence surrounding the solar park;
- (iii) A Health and Safety Plan (HASP) must be prepared by a Certified Industrial Hygienist (CIH) or other qualified individual sufficiently trained in worker health and safety requirements and implemented prior to the commencement of any activity that is likely to disturb soil/fill immediately below the crushed stone located above the geotextile fabric, except for emergency utility work that is less than a two day duration. Activities conducted immediately below the crushed stone located above the geotextile fabric should be planned with an LSP. The HASP should specify the chemicals at the Site, the types of media present, the extent of impacts, the potential routes of exposure, the appropriate level of personal protective equipment, the type of monitoring required, worker safety monitoring, and hazard communication. Workers must be informed of the requirements of the HASP, and the plan must be available on-Site throughout the course of the project:
- (iv) Excavation/disturbance of soil/fill below the crushed stone located above the geotextile fabric that exceed a two day duration requires site-specific evaluation by an LSP, who will evaluate if such activity can proceed and maintain a condition of No Significant Risk.

(v) No fill/soil is to be relocated from the Site to an off-site (property) location without LSP review and approval.

NBHS Campus, except Fenced Solar Park:

- (i) Maintain the physical integrity of all asphalt pavement, concrete pavement, sidewalks, and court surfaces or other paved surfaces;
- (ii) Maintain the physical integrity of all interior building floors;
- (iii) A Health and Safety Plan (HASP) must be prepared by a Certified Industrial Hygienist (CIH) or other qualified individual sufficiently trained in worker health and safety requirements and implemented prior to the commencement of any activity that is likely to disturb soil/fill greater than 3 feet in landscaped areas or immediately below pavement within the AUL area except for emergency utility work that is less than a two day duration. Activities conducted greater than 3 feet in depth or immediately below pavement should be planned with an LSP. The HASP should specify the chemicals at the Site, the types of media present, the extent of impacts, the potential routes of exposure, the appropriate level of personal protective equipment, the type of monitoring required, worker safety monitoring, and hazard communication. Workers must be informed of the requirements of the HASP, and the plan must be available on-site throughout the course of the project;
- (iv) Excavation/disturbance of soil/fill below three feet and/or below concrete floors, asphalt pavement, concrete pavement, sidewalks, court surfaces or other paved surfaces and buildings requires site-specific evaluation by an LSP, who will evaluate if such activity can proceed and maintain a condition of No Significant Risk.
- (v) No fill/soil is to be relocated from the Site to an off-site (property) location without LSP review and approval.

Agreement to Reference Notice of AUL

In accordance with 310 CMR 40.1074(2)(h), the City of New Bedford and its successors and assigns agree to reference the AUL in all deeds, easements, mortgages, leases, licenses, occupancy agreements, or any other agreements which convey an interest in and/or a right to use the property subject to the AUL.

Procedures for Changing Permitted Site Activities and Uses

In accordance with 310 CMR 40.1074(2)(i), a description of the procedures to be followed to ensure that changes in permitted activities and/or uses meet the objectives of the AUL is provided below:

Any proposed changes in activities and/or uses within the AUL boundaries that may result in higher levels of exposure to oil and/or hazardous material than currently exist must be evaluated by an LSP. The LSP will render an Opinion, consistent with 310 CMR 40.1080, as to whether the proposed changes will result in a significant risk of harm to human health, safety, public welfare, or the environment. Any and all requirements set forth above to meet the objective of the AUL will be satisfied before any proposed changes in activity and/or use are initiated.

Prepared by:

TRC Environmental Corporation

David M. Sullivan, LSP	
Licensed Site Professional No.	1488
Date:	

EXHIBIT D Documentation of Signatory Authority

DOCUMENTATION OF SIGNATORY AUTHORITY

I, Jonathon F. Mitchell, do hearby certify that I am the Mayor of the City of New Bedford, and the Chairman of the School Committee for the City of New Bedford, a duly elected School Committee for the City of New Bedford, having a principal office at 455 County Street, New Bedford, Massachusetts, and that I have been duly authorized and am presently serving in that capacity in accordance with the laws of the Commonwealth of Massachusetts and the rules and regulations of the New Bedford School Committee.

	Mayor / Chairman
	Mayor / Chairman
	THE COMMONWEALTH OF MASSACHUSETTS
	_,SS
personally appeared John identification, which was governmental agency, oat	7, 2017 before me, the undersigned notary public. F. Mitchell, proved to me though satisfactory evidence of photographic identification with a signature issued by a federal or state in or affirmation of a credible witness, personal knowledge of the son whose name is signed on the preceding or attached documents in
	(Official seal)
	, Notary Public
	My Commission Expires:

Notification to Property Owner(s)

310 CMR 40.1074(1)(e)



Wannalancit Mills 650 Suffolk Street Lowell, MA 01854

978.970.5600 PHONE 978.453.1995 FAX

www.TRCsolutions.com

.2017

Certified Mail, Return Receipt Requested

Mayor Jonathan F. Mitchell City of New Bedford 133 William Street New Bedford, Massachusetts 02740

Re: Activity and Use Limitation (AUL) Notification New Bedford High School New Bedford, Massachusetts RTN 4-15685

Dear Mayor Mitchell:

The purpose of this letter is to inform you that a Notice of Activity and Use Limitation (AUL) will be placed on the property at New Bedford in New Bedford, Massachusetts (New Bedford High School). New Bedford High School is part of the Site being managed under RTN 4-15685. The Massachusetts Contingency Plan (MCP) regulations (310 CMR 40.1074(1)(e)) require notification to all current holders of any record interest in the property subject to the proposed AUL. It is our understanding that other than the City of New Bedford, there are no other record interest holders on the property.

The soil impacts at the New Bedford High School Site include lead, arsenic, cadmium, polyaromatic hydrocarbons (PAHs), polychlorinated biphenys (PCBs) and dioxin. Remedial response actions consisting soil excavations and exposure barriers designed to achieve exposure point concentrations (EPCs) acceptable for current and foreseeable future uses in the top three feet of soil were conducted at the Site.

In _____2017, a Partial Permanent Solution will be submitted on behalf of the City of New Bedford for the New Bedford High School Campus. The Permanent Solution uses an AUL placed on the property to limit exposure to soil/fill and limit certain types of activities (e.g., residential use).

TRC's risk characterization concluded that the top 3 feet of soil, deeper soil horizons, and paved/covered surfaces must be managed consistent with the AUL prepared for the Site under a

progressive soil management approach that provides considerable flexibility for day-to-day activities at New Bedford High School.

Subsequent to implementation of the AUL at New Bedford High School, the following are *permitted* activities.

Fenced Solar Park:

- (i) Use of the area as a solar park:
- (ii) Emergency repairs of existing utilities not to exceed a two day duration:
- (iii) Such other activities and uses not identified below as being Activities and Uses Inconsistent with the AUL; and
- (iv) Such other activities or uses which, in the Opinion of a Licensed Site Professional (LSP), licensed by the Commonwealth of Massachusetts Board of Registration of Hazardous Waste Site Cleanup Professionals, shall present no greater risk of harm to health, safety, public welfare or the environment than the activities and uses set forth in this Section.

NBHS Campus, except Fenced Solar Park:

- (i) Any recreational, public, educational, institutional, commercial, industrial, or construction activities and uses that do not cause and/or result in the direct contact with, disturbance of, and/or relocation of the soil/fill located deeper than three feet below grade in landscaped areas or soil/fill at any depth below asphalt pavement, concrete pavement, sidewalks, court surfaces or building floors;
- (ii) Emergency repairs of existing utilities not to exceed a two day duration:
- (iii) Such other activities and uses not identified below as being Activities and Uses Inconsistent with the AUL; and
- (iv) Such other activities or uses which, in the Opinion of a Licensed Site Professional (LSP), licensed by the Commonwealth of Massachusetts Board of Registration of Hazardous Waste Site Cleanup Professionals, shall present no greater risk of harm to health, safety, public welfare or the environment than the activities and uses set forth in this Section.

Subsequent to implementation of the AUL at Walsh Field, the following are *prohibited* activities.

- (i) Uses other than the use as a solar park without a site-specific evaluation by an LSP:
- (ii) Excavation activities that exceed a two day duration that result in exposing soil/fill below the crushed stone located above the geotextile fabric without a site-specific evaluation by an LSP;
- (iii) Relocation of soil/fill from any depth below the geotextile fabric to another location within the Site without LSP review and approval:
- (iv) Gardening of agricultural crops for human consumption using Site soil:
- Other private, public, commercial, industrial or construction activities or uses not permitted by Section 1 of this Notice that result in the direct contact with, or disturbance of, the soil/fill from depths below the crushed stone located above the geotextile fabric without supervision of an LSP and the Massachusetts Contingency Plan (310 CMR 40.0000) of MCP.

NBHS Campus, except Fenced Solar Park:

- (i) Single or multi-family residential use:
- (ii) Activities that result in exposing soil/fill below concrete floors, asphalt pavement, concrete pavement, sidewalks, court surfaces or other paved surfaces without a site specific evaluation by an LSP:
- (iii) Relocation of any soil/fill from depths greater than 3 feet from the Site to another location within the Site without LSP review and approval:
- (iv) Gardening of agricultural crops for human consumption using Site soil; and
- Other private, public, commercial, industrial or construction activities or uses not permitted by Section 1 of this Notice that result in the direct contact with, or disturbance of, the soil/fill from depths greater than three feet from the Site without supervision of an LSP and the Massachusetts Contingency Plan (310 CMR 40.0000) of MCP.

The following outlines *obligations and conditions* under the AUL.

- (i) Maintain the physical integrity of the crushed stone located above the geotextile fabric;
- (ii) Maintain the physical integrity of the fence surrounding the solar park;

- (iii) A Health and Safety Plan (HASP) must be prepared by a Certified Industrial Hygienist (CIH) or other qualified individual sufficiently trained in worker health and safety requirements and implemented prior to the commencement of any activity that is likely to disturb soil/fill immediately below the crushed stone located above the geotextile fabric, except for emergency utility work that is less than a two day duration. Activities conducted immediately below the crushed stone located above the geotextile fabric should be planned with an LSP. The HASP should specify the chemicals at the Site, the types of media present, the extent of impacts, the potential routes of exposure, the appropriate level of personal protective equipment, the type of monitoring required, worker safety monitoring, and hazard communication. Workers must be informed of the requirements of the HASP, and the plan must be available on-Site throughout the course of the project;
- (iv) Excavation/disturbance of soil/fill below the crushed stone located above the geotextile fabric that exceed a two day duration requires site-specific evaluation by an LSP, who will evaluate if such activity can proceed and maintain a condition of No Significant Risk.
- (v) No fill/soil is to be relocated from the Site to an off-site (property) location without LSP review and approval.

NBHS Campus, except Fenced Solar Park:

- (i) Maintain the physical integrity of all asphalt pavement, concrete pavement, sidewalks, and court surfaces or other paved surfaces:
- (ii) Maintain the physical integrity of all interior building floors:
- (iii) A Health and Safety Plan (HASP) must be prepared by a Certified Industrial Hygienist (CIH) or other qualified individual sufficiently trained in worker health and safety requirements and implemented prior to the commencement of any activity that is likely to disturb soil/fill greater than 3 feet in landscaped areas or immediately below pavement within the AUL area except for emergency utility work that is less than a two day duration. Activities conducted greater than 3 feet in depth or immediately below pavement should be planned with an LSP. The HASP should specify the chemicals at the Site, the types of media present, the extent of impacts, the potential routes of exposure, the appropriate level of personal protective equipment, the type of monitoring required, worker safety monitoring, and hazard communication. Workers must be informed of the requirements of the HASP, and the plan must be available on-site throughout the course of the project;

- (iv) Excavation/disturbance of soil/fill below three feet and/or below concrete floors, asphalt pavement, concrete pavement, sidewalks, court surfaces or other paved surfaces and buildings requires site-specific evaluation by an LSP, who will evaluate if such activity can proceed and maintain a condition of No Significant Risk.
- (v) No fill/soil is to be relocated from the Site to an off-site (property) location without LSP review and approval.

Action Required by the Property Owner

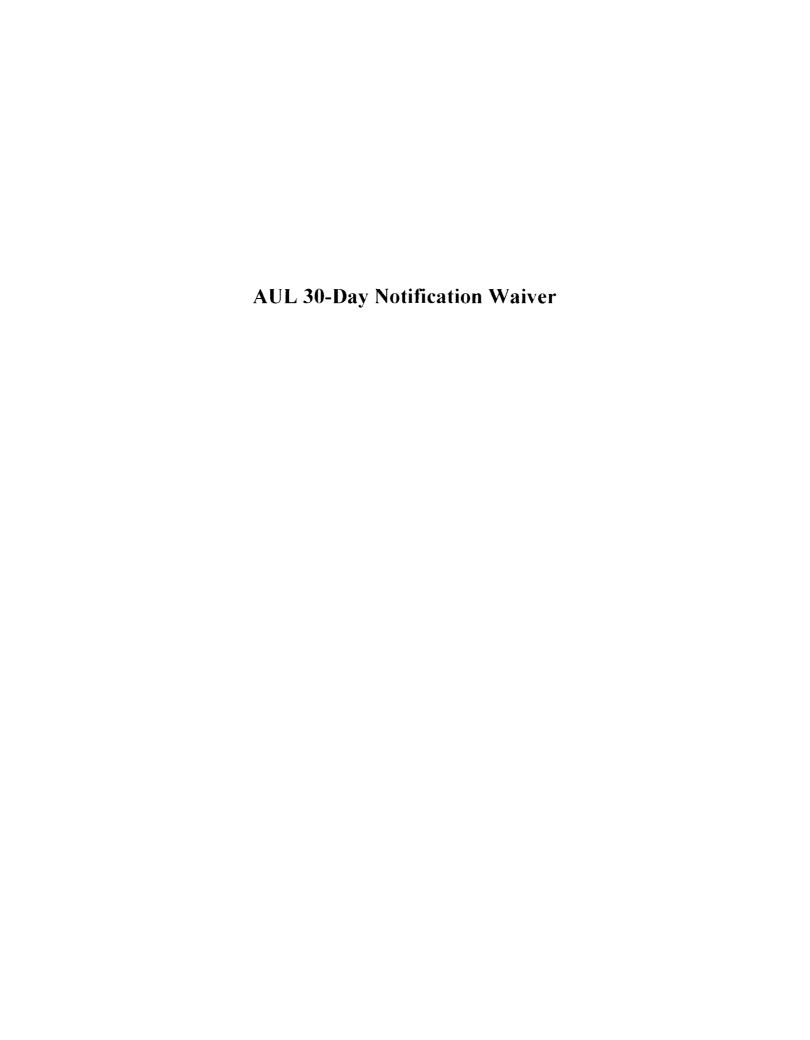
MCP regulations require a 30-day notification of the anticipated AUL restrictions to be sent to the current holders of record interest, prior to recording the AUL restrictions on the deed. However, the MCP also allows a waiver of the 30-day waiting period, providing the party receiving the notification provides a written waiver of the 30-day waiting period. The AUL will be recorded on the property, on or before, _____2017

Please sign and return the attached AUL Notification Waiver Form to my attention ______2017. If you have any questions concerning this AUL notification, please contact TRC at (978) 656-3565. Thank you.

Sincerely,

TRC Environmental Corporation

David M. Sullivan, LSP Senior Project Manager



AUL 30-DAY NOTIFICATION WAIVER

Ι,	, acknowledge that on	, the City of New Bedford,
Massachusetts receiv following property:	ved a notice that an Activity and Use I	Limitation (AUL) will be placed on the
New 1	Bedford High School	
New 1	Bedford, Massachusetts	
310 CMR 40.1074(f)		gulations (310 CMR 40.1074(1)(e) and ronmental Corporation, by the owner, he AUL waiting period.
Signature	Date	
Name (Printed)		
Title		