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Memorandum

To: The Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

From: David M. Sullivan, LSP, CHMM, TRC Environmental Corporation

Subject: Revised URAM Submittal for the Parker Street Waste Site (PSWS), New Bedford, Massachusetts

Date: December 15, 2009

CC: Scott Alfonse, Director of Environmental Stewardship, City of New Bedford
David Fredette, PE, Dept. of Environmental Stewardship, City of New Bedford

Introduction

Per direction of Molly Cote of the Massachusetts Department of Environmental Protection (MassDEP), TRC Environmental Corporation (TRC) prepared this memorandum to amend and update the Utility-related Abatement Measure (URAM) Plan submitted to MassDEP on September 22, 2009 for Release Tracking Number (RTN) 4-15685, regarding directional drilling and force main installation at the Parker Street Waste Site (PSWS). The following presents an email correspondence between TRC and MassDEP, the United States Environmental Protection Agency (EPA), the City of New Bedford (the City), and others. The following copy of recent email correspondence details the amendments to the original URAM submission (September 22, 2009).

From: Sullivan, Dave (Lowell,MA-US)
Sent: Thursday, December 10, 2009 1:23 PM
To: 'Tisa.Kimberly@epamail.epa.gov'; 'molly.cote@state.ma.us'; Martin, Gerard (DEP); David Fredette; 'Phil Lasker'; Saunders, Jeffry (Lowell,MA-US)
Cc: 'Scott Alfonse'; Lawrence Oliveira; 'billdocarmo@comcast.net'
Subject: New McCoy Field - Force Main Project - Post-Teleconference Summary
Importance: High

To all:

This e-mail was prepared by TRC as discussed at during our December 9, 2009 teleconference to summarize our understanding of the work and outline the path forward.

As noted in TRC's Release Abatement Measure (RAM) Plan for the New Andre McCoy Field (Former Keith Junior High School) soil removal in support of risk reduction and construction activities submitted in April 2009 and the associated Soil Management Plan (SMP), the City of New Bedford (City) had undertaken plans to horizontally directionally drill a force main storm sewer line that would tie into the existing City infrastructure. The line is designed to connect a pump station

being built as part of the New McCoy Field Athletic Complex into an existing storm sewer line within Hathaway Boulevard. The utility installation work will take place within the boundaries of the Parker Street Waste Site (PSWS), therefore a Utility-Related Abatement Measure (URAM) was submitted to the Massachusetts Department of Environmental Protection (MassDEP) on September 22, 2009 (RTN 4-15685) pursuant to 310 CMR 40.0460 of the Massachusetts Contingency Plan (MCP). The URAM was submitted prior to initiation of force main drilling activities and was based on the information available to TRC at that time.

Proposed minor design modifications to the force main (see attached Figure 1), including a slight adjustment of the force main pathway, the addition of drilling entry/exit point excavations and an increase in the diameter of the force main to 8-inches, were identified to the City. The City notified the United States Environmental Protection Agency (EPA) of the proposed directional drilling activities in a letter to Kimberly Tisa dated October 26, 2009. The letter outlined the proposed design changes and outlined evidence that the installation activities and associated displacement of soil did not qualify for regulation as PCB Remediation Waste or require classification and disposal under EPA's PCB regulations under 40 CFR Part 761. Subsequently, the EPA issued a response letter to the City dated November 12, 2009 confirming that the soils likely to be encountered during implementation of the URAM, as it was defined in the City's October 2009 letter, did not meet the definition of PCB Remediation Waste and therefore the work did not require EPA approval. However, additional modifications to the scope of work might require EPA approval and URAM activities are subject to EPA review and oversight.

Following a meeting between the City, construction contractor (David W. White & Sons) and the directional drilling subcontractor (i.e., Jade Horizontal Directional Drilling), additional details of the directional drilling activities presented to TRC by the City. TRC summarized that information and presented it to the EPA and MassDEP via email on December 6, 2009. Following review of to the updated proposed activities, the scope of work was discussed in further detail via email and during a conference call on December 9, 2009 between TRC, the City, EPA, MassDEP and David W. White & Sons. This e-mail summarizes the understanding reached during the December 9, 2009 conference call:

- **Exploratory Test Pit Excavation** – An exploratory test pit will be excavated adjacent to the sidewalk east of Hathaway Boulevard at the intersection with Greenwood Street (see attached Figure 1). The test pit will serve to properly locate (particularly the depth below grade) the electrical and communication duct banks running along the eastern side of the Hathaway Boulevard in line with the force main route. The duct banks must be located prior to initiation of drilling activities to facilitate force main installation. The work will require excavation of a single small and shallow test pit. The excavated material will be temporary stockpiled on and covered with polyethylene sheeting on the paved sidewalk adjacent to Hathaway Boulevard. The work area will be temporarily secured with caution tape, traffic cones, etc. Following identification of the existing underground utilities, the test pit will be immediately backfilled with the stockpiled material. TRC will provide environmental oversight during the test pit activities, including fugitive dust monitoring (i.e., upwind, work zone and downwind real-time monitoring with DustTrak™ units or equivalent) and work zone air monitoring with a photoionization detector (PID) as noted

in the above referenced RAM Plan. It is anticipated that this work will take less than one day to complete.

- **Enclosed Work Area / Staging Area** – A temporary fence will be erected to enclose a work area / staging area north of Parker Street and south of New Bedford High School (NBHS), specifically the pool area (i.e., F-Block). The proposed work area / staging area will be enclosed by a temporary chain-link fence used to enclose an entry/exit point excavation, drill rig, support truck, Vac-Rig, piping, temporary soil stockpiles (detailed further below) and collected drilling fluids (detailed further below). Attached Figure 1 shows the approximate location and extent of the proposed work area / staging area. The temporary fence posts will be directly driven (no soil excavation involved) by David W. White & Sons or their selected subcontractor. Steel plates will be used throughout a large portion of the work area/staging area to minimize disturbance to surface soils and the only access gate will be from Parker Street. The access gate will enter onto an existing approximately 8-foot wide asphalt sidewalk to minimize surface soil disturbance as a result of vehicle traffic to and from the work area / staging area. The steel plates will be used to cover grass in those areas most likely to be disturbed by construction activities (i.e., those areas impacted by heavy vehicle traffic, equipment staging, Vac-Rig movement, stockpiling, roll-off staging, etc.). Temporary fence installation will begin as early as December 11, 2009 consistent with verbal approval granted by MassDEP during the December 9, 2009 conference call.
- **Pipeline Pathway** – The proposed pathway of the pipeline and the entry/exit point excavation within the enclosed work area / staging area has shifted slightly northeast to accommodate a direct drilling line to the Hathaway Boulevard exit point / tie-in. This eliminates the need for an entry/exit point excavation adjacent to Hathaway Boulevard, as previously proposed, in favor of a direct tie-in to the existing infrastructure.
- **Updated Discussion Concerning TSCA Applicability** – Based on the available soil data, the highest total PCB concentration within the work area / staging area is 1.5 mg/kg. The excavation is within the temporary enclosure and the excavation location has only been adjusted approximately 20-30 feet. It is TRC's opinion that the EPA decision from the November 22, 2009 EPA response letter is still applicable (i.e., the soil is not classified as a PCB Remediation Waste as defined in 40 CMR Part 761). The soils in this area are less than 50 mg/kg and are pre-1978. However, as discussed during the December 9, 2009 conference call, drilling activities will not proceed without approval/concurrence by the EPA and MassDEP. Note that the only soil sample analytical results in excess of MCP standards are for metals (i.e., cadmium, chromium and lead) in a few locations. Most of the results in excess of standards are from the 1 to 3 foot or 1.5 to 3 foot depth samples. One result is from a sample that indicates a depth of 0.5 to 3 feet in depth. Please see the attached table that summarizes available soil analytical data from within the proposed staging area.
- **Temporary Soil Stockpiling** – All of the soils excavated in association with drilling activities (with the exception of those associated with the test pit noted above) will be staged on polyethylene sheeting and covered with polyethylene sheeting within the

enclosed work area / staging area in accordance with the existing RAM Plan and associated SMP. This includes soils from Walsh Field entry/exit point excavation, work area / staging area excavation and Hathaway Boulevard tie-in excavation. The material will be segregated based on the excavation from which it was removed. Each of the stockpiles will be secured with hay bales and surrounded with hay bales to form a secure barrier and mitigate fugitive soil runoff. The temporary fence enclosure will remain in place until all materials destined for off-site management have been removed from the site and eligible are returned to the excavation.

- **Collected Drill Fluids & Cuttings** – The material displaced by the drilling process will consist of a mixture of drill fluids (i.e., bentonite slurry) and soil material that will be saturated when displaced. This material will be collected with the 450-gallon capacity Vac-Rig at entry/exit point excavations. The material will be transported to the work area/staging area (see attached Figure 1) for temporary storage. The drilling fluids will be placed in roll-off containers lined with an impermeable material (e.g., fitted polyethylene liner) that are staged on steel plates. The spent fluids may be mixed with sand to help firm up the material to help facilitate offsite disposal. Following this process, the material will be appropriately sampled and characterized by a laboratory and disposed of offsite through David W. White & Sons support environmental support contractor (i.e., JM Environmental). No onsite dewatering consisting of draining or decanting to the ground surface/groundwater is planned. David W. White & Sons environmental support contractor will evaluate and recommend management/disposal options. The temporary fence enclosure will remain in place until all displaced materials have been appropriately managed. Note that entry/exit point excavations are relatively widespread spatially, requiring the Vac-Rig to move both within and outside the enclosed work area / staging area.
- **Staging Area Drilling Access Point/Pilot Hole** – Horizontal directional drilling will begin within the enclosed work area / staging area on the NBHS portion of the force main pathway. The drill rig will initially be oriented facing northwest toward Hathaway Boulevard surrounded by all necessary support equipment (see attached Figure 1). It is necessary to set the drill rig in a shallow (i.e., 0.5 to 1.0 foot deep) excavation approximately 40-feet southeast of the entry/exit point excavation. The 40-foot distance allows the drilling to proceed at a downward angle in order to reach the desired depth (approximately 5-feet deep) at the entry/exit point excavation location and beyond. Soil material associated with the shallow drill rig excavation will be temporarily stockpiled in the staging area following the procedures noted above. The drilling contractor plans to drill a 4-inch diameter pilot hole northwest towards Hathaway Boulevard that will ultimately tie-in the force main to the existing City sewer system.
- **Hathaway Boulevard Exit Excavation** – The pilot hole will be drilled to an exit point excavation adjacent to the existing manhole in Hathaway Boulevard where the tie-in to the existing sewer will be made. At this excavation the Vac-Rig will be used to collect cuttings/drill fluid/slurry from the pilot hole. All soil material displaced from this excavation will be temporarily stockpiled (as noted above) and targeted for characterization and offsite disposal. This material must be transported offsite for

disposal as it will be necessary to backfill the Hathaway Boulevard excavation with material specified by the City's Department of Public Infrastructure (flowable fill).

▪ **Force-Main Pipe Installation –**

- Progress of the Work – The installation of the force main will begin on the NBHS Campus, proceed across Parker Street to Walsh Field, then from New McCoy Field to the Walsh Field.
- Initiation of Pipe Installation - Following completion of the above described pilot hole, they will setup to install a portion of the pipe through the pilot hole.
- Threading/Reaming - The 8-inch diameter pipe will be threaded through the pilot hole as a reaming head expands the hole to 12-inches in diameter. Despite the greater size of the reaming head, the drillers have stated that a large quantity of excess material is not generated because the annular space fills as the pipe is advanced. Drilling fluids would again be collected with the above-mentioned Vac-Rig.
- Receiving End on NBHS Campus - The pipe would be received at the point within the fenced staging area. The rig would then be moved so that drilling could continue across Parker Street and beneath Walsh Field. Please note that Walsh Field is secured by a permanent perimeter fence and is currently not being used by students for after school activities. However, the excavation and work area within Walsh Field will be temporarily secured with orange snow fence as a precaution.
- Receiving End on Walsh Field - The pipe would be received at the small excavation near the Walsh Field bathrooms. Again the drilling fluids and displaced saturated soils will be collected with the Vac-Rig.
- Final Leg of Installation between Walsh Field and New McCoy Field - The final section of pipe would be advanced from an excavation within McCoy Field toward the Walsh Field excavation. Please note that McCoy Field is an active construction area that is already secured with temporary fencing.

- **Pipe Joints/Fusing** – Once the pipe is installed, the individual sections will be fused at each of the excavations (including clean-outs for the future use of the Department of Public Infrastructure, no other permanent structures will be installed).

- **Excavation Backfill** – In accordance with the URAM, to the degree feasible the entry/exit point excavations will be backfilled with the originally excavated material. As previously noted, material from individual excavations will not be combined for backfilling purposes. Excess material will be sampled and disposed of as noted in the October 26, 2009 notification letter. The upper 6-inches of each excavation will likely be completed with clean loam to properly restore the lawn. Any loam material that is used will be properly documented by David W. White & Sons as uncontaminated prior to use onsite. The parameters required for testing, if such data is not already provided by the soil supplier, are outlined in the previously referenced RAM Plan and it is assumed that testing would be facilitated by David W. White & Sons support contractor (i.e., JM

Environmental). Alternatively, the top six inches of loam from the excavation could be set aside for this purpose as long as it is return to its original location.

- **Displaced Pipeline Volume** - The drilling contractor estimates that approximately 7,000 gallons (i.e., approximately 32 yd³) of drilling fluids/slurry/soil mixture will be removed from the pipeline corridor and require offsite disposal (this estimate would only change significantly if large amounts of clay are encountered along the pipeline route, which is not anticipated). Running into clay could increase this volume by a factor of three, however, to date TRC has not encountered clays in the depth ranges and at the locations proposed for this work. As previously noted, the excess material will be managed in temporarily staged onsite roll-offs. Following stabilization with sand and proper disposal characterization for those parameters outlined in the RAM Plan, the material will be transported offsite for disposal at a properly permitted receiving facility. Once again, it is anticipated that David W. White & Sons support contractor will facilitate the disposal arrangements.
- **Environmental Oversight** – TRC will provide environmental oversight during the duration of drilling activities which involve open excavations, stockpile and displaced volume management and backfilling activities. Environmental monitoring will follow those procedures detailed in the RAM Plan, including fugitive dust monitoring using DustTrak™ units, or equivalent, equipped with size-selective inlet for particles of 10 micrometers in diameter or less (PM₁₀). Background samples will be collected for at least 15 minutes at each location prior to the start of site activities. This instrumentation has an accuracy of 0.001 mg/m³. The dust monitoring instruments will be placed in weatherproof cases with an omni-directional probe to minimize wind interference. The dust monitoring instruments will be zeroed daily before use and at the end of the day. Data will be logged at 60-second intervals and will be monitored periodically by field personnel during URAM-related excavation activities. Data will be downloaded daily. Fugitive dust monitors will be placed upwind, within (i.e., work zone) and downwind of the enclosed work area / staging area in a. Monitoring in this area will occur during all excavation and stockpile management activities. In addition, monitors will be placed in close proximity to any additional open excavations during work in those areas. The additional units will be used to monitor fugitive dust associated with those specific excavations. VOC air monitoring will be performed using a PID to monitor for the presence of VOCs within the work area breathing zone. Based on previously existing site data, significant VOC emissions are not expected during construction, but field monitoring of the breathing zone for VOCs will be conducted as a precaution.
- **Duration of the Work** – It is anticipated that the drilling effort will take a total of 6 days to complete.
- **Public Notification** – MassDEP emphasized that the City should provide notification to the local citizens and activists groups regarding the proposed work. TRC assumes the City will conduct the outreach noted by MassDEP.

Memorandum

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Based on the above, TRC's believes that the work involves displacement of soils in areas similar in regulatory classification to those outlined in EPA's November 12, 2009 response letter. The modifications proposed by the building contractor actually eliminates one of the previously identified areas of excavation. Furthermore, based on the presently available analytical data, total PCB concentrations in the work area continue to be less than 50 mg/kg and the soils are classifiable as pre-1978 and therefore do not meet the definition of PCB Remediation Waste as defined in 40 CFR Part 761. As a result the work can be managed under the MCP.

TRC's also concurs with MassDEP that additional documentation appended to the URAM currently on file with the MassDEP is a suitable mechanism under which to proceed with this work. Environmental oversight and soil management will be conducted in accordance with existing RAM Plan and associated SMP and as described herein. Scope-specific activities will occur in accordance with the methods detailed above and all work will be subject to EPA and MassDEP approval.

Based on the December 9, 2009 conference call, David W. White will only proceed with installation of the work area / staging area fence at this time (presently scheduled for December 11, 2009). All additional activities (including the utility test pit work) will begin pending approval.

Please let me know if you have any questions or concerns or require any additional information. Please notify me as soon as possible if this correspondence is not sufficient for your needs or does not accurately reflect your understanding. With MassDEP's concurrence, this information can be appended to the URAM filing on e-DEP.

Sincerely,

-Dave

David M. Sullivan, LSP, CHMM
Senior Project Manager



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Table 1
Summary of Available Soil Analytical Data Within Proposed Staging Area
Parker Street Waste Site
New Bedford, Massachusetts

Analysis	Analyte	Area Code:						4	4	4	4	4	4	4	4	4	4	4	4	
		Sample Location:						HG44	HH43	HH43+HI42	HH44	HH44+HI44	HI42	HI43	HI44	HJ42	HJ42+HF31	HJ44	HJ44+HI43	
		Sample Depth (ft.):						1-3	1.5-3	1.5-3	2.5-3	1-3	2.5-3	1.5-3	1-3	2.5-3	0.5-3	2.75-3	1.5-3	
Sample Date:						12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1**	TSCA													
VOCs																				
(mg/kg)	Acetone	50	400	50	400	6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Tertiary Amyl Methyl Ether	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzene	30.0	30	200.0	200	2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Bromobenzene	NS	NS	NS	NS	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Bromochloromethane	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Bromodichloromethane	0.1	20	0.1	100	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Bromoforn	1	200	1	800	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Bromomethane	0.5	30	0.5	30	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	sec-Butylbenzene	100(1)	100(1)	500(1)	500(1)	100(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	n-butylbenzene	100(1)	100(1)	500(1)	500(1)	100(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	tert-butylbenzene	100(1)	100(1)	500(1)	500(1)	100(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Carbon disulfide	NS	NS	NS	NS	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Carbon tetrachloride	5	10	5	60	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Chlorobenzene	3.0	100	3.0	100	1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Dibromochloromethane	0.03	20	0.03	100	0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Chloroethane	NS	NS	NS	NS	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Chloroform	0.3	400	0.3	800	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Chloromethane	NS	NS	NS	NS	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2-Chlorotoluene	NS	NS	NS	NS	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4-Chlorotoluene	NS	NS	NS	NS	100.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	10.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1,2-Dibromoethane	0.1	0.7	0.1	4	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Dibromomethane	NS	NS	NS	NS	500.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1,3-Dichlorobenzene	40.0	100	40.0	500	1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1,2-Dichlorobenzene	30	300	30	300	9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1,4-Dichlorobenzene	4	50	4	300	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Dichlorodifluoromethane	NS	NS	NS	NS	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1,1-Dichloroethane	5	500	5	1,000	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1,2-Dichloroethane	0.1	10	0.1	90	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1,1-Dichloroethene	40	500	40	1,000	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	cis-1,2-Dichloroethene	0.40	100	0.40	500	0.300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	trans-1,2-Dichloroethene	1	500	1	1,000	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1,2-Dichloropropane	0.1	10	0.1	100	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1,3-Dichloropropane	NS	NS	NS	NS	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2,2-Dichloropropane	NS	NS	NS	NS	0.1(2)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1,1-Dichloropropene	NS	NS	NS	NS	0.01(3)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	cis-1,3-Dichloropropene	0.4(4)	9(4)	0.4(4)	70(4)	0.01(4)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	trans-1,3-Dichloropropene	0.4(4)	9(4)	0.4(4)	70(4)	0.01(4)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Diethyl ether	NS	NS	NS	NS	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Diisopropyl ether	NS	NS	NS	NS	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1,4-Dioxane	6	70	6	500	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Ethyl Tertiary Butyl ether	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Ethylbenzene	500	500	1,000	1,000	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Hexachlorobutadiene	6	6	90	90	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2-Hexanone	NS	NS	NS	NS	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Isopropylbenzene	100(1)	100(1)	500(1)	500(1)	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	p-Isopropyltoluene	100(1)	100(1)	500(1)	500(1)	100(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2-Butanone	50	400	50	400	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4-Methyl-2-pentanone	50	400	50	400	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Methyl tert-butyl ether	100	100	100	500	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Methylene chloride	20	200	20	900	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Naphthalene	40	500	40	1,000	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	n-Propylbenzene	100(1)	100(1)	500(1)	500(1)	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Styrene	4	30	4	200	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1,1,1,2-Tetrachloroethane	0.1	7	0.1	100	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1,1,2,2-Tetrachloroethane	0.02	0.8	0.02	10	0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Tetrachloroethene	10	30	10	200	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Tetrahydrofuran	NS	NS	NS	NS	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Toluene	500	500	1,000	1,000	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1,2,4-Trichlorobenzene	70	500	70	900	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1,2,3-Trichlorobenzene	400^	20^	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Table 1
Summary of Available Soil Analytical Data Within Proposed Staging Area
Parker Street Waste Site
New Bedford, Massachusetts

Analysis	Analyte	Area Code:						4	4	4	4	4	4	4	4	4	4	4	4
		Sample Location:						4	4	4	4	4	4	4	4	4	4	4	4
		Sample Depth (ft.):						4	4	4	4	4	4	4	4	4	4	4	4
Sample Date:						4	4	4	4	4	4	4	4	4	4	4	4	4	
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1**	TSCA	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004
	1,1,1-Trichloroethane	500	500	600	1,000	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1,2-Trichloroethane	2	4	2	60	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	2	90	2	700	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	NS	NS	NS	NS	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,3-Trichloropropane	NS	NS	NS	NS	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trimethylbenzene	100(1)	100(1)	500(1)	500(1)	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,3,5-Trimethylbenzene	100(1)	100(1)	500(1)	500(1)	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vinyl chloride	0.6	0.6	0.7	4	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	o-Xylene	300	500	300	1,000	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	m & p-Xylene	300	500	300	1,000	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (mg/kg)	Dibenzofuran	10^	10^	NS	NS	100	NA	NA	NA	0.064 U	NA	0.059 U	NA	NA	NA	NA	0.12	NA	0.06 U
	2-Methylnaphthalene	80	300	80	500	0.7	NA	NA	NA	0.064 U	NA	0.059 U	NA	NA	NA	NA	0.11	NA	0.06 U
	Acenaphthene	1,000	1,000	3,000	3,000	4	NA	NA	NA	0.064 U	NA	0.059 U	NA	NA	NA	NA	0.27	NA	0.06 U
	Acenaphthylene	600	10	600	10	1	NA	NA	NA	0.064 U	NA	0.11	NA	NA	NA	NA	0.077	NA	0.06 U
	Anthracene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	0.064 U	NA	0.21	NA	NA	NA	NA	0.59	NA	0.14
	Benzo(a)anthracene	7	7	40	40	7	NA	NA	NA	0.15	NA	1.2	NA	NA	NA	NA	1.8	NA	0.51
	Benzo(a)pyrene	2	2	4	4	2	NA	NA	NA	0.064 U	NA	1.3	NA	NA	NA	NA	1.7	NA	0.5
	Benzo(b)fluoranthene	7	7	40	40	7	NA	NA	NA	0.2	NA	1.7	NA	NA	NA	NA	2.4	NA	0.71
	Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	0.064 U	NA	0.43	NA	NA	NA	NA	0.87	NA	0.27
	Benzo(k)fluoranthene	70	70	400	400	70	NA	NA	NA	0.064 U	NA	0.52	NA	NA	NA	NA	0.77	NA	0.25
	Chrysene	70	70	400	400	70	NA	NA	NA	0.16	NA	1.1	NA	NA	NA	NA	1.4	NA	0.44
	Dibenz(a,h)anthracene	0.7	0.7	4	4	1	NA	NA	NA	0.064 U	NA	0.059 U	NA	NA	NA	NA	0.06 U	NA	0.06 U
	Fluoranthene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	0.27	NA	2.1	NA	NA	NA	NA	3.4	NA	0.92
	Fluorene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	0.064 U	NA	0.059 U	NA	NA	NA	NA	0.26	NA	0.06 U
	Indeno(1,2,3-cd)pyrene	7	7	40	40	7	NA	NA	NA	0.064 U	NA	0.47	NA	NA	NA	NA	0.87	NA	0.06 U
	Naphthalene	40	500	40	1,000	4	NA	NA	NA	0.064 U	NA	0.059 U	NA	NA	NA	NA	0.11	NA	0.06 U
	Phenanthrene	500	500	1,000	1,000	10	NA	NA	NA	0.22	NA	0.93	NA	NA	NA	NA	2.8	NA	0.7
	Pyrene	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	0.41	NA	2.7	NA	NA	NA	NA	7.1	NA	1.5
PCBs (mg/kg)	Aroclor 1016/1242	2	2	3	3	2	1	0.058 U	0.067 U	NA	0.053 U	NA	0.056 U	1.31 U	1.12 U	0.07 U	NA	0.056 U	NA
	Aroclor 1016	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aroclor 1221	2	2	3	3	2	1	0.116 U	0.134 U	NA	0.107 U	NA	0.112 U	2.63 U	2.24 U	0.141 U	NA	0.113 U	NA
	Aroclor 1232	2	2	3	3	2	1	0.058 U	0.067 U	NA	0.053 U	NA	0.056 U	1.31 U	1.12 U	0.07 U	NA	0.056 U	NA
	Aroclor 1242	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aroclor 1248	2	2	3	3	2	1	0.058 U	0.067 U	NA	0.053 U	NA	0.056 U	1.31 U	1.12 U	0.07 U	NA	0.056 U	NA
	Aroclor 1254	2	2	3	3	2	1	0.565	0.899	NA	0.157	NA	0.538	1.31 U	1.5	0.94	NA	1.13	NA
	Aroclor 1260	2	2	3	3	2	1	0.058 U	0.067 U	NA	0.053 U	NA	0.056 U	1.31 U	1.12 U	0.07 U	NA	0.056 U	NA
	Aroclor 1262	2	2	3	3	2	1	0.279	0.292	NA	0.053 U	NA	0.155	1.31 U	1.12 U	0.277	NA	0.193	NA
	Aroclor 1268	2	2	3	3	2	1	0.058 U	0.067 U	NA	0.053 U	NA	0.056 U	1.31 U	1.12 U	0.07 U	NA	0.056 U	NA
	Total PCBs	2	2	3	3	2	1	0.844	1.191	NA	0.157	NA	0.693	2.63 U	1.5	1.217	NA	1.323	NA
PCB Homologs (mg/kg)	Monochlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dichlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Heptachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Octachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nonachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Decachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total PCBs	2	2	3	3	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pesticides (mg/kg)	Aldrin	0.04	0.04	0.4	0.4	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	alpha-BHC	0.1^	0.1^	NS	NS	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	beta-BHC	NS	NS	NS	NS	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	delta-BHC	NS	NS	NS	NS	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	gamma-BHC	1	1	2	1	0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 1
Summary of Available Soil Analytical Data Within Proposed Staging Area
Parker Street Waste Site
New Bedford, Massachusetts

Analysis	Analyte	Area Code:						4	4	4	4	4	4	4	4	4	4	4	4
		Sample Location:						HG44	HH43	HH43+HI42	HH44	HH44+HI44	HI42	HI43	HI44	HJ42	HJ42+HF31	HJ44	HJ44+HI43
		Sample Depth (ft.):						1-3	1.5-3	1.5-3	2.5-3	1-3	2.5-3	1.5-3	1-3	2.5-3	0.5-3	2.75-3	1.5-3
Sample Date:						12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	12/30/2004	
		S-1/GW-2	S-1/GW-3	S-2/GW-2	S-2/GW-3	RC S-1**	TSCA												
	alpha-Chlordane	1	1	30	30	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	gamma-Chlordane	1	1	30	30	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,4'-DDD	4	4	30	30	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,4'-DDE	3	3	20	20	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,4'-DDT	3	3	20	20	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dieldrin	0.05	0.05	0.4	0.4	0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endosulfan I	NS	NS	NS	NS	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endosulfan II	NS	NS	NS	NS	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endosulfan sulfate	200^	20^	NS	NS	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endrin	8	8	10	10	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endrin aldehyde	NS	NS	NS	NS	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Endrin Ketone	NS	NS	NS	NS	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Heptachlor	0.2	0.2	2	2	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Heptachlor epoxide	0.09	0.09	0.7	0.7	0.09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobenzene	0.7	0.7	5	5	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Methoxychlor	200	200	300	300	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chlordane	1	1	30	30	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toxaphene	NS	NS	NS	NS	10.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Herbicides																			
(mg/kg)	2,4-D	NS	NS	NS	NS	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4,5-TP (Silvex)	NS	NS	NS	NS	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dicamba	NS	NS	NS	NS	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dichloroprop	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4,5 T	NS	NS	NS	NS	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4 DB	NS	NS	NS	NS	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dinoseb	30^	7^	NS	NS	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																			
(mg/kg)	Mercury	20	20	30	30	20	N/A	NA	NA	0.223	NA	0.15	NA	NA	NA	NA	1.25	NA	0.103
	Antimony	20	20	30	30	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Arsenic	20	20	20	20	20	N/A	NA	NA	5.25	NA	4.87	NA	NA	NA	NA	17	NA	3.85
	Barium	1,000	1,000	3,000	3,000	1,000	N/A	NA	NA	344	NA	135	NA	NA	NA	NA	340	NA	176
	Beryllium	100	100	200	200	100	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	2	2	30	30	2	N/A	NA	NA	1.78	NA	2.24	NA	NA	NA	NA	4.92	NA	1.96
	Chromium	30	30	200	200	30	N/A	NA	NA	36	NA	9.3	NA	NA	NA	NA	36	NA	11
	Lead	300	300	300	300	300	N/A	NA	NA	665	NA	351	NA	NA	NA	NA	993	NA	447
	Nickel	20	20	700	700	20	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Selenium	400	400	800	800	400	N/A	NA	NA	NA	NA	0.77 U	NA	NA	NA	NA	0.81 U	NA	0.68 U
	Silver	100	100	200	200	100	N/A	NA	NA	0.39 U	NA	0.32 U	NA	NA	NA	NA	0.48	NA	0.34 U
	Thallium	8	8	60	60	8	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vanadium	600	600	1,000	1,000	600	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	2,500	2,500	3,000	3,000	2,500	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium (VI)	30	30	200	200	30	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons																			
(mg/kg)	Diesel Range Organics	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Gasoline Range Organics	1,000	1,000	3,000	3,000	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, TCLP																			
(ug/L)	Barium, TCLP	NS	NS	NS	NS	NS	100,000 ⁽⁵⁾	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium, TCLP	NS	NS	NS	NS	NS	1,000 ⁽⁵⁾	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium, TCLP	NS	NS	NS	NS	NS	5,000 ⁽⁵⁾	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead, TCLP	NS	NS	NS	NS	NS	5,000 ⁽⁵⁾	NA	NA	420	NA	120	NA	NA	NA	NA	1,280	NA	360
	Mercury, TCLP	NS	NS	NS	NS	NS	200 ⁽⁵⁾	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Reactivity																			
(mg/kg)	Reactive cyanide	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Reactive sulfide	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ignitability																			
(Deg. F)	Ignitability	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oxidation/Reduction Potential																			
(mV)	Oxidation/Reduction Potential	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
pH																			
(s.u.)	pH	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

