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September 2, 2005

Ms. Kimberly Tisa
EPA New England, Region 1
1 Congress Street
Suite 1100 (CPT)
Boston, MA 02114-2023

SEP 02 2005

Re: McCoy Field Site – Site Wetlands
225 Hathaway Boulevard
New Bedford, MA 02740

Dear Ms. Tisa:

The enclosed Risk-Based Cleanup Request Rev. 1 has been prepared under 40 CFR 761.61(c) for polychlorinated biphenyl (PCB) remediation waste within the portion of the McCoy Field Site (the Site) hereinafter referred to as the "Site Wetlands".

The City's goal is to reduce the risk associated with hazardous material that has migrated from the School Site to the Site Wetlands by excavating contaminated sediment and restoring the natural wetlands. Although the Method 3 Risk Assessment concludes that there is "No Significant Risk of harm to human health, public welfare, safety, and the environment," cleanup activities to achieve a 1 ppm cleanup goal are proposed.

Questions regarding this matter should be addressed to either Scott Alfonse at (508) 979-1487 or me at (781) 255-1982.

Very truly yours,

BETA GROUP, INC.

Alan D. Hanscom, P.E., LSP
Associate

Cc: Gerard Martin, MADEP
Scott Alfonse, City of New Bedford
Jacqueline Coucci, City of New Bedford
William DoCarmo, City Project Manager
Larry Oliveira, School Department
Evan Warner, Mount Vernon Group Architects
Barbara Laughlin, BETA

Wetlands Risk-Based Cleanup Request

Revision 1 (Revised Portions Only)
Volume I of I

Wetlands Site at McCoy Field
New Bedford, Massachusetts
RTN 4-15685

September 1, 2005

Prepared for:

City of New Bedford, Massachusetts

Prepared by:

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1.0 EXECUTIVE SUMMARY

1.1 Purpose of Submission

This document constitutes a Risk-Based Cleanup Request, originally submitted June 20, 2005 and revised September 1, 2005,under 40 CFR 761.61(c) for polychlorinated biphenyl (PCB) remediation waste within the portion of the McCoy Field Site (the "Site") hereinafter referred to as the "Site Wetlands." Refer to the Locus Map (Figure 1) for the Site location. The Site Wetlands have been delineated, as shown on Figure 2 (also see Contract Drawings 1 and 2 of the Bidding Documents. The "School Site", which encompasses landscaped areas, paved areas, and areas within the building footprint, has been addressed in a separate Risk-Based Cleanup Request for the School Site, last revised May 18, 2005.

The self-implementing cleanup level for *Bulk Polychlorinated biphenyl (PCB) remediation waste* in *high occupancy areas* under §761.61(a)(4)(i)(A) is ≤1 part per million (ppm) without further conditions, such as capping. However, use of self-implementing procedures to clean up sediments in freshwater ecosystems is prohibited under §761.61(a)(1)(i)(B). Therefore, even though the cleanup level proposed for sediment in the Site Wetlands is ≤1 ppm PCBs, this Risk-Based Cleanup Request must be submitted to demonstrate that the proposed cleanup level will pose "No Significant Risk" of injury to health or the environment.

1.2 Site Background

The property formerly known as McCoy Field (the Site), previously a recreational area occupied by three soccer fields, is the construction site for the New Keith Middle School. The Site is bounded by Hathaway Boulevard to the east, Durfee Street to the north, Summit Street to the west, and Nemasket Street to the south (Figure 2). Much of the material underlying the former soccer fields is relocated fill material from the current New Bedford High School location (east of the Site, across Hathaway Boulevard), where historic dumping and burning activities were reportedly performed prior to construction of the high school in the early 1970s. In or around 1994, the PCB-contaminated debris was spread across the Site and graded for the purposes of athletic field construction. The waste was covered with a sand/gravel leveling course and topsoil prior to construction of the soccer fields. The maximum depth of waste at the Site is 14 feet. As a result, the following distinct horizons are present at the Site:

- Topsoil;
- Sand/gravel layer;
- Fill material;
- Native organic silt; and,
- Native glacial till.

Embankments mark the edge of the fill placement along the northern and western boundaries of the filled area. These embankments lead down to deciduous wood swamp wetland areas, the "Site Wetlands", where fill material was not historically placed. Over time, constituents from the fill material migrated from the embankment areas to the Site Wetlands from wind erosion and storm water runoff. This Risk-Based Cleanup Request

is being submitted to address cleanup of PCB remediation waste that has migrated to the Site Wetlands.

1.3 Wetlands Cleanup Plan

In consultation with United States Environmental Protection Agency (US EPA) and Massachusetts Department of Environmental Protection (DEP) representatives, it was determined that cleanup of sediments with residual concentrations of PCBs greater than 1 ppm is the appropriate remedy. The remediation effort will include the removal of up to six inches of impacted sediments at locations within the Site Wetlands. Excavated sediment will be transferred directly into trucks for disposal in a state-approved non-hazardous waste landfill as *PCB remediation waste* at <50 ppm. Removal of the contaminated material will be conducted under the supervision of a licensed site professional (LSP) as required by the Massachusetts Contingency Plan (MCP), 310 CMR 40.0000.

Limited clearing of vegetation is proposed in order to access the surficial sediments to be removed. All disturbed areas will be restored, including replacement of the impacted sediments, replacement of vegetation with selected plant species, and seeding with wetlands seed mix.

1.4 Risk Characterization

The conclusion of a site-specific Method 3 Risk Characterization based on current site conditions is that, despite slight exceedances of the baseline hazard index (HI) of 1.0 for some environmental receptors, the Site is concluded to poses ***No Significant Risk of harm to human health, the environment, public welfare, and safety***. No institutional controls or engineered barriers were assumed in the risk characterization.

2.0 SITE BACKGROUND

2.1 Site History and Setting

BETA Group, Inc. (BETA) has been retained by the City of New Bedford School Department to provide LSP services related to the development of the New Keith Middle School at the location of the current McCoy Field (the "Site"). McCoy Field consists of approximately seven acres of land on the west side of Hathaway Boulevard, opposite New Bedford High School.

For the purposes of conducting cleanup, the Site has been divided into two sections, the "School Site" and the "Site Wetlands". PCB-contaminated debris from a former City burn dump was placed at the School Site in the late 1960s/early 1970s during construction of the New Bedford High School. In or around 1994, PCB-contaminated debris was spread across the School Site and graded for the purposes of athletic field construction.

Embankments mark the edge of the fill placement along the northern and western boundaries of the filled area. These embankments lead down to deciduous wood swamp wetland areas, the "Site Wetlands", where fill material was not historically placed. Over time, constituents from the fill material on the School Site migrated to the Site Wetlands from wind erosion and storm water runoff.

Pre-construction investigations of the School Site revealed the presence of Reportable Concentrations (RCs) of several contaminants in soil, including lead, barium, PCBs, and other semivolatile organic compounds (SVOCs). Initial subsurface investigations conducted in April 2000 by Miller Engineering & Testing, Inc. (Miller) identified four distinct horizons in soil in the playing field: surface soil, a gravel layer, fill (ash and construction and debris wastes), and native soil.

PCB analytical results from samples collected in March 2004 identified PCB concentrations at ≥50 ppm at the School Site. Based on these results and past Site activities, PCB-contaminated materials meet the definition of a *PCB remediation waste*, as defined under federal PCB regulations at 40 CFR 761.3. *PCB remediation waste* is regulated under the Toxic Substances Control Act (TSCA) and the PCB regulations at 40 CFR Part 761.

In accordance with a Consent Agreement and Final Order (CAFO) between EPA and the City of New Bedford (the City), the City has conducted sampling and removed the PCB-impacted soil located in the proposed utility corridors and in the vicinity of the proposed building pile caps and grade beams at the School Site. The CAFO also required development of a Work Plan that details the work. Revision 2 of the EPA Work Plan was appended to the CAFO executed by the EPA on May 21, 2004.

Since the original CAFO addressed only soil located in the utility corridors and in the vicinity of the proposed building pile caps and grade beams, the CAFO was amended on October 25, 2004 to encompass sampling and removal to be addressed under Revision 3 of the EPA Work Plan. This revision, submitted on November 5, 2004, expanded the scope or work to include sampling and removal of PCB-impacted soil for installation of the elevator shaft, acid neutralization tanks, above ground storage tank (AST) foundation, light stanchions, detention basins, drain lines, water line, and landscaped areas, as well as

for the remediation of the Site Wetlands and the neighboring properties in the vicinity of Durfee Street and Nemasket Street.

BETA has consulted with EPA and DEP concerning the submittal of this revised Risk-Based Cleanup Request for the Site Wetlands separate from the request already submitted for the cleanup of the School Site.

2.2 Nature of Contamination

2.2.1 Wetlands Sediment/Soil

Vanasse Hangen Brustlin, Inc. (VHB) collected sediment samples at the Site Wetlands in August 2000 and October 2002. PCBs were detected in the majority of these samples, with an average total PCB concentration of 0.52 ppm and a maximum concentration of 3.49 ppm. On August 11, 2000, sample G1 was collected within the Site Wetlands at the toe of the embankment in a heavily vegetated area in which ash fill was visible. The sample contained 18.4 ppm PCBs, constituting an Imminent Hazard (IH) as defined in the MCP at 310 CMR 40.0321(2). Access to the area in the vicinity of 18.4 ppm PCBs detection was restricted by School personnel on August 18, 2000, through installation of snow fencing and exclusion tape. Snow fence was used along the vegetation line, and exclusion tape was used in the woods/swamp where density of the vegetation prevented placement of snow fencing. The exclusion tape was later replaced with snow fencing after brush and vegetation was cleared out of the way.

In order to characterize wetlands sediment for ecological risk assessment, BETA collected 124 samples from the wetlands located to the west and north of McCoy Field in December 2004, January 2005, and April 2005. The laboratory analytical results of the sampling conducted by BETA have been summarized on Tables 1 through 5. A compact disk (CD) containing electronic copies of the laboratory reports is included as Attachment C.

Since the Site Wetlands generally dry out in late summer, the material is evaluated as both soil and sediment. When evaluated as soil, the following constituents were detected at concentrations above the applicable Method 1 S-1 Soil Standards set forth in 310 CMR 40.0000:

Constituent	Locations of Exceedances	Range of Detected Concentrations (mg/kg)	Method 1 S-1 Soil Standard[1] (mg/kg)	U.S. EPA Residential Cleanup Level (mg/kg)
PCBs (as Aroclor 1254)	IW-2, WC.5-4.5, WC.5-27.5, WD-5, WD.5-2.5, WD.5-17.57, WD-6, WD-11, WD-12, WD-14, WD-15, WD-19, WD-23, WD-24, WD-25, WD-26, WD-27, WH-5 (above, plus) WC.5-22.5, WC.5-24.5, WD.5-3.5, WD-10, WD-17, WD-21, WE-3, WG-4.5, WI.5-5	0.014 – 11.8	2	1
Benzo(a)anthracene	IW-1, IW-2, WB-4, WC.5-14.5, WD.5-17.57	0.1 – 2.3	0.7	--
Benzo(b)fluoranthene	IW-1, IW-2, WC.5-14.5, WC.5-17.28, WD.5-17.57	0.12 – 2.9	0.7	--
Benzo(a)pyrene	IW-1, IW-2, WC.5-14.5, WD.5-17.57	0.11 – 2.3	0.7	--
Indeno(1,2,3-cd)pyrene	IW-2, WC.5-14.5	0.55 – 1.1	0.7	--
Lead	IW-2, WB-7, WC.5-14.5, WD.5-17.57, WD-7, WD-12, WD-23, WD-25, WE-3, WF-8	1.7 – 810	300	--

Notes:
1. Applicable to both S-1/GW-2 and S-1/GW-3 categories.
2. mg/kg – milligrams per kilogram (parts per million)

The following table lists constituents that were detected at concentrations above one or more of the following screening sediment benchmarks:

- Freshwater Sediment Screening Benchmarks (MADEP 2002b);
- If the above was not available, Effect Range-Low (ERL) Values (NOAA 1999); and,
- If neither of the above were available, values calculated from chronic surface water benchmark concentrations using the equilibrium partitioning approach and the 5th percentile organic carbon content of Site soil/sediment.

Constituent	No. Locations With Exceedances/Total Samples Analyzed	Range of Detected Concentrations (mg/kg)	Chronic Sediment Screening Benchmark (mg/kg)
PCBs (as Aroclor 1254)	92 / 124	0.014 – 11.8	0.0598 [1]
Anthracene	4 / 122	0.25 – 0.74	0.0572 [1]
Benzo(a)anthracene	13 / 122	0.1 – 2.3	0.108 [1]
Benzo(b)fluoranthene	5 / 122	0.12 – 2.9	1.116 [2]
Benzo(k)fluoranthene	2 / 122	0.13 – 1.4	0.617 [2]
Benzo(g,h,i)perylene	4 / 122	0.49 – 1.1	0.226 [2]
Benzo(a)pyrene	9 / 122	0.11 – 2.3	0.15 [1]
Chrysene	11 / 122	0.11 – 1.2	0.166 [1]
Fluoranthene	9 / 122	0.11 – 3.6	0.423 [1]
Fluorene	2 / 122	0.089 – 0.14	0.0774 [1]
Phenanthrene	8 / 122	0.095 – 2.6	0.204 [1]
Pyrene	19 / 122	0.12 – 5.6	0.195 [1]
Cadmium	48 / 123	0.2 – 5.75	0.99 [1]
Chromium (total)	7 / 123	3.07 – 79	43.4 [1]

Constituent	No. Locations With Exceedances/Total Samples Analyzed	Range of Detected Concentrations	Chronic Sediment Screening Benchmark
Lead	70 / 123	1.7 – 810	35.8 [1]
Mercury	28 / 123	0.015 – 2.06	0.18 [1]

1. MADEP (2002b).
2. Calculated value.

Wetlands surface sediment sample WD25, collected during the December 2004 sampling event, contained PCBs at a concentration exceeding 10 ppm. On January 18, 2005, the MADEP was notified of this Imminent Hazard (IH) condition. On January 19, 2005, BETA personnel took four additional samples located approximately six feet away from WD25 to determine the extent of PCB concentrations in excess of 10 ppm. The area surrounding sample WD25 was fenced off with high visibility orange plastic fencing to restrict access to the suspect area. Analytical results of the subsequent sampling indicated that the aerial extent of PCB concentrations greater than 10 ppm was limited to the original sample location WD25. In order to increase the frequency of sample locations and delineate the extent of sediment containing >1 ppm PCBs, additional samples were collected in April 2005.

On August 11, 2005, BETA personnel collected nine (9) sediment samples from six locations at depths of 6-12 inches at previous sample locations that exhibited elevated PCB concentrations. Refer to Figure 4 for sample locations. At two locations, additional samples were collected at depths of 12-24" (WD-25 and WH-5) and 24-30" (WD-25). All samples were submitted for PCB analysis and only the 6-12" samples were submitted for additional analysis of RCRA 8 metals and SVOCs. Of the nine samples, only one (WD-14 – 6-12") had PCB concentrations >1 ppm. Refer to Tables 1 -3 for summaries of analytical results.

2.2.2 Wetlands Surface Water

Surface water has not been sampled in the Site Wetlands. The Method 3 Risk Characterization Report, included as Attachment A, predicts sediment interstitial water concentrations from soil/sediment using the equilibrium partitioning approach.

2.2.3 Wetlands Groundwater

Groundwater has not been sampled in the Site Wetlands. Limited groundwater sampling conducted in the upland area indicated that concentrations of constituents of concern were very limited; all detected concentrations were below all applicable Method 1 Groundwater Standards. Groundwater for the Site will be monitored in accordance with the Long-Term Monitoring Plan, a draft of which was submitted with the Risk-Based Cleanup Request for the School Site (May 2005).

2.2.4 Adjacent Upland Soil

Site investigations in upland areas of the School Site identified the presence of constituents in soil and fill material at concentrations above applicable MCP Method 1 S-1 Soil Standards. While these conditions do not represent conditions in the Site Wetlands, they describe the upgradient source of contaminants that may have migrated to the Site Wetlands. The following constituents were detected at concentrations above Method 1 S-1 Soil Standards:

- PCBs (as Aroclor 1254)
- Benzidine
- Benzo(a)anthracene
- Benzo(b)fluoranthene
- Benzo(k)fluoranthene
- Benzo(a)pyrene
- Chrysene
- Dibenzo(a,h)anthracene
- Indeno(1,2,3-cd)pyrene
- Total petroleum hydrocarbons (TPH)
- Arsenic
- Barium
- Lead

2.3 Wetlands Sampling Procedures

2.3.1 Sampling Equipment and Methodology

Samples were collected from wetlands sediment using disposable polyvinyl chloride (PVC) liners in conjunction with a hollow shaft sampler, extension rods, and a slam bar hammer. Samples were collected from 0 to 6 inches. In order to maximize sample recovery, the sleeve was re-advanced as close as possible to the original location. A dedicated disposable liner was used for each sample location and the hollow shaft sampler was decontaminated between sample locations.

During deeper (greater than 6 inches) sample collection activities (August 2005), three (3) samples were taken at each requested location and submitted for laboratory analysis. In order to obtain accurately represented samples, the top 6" of soil was removed with the 6" hand auger prior to obtaining the sample. The samples labeled "6-12" were taken from an additional auger at approximately 6-12" below the original auger which was decontaminated between sample locations. A total of nine (9) samples were collected at six (6) different locations.

2.3.2 Sample Locations

Samples were initially collected on approximately a 40-foot grid. In some cases where initial samples contained >1 ppm PCBs, the grid was tightened to a 20-foot grid and additional samples were collected. Refer to Figure 2 for the layout of the sampling grid and sample locations.

2.3.3 Analytical Parameters

Samples collected for ecological risk characterization were routinely analyzed for PCBs, RCRA 8 Metals, polynuclear aromatic hydrocarbons (PAHs), pesticides, and herbicides. Whenever a metal was detected in excess of 20 times its

respective toxicity characteristic level, Toxicity Characteristic Leaching Procedure (TCLP) analysis was conducted. The following reporting limits were used, to the extent possible, by the laboratory:

- PCB = 10 parts per billion (ppb) per Aroclor
- Mercury = 10 ppb
- RCRA 8 Metals (except Mercury) combined = 100 ppb
- Pesticides/herbicides = 10 ppb

2.4 Wetlands Data Quality Assessment

Prior to excavation of contaminated sediment, a data quality assessment has been completed on the characterization sample results. Since the cleanup goal is defined with respect to PCBs, the assessment focused on PCB analytical results.

2.4.1 Technical Holding Times

The laboratory holding times for both the sample prior to extraction and the extract prior to analysis was evaluated for compliance with EPA's recommended holding times (14 days and 40 days, respectively). The holding times were reviewed for 146 samples. Of the 146 samples, a total of 134 samples or 92% were extracted within 14 days from the date of collection. All 146 samples (100%) were analyzed within 40 days from extraction. Refer to Table 4.

2.4.2 Surrogate Recoveries

The surrogate recoveries have been compared to the acceptable range (40 to 140%). Of the 146 samples analyzed, the surrogate recoveries for TCMX and DCBP were within the acceptable range for 91% of the samples. Of the 9% or 13 samples for which one or more surrogates were not recovered within the acceptable range, 10 samples contained PCBs >1 ppm; therefore the material that these 10 samples represent will be excavated for 0ff-Site disposal at an appropriate facility. Of the three remaining samples, one sample underwent multiple cleaning procedures. In the other two samples, the surrogate recoveries for TCMX were 123% and 128%; however, surrogate DCBP was obscured by the profile.

2.4.3 Matrix Spike/Matrix Spike Duplicates

Matrix spikes and matrix spike duplicates were evaluated with respect to the corresponding samples and the relative percent difference will be compared to the acceptable range (50%). Significant variations were observed with respect to the spike recoveries, almost all of which were well outside the acceptable range. Two likely contributing factors are as follows:

- Sample heterogeneity
- New England Testing Laboratories' method for determining the spike recovery: The concentration of PCBs detected in the corresponding sample is assumed to be the concentration of PCBs in both the matrix spike and matrix spike duplicate. This assumption compounds the influence of the sample heterogeneity. For example, WC.5-14.5MS and

WC.5-14.5MS are assumed to contain an original total PCB concentration of 922 ppb, which is the concentration detected in WC.5-14.5. Given the spike recoveries of -480% and -876% it is likely that pre-spike concentrations of total PCBs in the MS/MSD samples were much less than the concentration in WC.5-14.5.

We experienced a similar situation with the characterization samples collected from the School Site. We had several discussions with laboratory personnel, risk assessors, and EPA technical staff to help reconcile higher than expected RPDs and identified the following complicating factors:

- Due to the heterogeneity of the soil samples (i.e. the percentage of glass, organics, and other deleterious materials), securing a representative sample that could be replicated in the laboratory was difficult at best.
- The laboratory reported the detection of (what appeared to be) fragments of capacitor paper that likely contributed to higher than actual PCB concentrations.

2.4.4 Method Blanks

Ottawa sand samples were run through all extraction and clean-up steps to confirm that the analytical instruments were free from contamination. The frequency was one per 20 samples or for each discrete run with the instrument. In all method blanks, results for PCB analysis were non-detect. The surrogate recoveries for all method blanks were within the acceptable range.

2.4.5 Laboratory Control Spikes

Ottawa sand samples were spiked with a known concentration of PCBs and run through all extraction and clean-up steps to confirm that the analytical methods can sufficiently measure the contaminant concentration. The frequency was one per 20 samples or for each discrete run with the instrument. In all laboratory control spikes, the spike recovery and surrogate recoveries were within the acceptable range.

3.0 WETLANDS CLEANUP PLAN

3.1 Schedule

3.1.1 Notice of Intent

A Notice of Intent (NOI) was filed with the New Bedford Conservation Commission (the Commission) on May 27, 2005 for Plot 69 Lot 125 and Plot 75 Lot 167. The NOI encompasses removal of contaminated soils and sediments from the wetland area located adjacent to the McCoy Field/Keith Middle School construction project. Refer to Attachment B for a copy of the NOI. A Public Hearing was held on June 14, 2005.

Subsequent NOI Supplemental submissions were submitted to address additional concerns and/or questions raised by the Commission. NOI Supplemental No. 1 and NOI Supplemental No.2 were submitted to the Commission on July 20 and August 17, 2005, respectively.

3.1.2 Order of Conditions

An Order of Conditions was issued by the New Bedford Conservation Commission on August 31, 2005. A copy is included as Attachment H.

3.1.3 Other Permit Requirements

A BRP WW10 Major Project Certification (Water Quality Certification) and Environmental Notification Form (ENF) have been filed with the DEP, with copies to the Army Corp of Engineers (ACOE). Refer to Attachments E and F, respectively. A Section 404 Permit has been filed with the ACOE (Attachment G). Due to the nature of the work and limited opportunity to remediate the wetlands during the dry weather time of year, we anticipate final approval within six to eight weeks.

3.1.3.1 Status of Permits

The status of the various state and local environmental permits are as follows:

- **MEPA Review** - A letter dated August 15, 2005 was issued by the Massachusetts Executive Office of Environmental Affairs indicating that no further MEPA review is required. A copy is enclosed as Attachment I.
- **Conservation Commission –** An **Order of Conditions** was issued on August 31, 2005. A copy is included as Attachment H.
- **Section 401 Water Quality Certificate** – A meeting was held on August 30, 2005 at DEP-Southeast Regional Office to review any supplemental DEP requirements. Approval is pending.
- **Section 404 Corps of Engineers Permit** – According to Brian Valiton, the ACOE will be issuing a general programmatic permit later this week (Week of August 29th).

3.1.4 Wetlands Cleanup

Wetlands remediation is proposed to take place in September 2005, pending acquisition of the required permits in a timely manner.

3.1.5 Wetlands Restoration

All planting will occur at the beginning or end of the growing season. Fall plantings should be done before the first frost. However, shrubs and trees may be planted up to October 26th, weather permitting. Special conditions and contingency plans are outlined in the Wetlands Restoration Design included in Attachment B.

3.1.6 Conservation Commission Inspections

As discussed with the Conservation Commission, no Site work will be performed prior to a Site inspection and approval of the siltation controls by the Conservation Agent. Subsequently, BETA will coordinate Commission inspections of the Site Wetlands at the project milestones outlined in a copy of the NOI (Attachment B).

3.2 Remedial Approach

The remediation project includes the removal of up to six inches of impacted sediments at selected locations within the Site Wetlands. Additionally, the removal of soil/sediment from 6-18 inches deep at sixty-three (63) locations of new trees will be required. Each tree location requires a hole of approximately 18 inches in diameter. Limited clearing of vegetation is proposed in order to access the area in which the sediments are to be removed. All disturbed areas will be restored, including replacement of the impacted sediments, and seeding with wetlands seed mix.

3.2.1 Wetlands Sediment Removal

In recent consultation with US EPA and DEP representatives, it was determined that cleanup of sediments with residual concentrations of PCBs greater than 1 ppm is the appropriate remedy. Reference was made to the Executive Summary of the Method 3 Risk Characterization Report, included as Attachment A. Removal of the contaminated material will be conducted under the supervision of an LSP as required by the MCP.

We propose to implement the removal of up to six inches of PCB-impacted sediments at selected locations within the area illustrated on the attached site plan (Figure 2). Access to the area is proposed to include the following:

- Clearing of vegetation, as required, to access areas containing contaminated sediment;
- Physical removal of leaf litter, surface vegetation and surface sediment/soil to the limits direct by BETA's on-site representative;
- Excavation and removal of contaminated sediment, soil and vegetation, including live loading, transportation, and disposal at appropriately licensed disposal facilities; and

- Restoration of disturbed areas, including replacement of the removed sediment/soil with clean sandy soil and seeding with wetlands mix, similar to that used for the current slope stabilization project at McCoy Field.

The remediation contractor will use a combination of a Bobcat (or equivalent) loader, hand tools, and vacuum excavation to remove up to six inches of leaf litter, sediment, and soil from the proposed area of excavation. Trees larger than 6-inches in diameter will not be removed. Hand tools and vacuum excavation will be used to remove all soil within a five-foot radius of trees with a minimum 6-inch trunk diameter.

The temporary disturbance will be conducted at a time when the area is sufficiently dry or frozen to reduce impacts caused by the compaction of equipment. Once the contaminated areas have been excavated, the area will be restored and re-vegetated as described in Section 3.6. Prior to restoration, confirmation sampling will be conducted as detailed in Section 3.5.

3.2.2 Clearing

Remediation activities will result in some areas being cleared of existing vegetation and excavated. If large trees need to be cut to allow equipment access, the stumps will remain to minimize soil disturbance. Leaving the stumps will also increase the likelihood that the trees will sprout new growth. Any debris, including slash and felled trees will be stockpiled on an upland area adjacent to the site work.

Individual large diameter trees that are Facultative or wetter will be evaluated and marked to remain in the wetland restoration area to take advantage of their shading effect. Selection of canopy trees will be performed by a qualified professional retained by BETA to oversee the wetland restoration activities. This will also create a pit and mound topography creating microenvironments.

3.2.3 Erosion Control

Embankments (edges of fill material) have been stabilized at a slope of 2:1 to 3:1. Any contaminated material remaining on the embankments was covered with a geotextile separation fabric, warning barrier, and three feet of clean soil.

Prior to the initiation of any Site activities, BETA will direct the placement of a row of staked hay bales along the limits of work (LOW) line. All work and all disturbances will occur within the LOW. In the event that flooding rains occur or excess water exists in the work area, dewatering of isolated work areas will be implemented as discussed in Section 3.2.5.

During the project, the remediation contractor will be implementing the provisions of the Storm Water Pollution Prevention Plan (SWPPP) dated September 2004. The SWPPP addresses proper procedures for such items as removing silt from trucks and adjacent roadways, preventing fuel spills, and managing stormwater flow. Additionally, the remediation contractor will be

required to place jute erosion mats (and/or straw mulch on level areas) over open excavation areas to minimize erosion by stormwater runoff.

3.2.4 Temporary Access Ways

The remediation contractor will install temporary access ways, where necessary, to allow vehicle access to the areas of proposed excavation. These driveways will be constructed by the placement wetland mats. Under no conditions is crushed stone to be used. The access ways will be restored in accordance with the Wetland Restoration and Planting Plan (included in Attachment B) and the Order of Conditions issued by the New Bedford Conservation Commission.

3.2.5 Dewatering

Depending on Site conditions, limited dewatering may be necessary to remove standing surface water prior to excavation. If such dewatering is necessary, the Contractor will install shallow groundwater extraction sumps (typically on the order of 4 feet deep) within the limits of work, to remove surface water and provide a limited lowering of the local water table during excavation. The extracted surface and groundwater will be pumped to an on-Site fractionation tank to provide settling of fines followed by discharge into a settling basin to be constructed on-Site. This treatment and discharge will be performed under a National Pollutant Discharge Elimination System (NPDES) exclusion letter or an NPDES Construction General Permit (CGP), as appropriate, to be obtained by BETA from EPA.

3.3 Disposal Technology

Site investigations in upland areas of the School Site identified the presence of PCBs at concentrations ≥50 ppm. Based on these results and past Site activities, PCB-contaminated materials at the School Site meet the definition of a *PCB remediation waste* which is regulated under the TSCA and the PCB regulations at 40 CFR Part 761. Sediment in the Site Wetlands that was impacted from migration of PCBs from the School Site is also *PCB remediation waste*.

The PCB regulations require disposal of *PCB remediation waste* at ≥50 ppm in a TSCA-permitted disposal facility or a RCRA hazardous waste landfill; however, the highest concentration of PCBs detected in the Site Wetlands is 11.8 ppm. Therefore, sediment excavated from the Site Wetlands will be disposed in a state-approved non-hazardous waste landfill as *PCB remediation waste* at <50 ppm.

Excavated sediment will be transferred directly into trucks for removal from the Site and appropriate disposal. All material requiring off-site disposal shall be properly disposed off-site at appropriately permitted landfill or disposal facilities in good standing and holding current, valid permits and licenses in accordance with all federal, state, and local laws, regulations, ordinances, and procedures. Actual disposal facility locations will be identified to EPA prior to shipment of any wastes from the Site.

3.4 Cleanup Verification

3.4.1 Confirmation Sampling Plan

Subsequent to excavation of up to six inches of sediment in the designated remediation area, confirmation samples for vertical delineation of the remediation area will be collected in the same location as the characterization samples. Refer to Figure 2. Confirmation samples of the aerial extent of the remediation area will be collected along the perimeter of the excavation at approximately every 20 feet. The confirmation samples will be collected from the remaining top three inches (6 to 9 inches from the pre-remediation surface). Confirmation samples will be analyzed for PCBs only using EPA Method 8082. Sampling will be performed, to the extent possible, in accordance with the *Region I, EPA New England, Sediment Sampling Guidance* (Draft September 1998), so as to minimize water content to ensure usability (>30% solids) in a Tier I-type evaluation. Refer to the QA/QC Plan for Cleanup Verification (Attachment D).

3.4.2 Confirmation Sample Laboratory Analysis

As outlined in the QA/QC Plan for Cleanup Verification, the samples should be analyzed for percent solids prior to PCB analysis to ensure that >30% solids are present. All samples with percent solids ≤ 30% will need to be pretreated (either air drying or freeze drying). Solvent extraction of the sample should only proceed once the percent solids >30%. Refer to the QA/QC Plan for Cleanup Verification (Attachment D).

3.4.3 Data Validation

The EPA Work Plan (November 2004) outlines the data validation and laboratory and field quality control requirements for samples collected at the Site. All data will undergo a Tier I-type evaluation whereby a completeness check is made. A modified Tier II-type review will be performed on all of the data using QC indicators. Refer to the QA/QC Plan for Cleanup Verification for specific requirements outlined for the Tier I- and Tier II-type evaluations to be implemented for Site Wetlands confirmation samples (Attachment D).

3.5 Wetlands Restoration

The surrounding bordering vegetated wetland (BVW) is well vegetated with a diverse community consisting of red maple trees and saplings, highbush blueberry shrubs, viburnum shrubs and emergent herbaceous plants. The remediation activities will result in approximately 0.87 acres of temporary alteration to the surrounding BVW. Once the area has been excavated and confirmation samples indicate that the remediation goal has been met, re-vegetation efforts can commence.

3.5.1 Planting Plan

The goal of the restoration effort will be to restore the natural plant community so that the impacts of the remediation are minimized. In accordance with 310 CMR 10.55, at least 75% of the surface area of the restoration area must be re-

established with indigenous wetland plant species within two growing seasons. The planting plan is depicted in Figures 3.1 and 3.2. For additional details on the planting plan, consult the Wetland Restoration Design prepared by NAA and appended to the Notice of Intent (Attachment B).

The proposed final elevations are the same as current elevations. Any soil amendments needed to create a soil profile to support the planted wetland vegetation will be placed to bring the ground surface to finished elevation. The amended soils used for the replication area will consist of a mixture of 24% organic and the remainder of mineral materials. There will be no compaction of soils used within the replication area. Once the project is complete, it is expected that there will be no loss or impairment of the resource area.

3.5.2 Inspections and Monitoring

BETA will coordinate a Commission inspection of the Site at the following project milestones:

- When erosion controls are installed, prior to any other work;
- After sediment has been excavated (Commission will inspect the soils to be replaced in the restored wetland at this time);
- After soils have been replaced (Commission will inspect plant material to be placed in restoration area at this time); and
- After final plantings are complete.

Any trees that do not remain alive for a minimum of one year from the completion of wetlands restoration will be replaced.

3.6 Contingency Plan

3.6.1 Unanticipated Conditions

The sediment scheduled for off-site management has been sampled in-situ for PCBs, heavy metals, and PAHs. A temporary stockpiling provision has been incorporated into the technical specification as a contingent provision, to provide for segregation of any "suspect" material that may be characteristically different from the majority of the sediment. Temporary storage of wastes/materials to be segregated for separate characterization will not exceed 100 cubic yards (cy). Upon review and evaluation of the results, appropriate disposal options will be assessed and implemented as soon as practicable. The LSP reserves the right to sample the "suspect" materials in-situ so that appropriate characterization can take place prior to excavation and off-site management.

3.6.2 Unanticipated Wider Distribution

Since sediment in the Site Wetlands was impacted from material that migrated from the adjacent upland area, the impacted sediment is not expected to occur below the top six inches. Therefore, characterization samples were collected from the surface to six inches. In order to demonstrate that removal of the top six

inches of sediment, as indicated on Figure 2, successfully removes the extent of material containing PCBs at concentrations exceeding 1 ppm, confirmation samples will be collected from 6 to 9 inches below pre-excavation grade. If any confirmation samples contain PCBs at concentrations exceeding 1 ppm, the remediation plan will be modified to include removal of the impacted sediment. Then additional confirmation samples will be collected from the top three inches of remaining sediment. This iterative process of excavating and collecting confirmation samples will be carried out until confirmation samples demonstrate that the remediation goal has been achieved.

3.6.3 Other Obstacles

At this time, no "other obstacles" are anticipated; however, the City will be monitoring all construction activities and will be prepared to address unforeseen circumstances that may arise.

4.0 HAZARD IDENTIFCATION

4.1 Constituents of Concern

Constituents of concern (COCs) for the human health risk characterization include the following:

- PCBs (as Aroclor 1254)
- Acenaphthene
- Anthracene
- Benzo(a)anthracene
- Benzo(b)fluoranthene
- Benzo(k)fluoranthene
- Benzo(g,h,i)perylene
- Benzo(a)pyrene
- Chrysene
- Fluoranthene
- Fluorene
- Indeno(1,2,3-cd)pyrene
- Phenanthrene
- Pyrene
- Barium
- Cadmium
- Chromium
- Lead
- Mercury
- Selenium

These COCs are all of the constituents detected in soil/sediment from the wetland area except for the following for the reasons provided:

Arsenic. Arsenic was not detected above either its Method 1 soil standard or its chronic sediment screening benchmark. All detected concentrations were at or below arsenic's natural soil background level (MADEP 2002d).

Silver. Silver was not detected above either its Method 1 Soil Standard or its chronic sediment screening benchmark. All detected concentrations were at or below silver's natural soil background level (MADEP 2002d).

Note that detected concentrations of acenaphthene, anthracene, benzo(a)-anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, benzo(a)pyrene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene, all of which are polycyclic aromatic hydrocarbons (PAHs), are all at or below background levels in natural soil. These constituents are retained because they are also assessed in sediment and there is no generally recognized background level for these COCs in sediment.

4.2 Environmental Fate and Transport Characteristics

Leaching

Leaching potential can be described by a constituent's water solubility and tendency to adsorb to organic carbon in soil. The water solubility of the organic COCs is low to moderate, and the tendency of the COCs to adsorb to organic carbon in soil is high. This indicates that significant desorption of organic COCs from soil or sediment to groundwater or surface water is not likely.

Metals vary in their water solubility depending on the form that exists in the soil or sediment; which is not known. However, most metals generally have a low water solubility and are strongly bound to soil and, with the exception of mercury, are considered non-volatile. Mercury can be volatile; however, this is typically seen at higher than ambient temperatures.

Volatilization

Volatilization potential can be described both by a constituent's vapor pressure and Henry's Law Constant (the ratio of vapor pressure to water solubility, describing the tendency to volatilize from water). The higher the vapor pressure and Henry's law constant, the higher the volatilization potential. The organic COCs generally have a low volatility. This indicates that significant volatilization of the organic COCs to air is unlikely.

Erosion

Due to the engineered barriers at the School Site (soil cap, asphalt cap, building), which will be maintained in accordance with the AUL, no fill material will be present at the ground surface of the School Site. Therefore, surface runoff from the School Site onto the Site Wetlands will not be a migration pathway.

Similarly, the engineered barriers will preclude the potential for entrainment of contaminated soil in the air. During construction activities in which contaminated material is exposed to the air, dust monitoring activities are conducted in accordance with the Soil Management and Dust Monitoring Section of the EPA Work Plan as well as Work Plan Attachment O (Proposed Waste and Regulated Soil Removal Plan).

Furthermore, the Storm Water Pollution Prevention Plan incorporates storm water management, stabilization practices, erosion and sediment control, and spill prevention. Hay bales and silt fences are in place along the toe of the entire embankment.

Persistence

PCBs, PAHs, and metals are generally considered to be persistent in the environment. Degradation of these constituents will occur slowly over time, or not at all (metals).

Bioaccumulation

PCBs, PAHs, and metals are generally considered to have the potential to bioaccumulate in animal or plant tissue.

Toxicity Values

Seven of the COCs are known or probable human carcinogens and assessed as such: PCBs, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, chrysene, and indeno(1,2,3-cd)pyrene. The remainder is assessed as non-carcinogens. Chronic and sub-chronic toxicity values used to quantify the potential carcinogenic and non-carcinogenic human health risks of the COCs presented on Table 7, and were obtained from the following sources:

- Integrated Risk Information System (IRIS) (U.S. EPA 2005);
- Proposed Revised Method 1 Numerical Standards and supporting documentation (MADEP 2004); and,
- Revisions to Dose-Response Values Used in Human Health Risk Assessment (MADEP 2004a).

Toxicity values used to assess non-carcinogenic health impacts are reference doses (RfD) for ingestion and dermal exposures and reference concentrations (RfC) for inhalation exposures. Toxicity values used to assess excess lifetime cancer risks are cancer slope factors (SF) for ingestion and dermal exposures and inhalation unit risk values (UR) for

inhalation exposures. Inter-route extrapolations were made (e.g., deriving inhalation toxicity values from oral values), where necessary, to quantify exposures. Brief toxicity profiles for the COCs are presented in Attachment A.

5.0 HUMAN HEALTH RISK CHARACTERIZATION

The Method 3 Risk Characterization, conducted in accordance with 310 CMR 40.0000, for Wetland Areas is based upon the results of sediment sampling conducted in the wetland area from December 2004 through April 2005. The results of samples collected from 2000 to 2002 are not considered due to the age of the data, high reporting limits, and the potential for wetlands sediment to have migrated over time. The objective of the human health risk characterization is to assess if pre-remediation Site conditions pose a potential health risk to exposed humans. AULs and engineered barriers are neither proposed for the Site Wetlands nor assumed in the risk characterization. The conclusion of the Method 3 Risk Characterization is that the Site Wetlands pose "No Significant Risk" of harm to human health. A summary of the human health risk characterization follows. Refer to Attachment A for a more detailed discussion.

5.1 Exposure Assessment

Human receptors potentially present at the future Keith Middle School include pedestrians, recreators, and trespassers, who may be exposed to COCs during recreational activities, dog-walking, and similar activities. Pedestrians, recreators, and trespassers are assessed in four age groups: children (between the ages of 1 to 8), youth (between the ages of 8 to 15), adults (over age 15), and a combined age group (ages 1 to 30).

The following receptor groups are not quantitatively assessed for the reasons provided:

- Residents: The Site is not currently used for residential purposes, nor is such use anticipated in the near future. Given the presence of the wetland, there is little likelihood that any residential structures will be built. Therefore, residential use of the wetlands is not assessed.
- Commercial Workers: The Site is not currently used for occupational purposes, nor is such use anticipated in the future. Given the presence of the wetland, there is little likelihood that any occupational structures will be built. Therefore, occupational use of the wetlands is not assessed.
- Construction Workers: Worker exposure and any protective measures will be addressed in the remediation contractor's Site-Specific Health & Safety Plan. Based upon the worker exposure assessment performed on the immediately adjacent site containing the same contaminants of concern, dust suppression measures (water spraying) will likely be required to reduce dusts to acceptable levels for potential inhalation by workers and/or to prevent off-site migration.

5.2 Potentially Complete Exposure Pathways

Potential exposure pathways that are quantitatively assessed are:

- Soil/sediment ingestion
- Soil/sediment dermal contact
- Inhalation of entrained soil/sediment particles
- Surface water ingestion
- Surface water dermal contact

All soil/sediment samples are assessed as soil since the wetland area typically dries up in summer, humans are more likely to have contact with soil than submerged sediment, and are more likely to access the Site during the warmer months when the wetlands have dried up. Since groundwater has been sampled at the Site and concentrations of COCs were either non-detect or below the applicable Method 1 Standards; exposure to groundwater is not assessed. Furthermore, since the COCs have a low volatility potential, exposure through volatilization pathways is also not assessed.

5.3 Exposure Factors

Exposure factors used to quantify human exposures were obtained from DEP (2004; 2002a; 1995), U.S. EPA (2004; 1997; 1996), or other, generally recognized guidance. In the absence of specific guidance, assumptions were made regarding the degree of exposure. Relative absorption factors (RAFs) are used to modify absorption through dermal intake and all constituents are conservatively assumed to be 100% absorbed through the oral exposure route. Estimation of the dermal intake of constituents from surface water is estimated using approaches described in U.S. EPA (2004).

5.4 Exposure Point Concentrations

This section evaluates the presence of hot spots and describes the derivation of exposure point concentrations (EPCs) for COCs in soil and groundwater.

5.4.1 Evaluation of Hot Spots

No hot spots, as defined in 310 CMR 40.0006, are contained within the data set.

5.4.2 Soil/Sediment Exposure Point Concentrations

The MCP allows use of the arithmetic mean as an EPC under certain conditions:

- Longer-term exposures are assessed;
- Constituents assessed are not lethal or associated with severe health effects from short-term exposures;
- Data available to characterize the Site are sufficient;
- The data do not exhibit a high degree of variability; and,
- The arithmetic mean is unlikely to underestimate the true mean.

Responses to these conditions are presented below:

- Chronic exposures are assessed for all receptors.
- None of the COCs is believed associated with acute health effects at the environmental concentrations detected; all detected concentrations are below upper concentration limits.
- The amount of data available for the Site is judged sufficient and the scope of analyses is appropriate for the type of release that occurred.
- While a certain amount of variability exists in the data, it is judged to represent spatial distribution of the contamination. All COCs meet the criteria in 310 CMR 40.0926(b) for demonstrating low variability, using the Method 1 S-1 Soil Standard as the applicable standard.

- Since environmental data are often log-normally distributed, the arithmetic mean concentration is likely to overestimate the true central tendency of the data.

5.4.3 Soil/Sediment Exposure Point Concentrations

COCs EPCs present in soil/sediment were calculated using arithmetic mean concentrations for all COCs. Non-detect constituents were included in the arithmetic mean at a concentration equal to one-half the quantitation limit.

The maximum detected concentration of PCBs at WD-25 (11.8 mg/kg) was further characterized by supplemental sampling at four locations immediately surrounding the original sample location (WD-25A, -25B, -25C, and -25D). Lower PCB concentrations were detected in these samples (0.419 mg/kg to 0.987 mg/kg). To avoid over-representing this location, the average of the five sample results was used to represent WD-25.

Sample location WE-6 was sampled on two occasions. The highest detected COC concentrations or the lowest quantitation limits (if not detected) were used to represent this location.

5.4.4 Sediment Interstitial Water and Surface Water Exposure Point Concentrations

Interstitial water EPCs were calculated from soil/sediment EPCs using the equilibrium partitioning approach. Overlying surface water EPCs were calculated from the predicted sediment interstitial water concentration. The predicted water concentrations for each COC are presented in Attachment A.

5.4.5 Air Exposure Point Concentrations

EPCs for soil particles in air were derived using the approach recommended by DEP (1995) to represent soil particle concentrations in air under "open field" conditions.

5.5 Quantitation of Exposure

COC exposure was quantified by combining exposure factors with EPCs to derive an average daily exposure (ADE) or dose (ADD). Risk characterization equations presented in MADEP (1995) were used to quantify exposures and are presented in the risk characterization spreadsheets as an appendix to Attachment A.

5.6 Risk Characterization

5.6.1 Methodology

Potential cancer risks and non-carcinogenic health hazards were quantified by combining estimated COC intakes with the COC's appropriate toxicity value for the exposure under consideration.

The risk characterization procedure for carcinogenic chemicals derives an excess lifetime cancer risk, which is the excess lifetime risk (i.e., over background risk levels) of incurring cancer from exposure to carcinogens. Cancer risks for each COC, pathway, and age group are summed to derive a total excess lifetime cancer risk, which is compared with the maximum acceptable cancer risk adopted by MADEP: a risk of one-in-one-hundred-thousand, denoted as $1x10^{-5}$. A total excess lifetime cancer risk at or below $1x10^{-5}$ represents no significant risk to human health.

The risk characterization procedure for non-carcinogenic chemicals derives a Hazard Quotient (HQ), which is the ratio of the estimated exposure or intake to an exposure or intake judged to pose no health hazard. HQs are derived separately for each age group. HQs for each COC and pathway are summed to derive a total Hazard Index (HI), which is compared with the maximum acceptable HI adopted by MADEP: 1.0. An HI at or below 1.0 represents "No Significant Risk" to human health.

5.6.2 Risk Characterization Results

Risk characterization calculations are summarized below.

RECREATIONAL/PEDESTRIAN/TRESPASSER RISK CHARACTERIZATION SUMMARY

Exposure Pathway	Child		Youth		Adult		Combined
	Hazard Index	Cancer Risk	Hazard Index	Cancer Risk	Hazard Index	Cancer Risk	Cancer Risk
Soil/sediment ingestion	0.2	$5x10^{-7}$	0.05	$1x10^{-7}$	0.03	$2x10^{-7}$	$8x10^{-7}$
Soil/sediment dermal contact	0.08	$3x10^{-7}$	0.02	$8x10^{-8}$	0.01	$9x10^{-8}$	$5x10^{-7}$
Inhalation of entrained soil particles	0.0006	$4x10^{-10}$	0.0006	$4x10^{-10}$	0.0006	$1x10^{-9}$	$2x10^{-9}$
Surface water ingestion	0.0005	$4x10^{-10}$	0.0002	$2x10^{-10}$	0.0001	$3x10^{-10}$	$9x10^{-10}$
Surface water dermal contact	0.0001	$1x10^{-8}$	0.00009	$1x10^{-8}$	0.00006	$2x10^{-8}$	$5x10^{-8}$
Total (all pathways)	**0.3**	**9×10^{-7}**	**0.07**	**2×10^{-7}**	**0.04**	**3×10^{-7}**	**1×10^{-6}**
Maximum Acceptable Level	**1.0**	**1×10^{-5}**	**1.0**	**1×10^{-5}**	**1.0**	**1×10^{-5}**	**1×10^{-5}**

Total HIs for adults, youth, and children are below the maximum acceptable HI (1.0). Total excess lifetime cancer risks for individual and combined age groups are below the maximum acceptable cancer risk. Therefore, the Site poses "No Significant Risk" of harm to human health to pedestrians, recreators, or trespassers.

6.0 ENVIRONMENTAL RISK CHARACTERIZATION

The objective of the environmental risk characterization is to assess if Site conditions in the wetland area pose a potential health risk to exposed environmental receptors. These potential health risks are assessed by performing a risk characterization consistent with DEP and U.S. EPA guidance for environmental risk characterizations.

6.1 Exposure Assessment

A number of threatened or endangered species or species of special concern have been identified in the New Bedford area. These species include terrestrial, avian, reptilian, and amphibian species. Although not specifically identified on the Site Wetlands, some of these species have the potential to be located on the Site Wetlands based on the species' preferred habitat.

Environmental receptors for which exposure and toxicological information is readily available have been selected to serve as surrogates for similar environmental species that may be present on Site Wetlands but for which exposure and toxicological information is not readily available. These receptors are summarized below:

- Earthworms (terrestrial invertebrates)
- Crustaceans (benthic aquatic invertebrates)
- Green frog (amphibians)
- American robin (omnivorous avian species)
- Red-tailed hawk (carnivorous avian species)
- Short-tailed shrew (insectivorous mammals)
- Raccoon (omnivorous mammals)

This set of surrogate receptors spans several trophic levels; including those in intimate contact with potentially impacted media (terrestrial and aquatic invertebrates and the green frog in its embryonic or juvenile form), organisms that feed on these organisms (shrew, raccoon, and robin) and organisms that feed on these primary feeders (raccoon and hawk). These organisms are also consistent with the limited environmental habitat offered by the Site Wetlands because of its urban setting, future planned use, limited size, and isolated character.

Because the wetlands are dry for a portion of the year, the wetlands are not believed to support a fish population. Therefore, species that feed primarily on fish (such as mink or heron) or inhabit primarily aquatic environments (sea otter, muskrat) are not assessed. Similarly, species that tend to inhabit habitats different from the Site (e.g. prairie voles), or have a similar or "less at risk" dietary habit (e.g., are primarily vegetarian) as the selected receptors (e.g., rabbits) are not assessed.

6.2 Potentially Complete Exposure Pathways

In general, invertebrates and amphibian species are directly exposed to impacted media, whereas higher trophic level species are exposed primarily through direct ingestion of

media and the diet. Exposure factors, such as food, water, and soil ingestion rates, and fraction of potentially affected food in the diet, were applied to quantify exposure of these organisms.

6.3 Sediment Interstitial Water and Surface Water Exposure Point Concentrations

Interstitial water EPCs were calculated from soil/sediment EPCs using the equilibrium partitioning approach. Overlying surface water EPCs were calculated from the predicted sediment interstitial water concentration. The predicted interstitial water COC concentrations were applied as EPCs to assess aquatic invertebrates; predicted overlying surface water COCs were applied as EPCs to assess amphibians, avian and mammalian receptor groups. The predicted water concentrations for each COC are presented in Attachment A.

6.4 Toxicity Assessment

6.4.1 Terrestrial Invertebrates

Since the assessment endpoint for this receptor group is survival, toxicity reference values (TRVs) based on acute toxicity in the form of soil concentrations in milligrams per kilogram (mg/kg), were selected.

6.4.2 Aquatic Invertebrates

Since the assessment endpoint for this receptor group is survival, TRVs based on acute toxicity in the form of water concentrations in micrograms per liter (µg/L) were selected. These TRVs are later compared with predicted sediment interstitial water concentrations. This form of the TRV was selected rather than bulk sediment concentrations (such as probable effects levels), because bulk sediment benchmark values do not consider Site-specific factors, such as the organic carbon content of the sediment. In addition, the constituent concentration in sediment interstitial water is typically considered the bioavailable fraction.

6.4.3 Amphibians

Available toxicological data for amphibians were obtained from the Reptile and Amphibian Toxicological Literature database (RATL, version 6), maintained by the Environment Canada's National Wildlife Research Centre.[1] Toxicological information was located for Aroclor 1254, benzo(a)pyrene, fluoranthene, cadmium, chromium, lead, mercury, and selenium. Species tested included various frogs, toads, and salamanders, typically tested in the egg or tadpole stage. The assessment endpoints for these receptors are survival, growth, and reproduction, so preference was given to studies identifying a no-observed-adverse-effect-level (NOAEL). However, since most information was based on acute effects, the following scheme was applied to approximate a chronic effects-based TRV:

[1] In presentation of lab data, the database states that results are expressed as "µg/L or ppm unless otherwise specified." Since µg/L and ppm differ by three orders of magnitude, the units were sometimes unclear if the data were not specifically labeled. Data associated with uncertain presentation of units were typically not used.

Where LC_{50} is the median lethal concentration and EC_{50} is the median effective concentration (for effects other than lethality). The available toxicity values and resultant TRVs are summarized in Appendix A.

6.4.4 Avian Species

The assessment endpoints for this receptor group are survival, growth, and reproduction. TRVs are based on chronic toxicity and are in the form of an intake in milligrams per kilogram of body weight per day (mg/kgBW-dy). Unlike benthic and aquatic invertebrates and amphibians, two TRVs were selected for use: one TRV representing a more conservative level of protection (TRV-Low) and one representing a more moderate level of protection (TRV-High). Several sources of avian TRVs were identified, including TRVs from U.S. EPA, U.S. Department of Energy, and other sources.

In general, when two or more TRV values were available for a TRV type (i.e., low or high), the more commonly adopted value or a value representing the middle of the distribution was typically (but not always) selected for use. In some cases [as in the U.S. EPA (1999) value for PAHs, discussed in the footnote to Table 18, Appendix A], the study design was judged to be inappropriate for use in the risk characterization and was not applied. If a TRV-High value was not available for a COC (all of the PAHs), the TRV-Low value was applied for both risk characterization calculations.

6.4.5 Mammalian Species

The assessment endpoints for this receptor group are survival, growth, and reproduction. TRVs are based on chronic toxicity and are in the form of an intake (mg/kgBW-dy). Two TRVs were selected for use: one TRV representing a more conservative level of protection (TRV-Low) and one representing a more moderate level of protection (TRV-High). Several sources of mammalian TRVs were identified, including TRVs from U.S. EPA, U.S. Department of Energy, and other sources.

In general, when two or more TRV values were available for a TRV type (i.e., low or high), the more commonly adopted value or a value representing the middle of the distribution was typically selected for use.

6.5 Risk Characterization

6.5.1 Terrestrial Invertebrates

Soil EPCs are compared with acute effects-based soil TRVs for the assessment endpoint of survival (chronic TRVs were applied when acute TRVs could not be located).

6.5.2 Aquatic Invertebrates

Since COCs in interstitial water will be more bioavailable than those bound up on sediment particles, predicted interstitial water concentrations are compared with acute effects-based TRVs for the assessment endpoint of survival.

6.5.3 Amphibian Receptors

Since frogs typically lay their eggs on the water surface or attached to floating or submerged vegetation and tadpoles stay within the water column, one-tenth of predicted interstitial water concentrations are used to represent surface water EPCs. Surface water EPCs are compared with chronic effects-based surface water TRVs for the assessment endpoint of survival, growth, and reproduction.

6.5.4 Avian Receptors

Surrogate avian receptors are the American robin and the red-tailed hawk. These birds may have direct contact with COCs contained in surface water and soil/sediment in the wetlands, as well as through their diet.

6.5.5 Mammalian Receptors

Surrogate mammalian receptors are the short-tailed shrew and raccoons. These animals may have direct contact with COCs contained in surface water and soil/sediment in the wetlands, as well as through their diet.

7.0 WRITTEN CERTIFICATION

Pursuant to §761.61(a)(3)(i)(E), Scott Alfonse, as a representative of the City of New Bedford and the party conducting the cleanup, hereby certifies that all sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental chemical analysis procedures used to assess or characterize the PCB contamination at the cleanup site, are on file at:

BETA Group, Inc.
315 Norwood Park South
Norwood, MA 02062

and are available for EPA inspection.

City of New Bedford

_____ _____

Director of Environmental Stewardship Date

8.0 REFERENCES

U.S. EPA (1998). 40 CFR 761.61. “Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions." *Code of Federal Regulations*.

Tables

Table 1
Laboratory Analytical Results - Polychlorinated Biphenyls
Wetlands

Sample Identification	Depth	Collection Date	Analysis Date	% Solids	Total PCBs (ug/kg)	PCB-1221 (ug/kg)	Q	RL	PCB-1232 (ug/kg)	Q	RL	PCB-1016/1242 (ug/kg)	Q	RL	PCB-1248 (ug/kg)	Q	RL	PCB-1254 (ug/kg)	Q	RL	PCB-1260 (ug/kg)	Q	RL	PCB-1262 (ug/kg)	Q	RL	PCB-1268 (ug/kg)	Q	RL
RCS-1					2,000	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
Turnkey Acceptance Limit					50,000	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
UCL					100,000	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
IW1-0-6"	0-6"	12/23/04	1/7/05	77.33	270	ND	U	20	ND	U	10	ND	U	10	ND	U	10	270	~	10	ND	U	10	ND	U	10	ND	U	10
IW2-0-6"	0-6"	12/23/04	1/11/05	61.79	**5,710**	ND	U	20	ND	U	10	ND	U	10	ND	U	10	5710	~	10	ND	U	10	ND	U	10	ND	U	10
WA3-0-6"	0-6"	12/21/04	12/23/04	72.08	110	ND	U	11	ND	U	5	ND	U	5	ND	U	5	110	~	5	ND	U	5	ND	U	5	ND	U	5
Duplicate 201 (WA3-0-6")	0-6"	12/21/04	12/23/04	69.52	230	ND	U	12	ND	U	6	ND	U	6	ND	U	6	230	~	6	ND	U	6	ND	U	6	ND	U	6
WB4-0-6"	0-6"	12/21/04	12/23/04	39.87	68	ND	U	21	ND	U	10	ND	U	10	ND	U	10	68	~	10	ND	U	10	ND	U	10	ND	U	10
WB5-0-6"	0-6"	12/21/04	12/23/04	**28.44**	80	ND	U	28	ND	U	14	ND	U	14	ND	U	14	80	~	14	ND	U	14	ND	U	14	ND	U	14
WB6-0-6"	0-6"	12/21/04	12/23/04	**14.87**	113	ND	U	56	ND	U	28	ND	U	28	ND	U	28	113	~	28	ND	U	28	ND	U	28	ND	U	28
WB7-0-6"	0-6"	12/21/04	12/23/04	**16.29**	ND	ND	U	49	ND	U	25	ND	U	25	ND	U	25	ND	U	25	ND	U	25	ND	U	25	ND	U	25
WC-4	0-6"	12/21/04	12/27/04	**18.98**	36	ND	U	45	ND	U	23	ND	U	23	ND	U	23	36	~	23	ND	U	23	ND	U	23	ND	U	23
WC-5	0-6"	12/21/04	12/27/04	**15.83**	74	ND	U	52	ND	U	26	ND	U	26	ND	U	26	74	~	26	ND	U	26	ND	U	26	ND	U	26
WC-6	0-6"	12/21/04	12/27/04	**19.49**	107	ND	U	42	ND	U	21	ND	U	21	ND	U	21	107	~	21	ND	U	21	ND	U	21	ND	U	21
WC7-0-6"	0-6"	12/21/04	12/23/04	**21.65**	640	ND	U	38	ND	U	19	ND	U	19	ND	U	19	640	~	19	ND	U	19	ND	U	19	ND	U	19
WC8-0-6"	0-6"	12/21/04	12/23/04	**14.26**	58	ND	U	56	ND	U	28	ND	U	28	ND	U	28	58	~	28	ND	U	28	ND	U	28	ND	U	28
WC18-0-6"	0-6"	12/23/04	12/30/04	82.57	26	ND	U	20	ND	U	10	ND	U	10	ND	U	10	26	~	10	ND	U	10	ND	U	10	ND	U	10
WC19-0-6"	0-6"	12/23/04	1/7/05	62.48	110	ND	U	20	ND	U	10	ND	U	10	ND	U	10	110	~	10	ND	U	10	ND	U	10	ND	U	10
WC20-0-6"	0-6"	12/23/04	1/7/05	53.05	104	ND	U	20	ND	U	10	ND	U	10	ND	U	10	104	~	10	ND	U	10	ND	U	10	ND	U	10
WC21-0-6"	0-6"	12/23/04	1/7/05	60.01	100	ND	U	20	ND	U	10	ND	U	10	ND	U	10	100	~	10	ND	U	10	ND	U	10	ND	U	10
WC22-0-6"	0-6"	12/23/04	12/30/04	71.79	68	ND	U	20	ND	U	10	ND	U	10	ND	U	10	68	~	10	ND	U	10	ND	U	10	ND	U	10
WC23-0-6"	0-6"	12/23/04	1/7/05	64.39	159	ND	U	20	ND	U	10	ND	U	10	ND	U	10	159	~	10	ND	U	10	ND	U	10	ND	U	10
WC24-0-6"	0-6"	12/23/04	12/30/04	79.84	14	ND	U	20	ND	U	10	ND	U	10	ND	U	10	14	~	10	ND	U	10	ND	U	10	ND	U	10
WC25-0-6"	0-6"	12/23/04	12/30/04	60.9	71	ND	U	20	ND	U	10	ND	U	10	ND	U	10	71	~	10	ND	U	10	ND	U	10	ND	U	10
WC26-0-6"	0-6"	12/23/04	12/30/04	51.45	76	ND	U	20	ND	U	10	ND	U	10	ND	U	10	76	~	10	ND	U	10	ND	U	10	ND	U	10
WC27-0-6"	0-6"	12/23/04	12/30/04	73.58	41	ND	U	20	ND	U	10	ND	U	10	ND	U	10	41	~	10	ND	U	10	ND	U	10	ND	U	10
WC.5-4.5	0-6"	4/22/05	4/30/05	**11.74**	**4,069**	ND	U	173	ND	U	87	ND	U	87	ND	U	87	2315	~	87	1,754	~	87	ND	U	87	ND	U	87
WC.5-5.5	0-6"	4/22/05	4/30/05	**17.34**	90	ND	U	124	ND	U	62	ND	U	62	ND	U	62	90	~	62	ND	U	62	ND	U	62	ND	U	62
WC.5-6.5	0-6"	4/22/05	4/30/05	**12.23**	ND	ND	U	169	ND	U	85	ND	U	85	ND	U	85	ND	U	85	ND	U	85	ND	U	85	ND	U	85
WC.5-8.5	0-6"	4/22/05	4/30/05	**15.21**	94	ND	U	112	ND	U	56	ND	U	56	ND	U	56	94	~	56	ND	U	56	ND	U	56	ND	U	56
WC.5-9.5	0-6"	4/22/05	4/30/05	**14.46**	135	ND	U	131	ND	U	66	ND	U	66	ND	U	66	135	~	66	ND	U	66	ND	U	66	ND	U	66
WC.5-10.5	0-6"	4/20/05	4/26/05	**14.16**	ND	ND	U	89	ND	U	44	ND	U	44	ND	U	44	ND	U	44	ND	U	44	ND	U	44	ND	U	44
WC.5-11.5	0-6"	4/20/05	4/26/05	**23.44**	36	ND	U	60	ND	U	30	ND	U	30	ND	U	30	36	~	30	ND	U	30	ND	U	30	ND	U	30
WC.5-12.5	0-6"	4/20/05	4/26/05	**18.14**	ND	ND	U	74	ND	U	37	ND	U	37	ND	U	37	ND	U	37	ND	U	37	ND	U	37	ND	U	37
WC.5-13.5	0-6"	4/20/05	4/26/05	**19.51**	232	ND	U	70	ND	U	35	ND	U	35	ND	U	35	232	~	35	ND	U	35	ND	U	35	ND	U	35
Duplicate 222 (WC.5-13.5)	0-6"	4/20/05	4/26/05	**23.05**	105	ND	U	54	ND	U	27	ND	U	27	ND	U	27	105	~	27	ND	U	27	ND	U	27	ND	U	27
WC.5-14.5	0-6"	4/20/05	4/26/05	32.31	922	ND	U	41	ND	U	20	ND	U	20	ND	U	20	922	~	20	ND	U	20	ND	U	20	ND	U	20
WC.5-14.5MS	0-6"	4/20/05	4/26/05	35.94	500	ND	U	35	ND	U	18	ND	U	18	ND	U	18	500	~	18	ND	U	18	ND	U	18	ND	U	18
WC.5-14.5MSD	0-6"	4/20/05	4/26/05	36.12	90	ND	U	38	ND	U	19	ND	U	19	ND	U	19	90	~	19	ND	U	19	ND	U	19	ND	U	19
WC.5-15.5	0-6"	4/20/05	4/26/05	**29.21**	175	ND	U	43	ND	U	22	ND	U	22	ND	U	22	175	~	22	ND	U	22	ND	U	22	ND	U	22
WC.5-16.5	0-6"	4/20/05	4/26/05	85.97	ND	ND	U	14	ND	U	7	ND	U	7	ND	U	7	ND	U	7	ND	U	7	ND	U	7	ND	U	7
WC.5-17.14	0-6"	4/20/05	4/26/05	**22.50**	441	ND	U	55	ND	U	28	ND	U	28	ND	U	28	441	~	28	ND	U	28	ND	U	28	ND	U	28
WC.5-17.28	0-6"	4/20/05	4/26/05	**22.86**	546	ND	U	26	ND	U	13	ND	U	13	ND	U	13	546	~	13	ND	U	13	ND	U	13	ND	U	13
WC.5-18.5	0-6"	4/25/05	5/2/05	68.72	135	ND	U	34	ND	U	17	ND	U	17	ND	U	17	135	~	17	ND	U	17	ND	U	17	ND	U	17
WC.5-19.5	0-6"	4/25/05	5/2/05	85.78	ND	ND	U	24	ND	U	12	ND	U	12	ND	U	12	ND	U	12	ND	U	12	ND	U	12	ND	U	12
WC.5-20.5	0-6"	4/25/05	5/2/05	64.63	ND	ND	U	39	ND	U	19	ND	U	19	ND	U	19	ND	U	19	ND	U	19	ND	U	19	ND	U	19
WC.5-21.5	0-6"	4/25/05	5/2/05	62.87	72	ND	U	33	ND	U	17	ND	U	17	ND	U	17	72	~	17	ND	U	17	ND	U	17	ND	U	17
WC.5-22.5	0-6"	4/25/05	5/2/05	53.46	**1,160**	ND	U	42	ND	U	21	ND	U	21	ND	U	21	1160	~	21	ND	U	21	ND	U	21	ND	U	21
WC.5-23.5	0-6"	4/25/05	5/2/05	59.47	379	ND	U	38	ND	U	19	ND	U	19	ND	U	19	379	~	19	ND	U	19	ND	U	19	ND	U	19
WC.5-24.5	0-6"	4/25/05	5/2/05	46.98	**1,520**	ND	U	46	ND	U	23	ND	U	23	ND	U	23	1520	U	23	ND	U	23	ND	U	23	ND	U	23
Duplicate 223 (WC.5-24.5)	0-6"	4/25/05	5/2/05	33.63	67	ND	U	64	ND	U	32	ND	U	32	ND	U	32	67	~	32	ND	U	32	ND	U	32	ND	U	32
WC.5-25.5	0-6"	4/25/05	5/2/05	59.00	119	ND	U	35	ND	U	17	ND	U	17	ND	U	17	119	~	17	ND	U	17	ND	U	17	ND	U	17

Table 1
Laboratory Analytical Results - Polychlorinated Biphenyls
Wetlands

Sample Identification	Depth	Collection Date	Analysis Date	% Solids	Total PCBs (ug/kg)	PCB-1221 (ug/kg)	Q	RL	PCB-1232 (ug/kg)	Q	RL	PCB-1016/1242 (ug/kg)	Q	RL	PCB-1248 (ug/kg)	Q	RL	PCB-1254 (ug/kg)	Q	RL	PCB-1260 (ug/kg)	Q	RL	PCB-1262 (ug/kg)	Q	RL	PCB-1268 (ug/kg)	Q	RL
RCS-1					2,000	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
Turnkey Acceptance Limit					50,000	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
UCL					100,000	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
WC.5-26.5	0-6"	4/25/05	5/2/05	54.29	140	ND	U	39	ND	U	19	ND	U	19	ND	U	19	140	~	19	ND	U	19	ND	U	19	ND	U	19
WC.5-27.5	0-6"	4/25/05	5/2/05	74.83	**2,820**	ND	U	24	ND	U	12	ND	U	12	ND	U	12	2820	U	12	ND	U	12	ND	U	12	ND	U	12
WD-3 (0-6")	0-6"	12/22/04	12/27/04	50.19	160	ND	U	20	ND	U	10	ND	U	10	ND	U	10	160	~	10	ND	U	10	ND	U	10	ND	U	10
WD-4 (0-6")	0-6"	12/22/04	12/27/04	**19.48**	240	ND	U	20	ND	U	10	ND	U	10	ND	U	10	240	~	10	ND	U	10	ND	U	10	ND	U	10
WD-4.5	0-6"	4/22/05	4/30/05	**16.62**	330	ND	U	132	ND	U	66	ND	U	66	ND	U	66	330	~	66	ND	U	66	ND	U	66	ND	U	66
WD-5 (0-6")	0-6"	12/22/04	12/27/04	48.83	**4,730**	ND	U	20	ND	U	10	ND	U	10	ND	U	10	4730	~	10	ND	U	10	ND	U	10	ND	U	10
Duplicate 202 (WD-5-0-6")	0-6"	12/22/04	12/27/04	56.37	**3,740**	ND	U	20	ND	U	10	ND	U	10	ND	U	10	3740	~	10	ND	U	10	ND	U	10	ND	U	10
WD-5 (6"-12")	6"-12"	8/11/05	8/15/05	**29.71**	57	ND	U	20	ND	U	10	ND	U	10	ND	U	10	57	~	10	ND	U	10	NA	~	~	NA	~	~
WD-6 (0-6")	0-6"	12/22/04	12/27/04	**28.93**	**2,250**	ND	U	20	ND	U	10	ND	U	10	ND	U	10	2250	~	10	ND	U	10	ND	U	10	ND	U	10
WD-6.5	0-6"	4/22/05	4/30/05	**14.56**	93	ND	U	142	ND	U	71	ND	U	71	ND	U	71	93	~	71	ND	U	71	ND	U	71	ND	U	71
WD-7	0-6"	12/21/04	12/27/04	30.22	571	ND	U	28	ND	U	14	ND	U	14	ND	U	14	571	~	14	ND	U	14	ND	U	14	ND	U	14
WD8-0-6"	0-6"	12/21/04	12/23/04	**18.85**	151	ND	U	42	ND	U	21	ND	U	21	ND	U	21	151	~	21	ND	U	21	ND	U	21	ND	U	21
WD-9 (0-6")	0-6"	12/22/04	12/27/04	**23.53**	560	ND	U	20	ND	U	10	ND	U	10	ND	U	10	560	~	10	ND	U	10	ND	U	10	ND	U	10
WD-10 (0-6")	0-6"	12/22/04	12/27/04	**26.85**	**1,020**	ND	U	20	ND	U	10	ND	U	10	ND	U	10	1020	~	10	ND	U	10	ND	U	10	ND	U	10
WD-10.5	0-6"	4/20/05	4/26/05	**18.79**	64	ND	U	65	ND	U	33	ND	U	33	ND	U	33	64	~	33	ND	U	33	ND	U	33	ND	U	33
WD-10.5 (6"-12")	6"-12"	8/11/05	8/15/05	48.95	11	ND	U	20	ND	U	10	ND	U	10	ND	U	10	11	~	10	ND	U	10	NA	~	~	NA	~	~
WD-11 (0-6")	0-6"	12/22/04	12/27/04	**20.90**	**5,420**	ND	U	20	ND	U	10	ND	U	10	ND	U	10	5420	~	10	ND	U	10	ND	U	10	ND	U	10
WD-12 (0-6")	0-6"	12/22/04	12/27/04	**20.19**	**4,060**	ND	U	20	ND	U	10	ND	U	10	ND	U	10	4060	~	10	ND	U	10	ND	U	10	ND	U	10
WD-13 (0-6")	0-6"	12/22/04	12/27/04	**22.29**	ND	ND	U	20	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10
WD-14 (0-6")	0-6"	12/22/04	12/27/04	**17.00**	**8,910**	ND	U	20	ND	U	10	ND	U	10	ND	U	10	8910	~	10	ND	U	10	ND	U	10	ND	U	10
WD-14 (6"-12")	6"-12"	8/11/05	8/15/05	32.75	**1,032**	ND	U	20	ND	U	10	ND	U	10	ND	U	10	1032	U	10	ND	U	10	NA	~	~	NA	~	~
WD-15 (0-6")	0-6"	12/22/04	12/27/04	**26.17**	**3,900**	ND	U	20	ND	U	10	ND	U	10	ND	U	10	3900	~	10	ND	U	10	ND	U	10	ND	U	10
WD-15.5	0-6"	4/20/05	4/26/05	70.11	33	ND	U	20	ND	U	10	ND	U	10	ND	U	10	33	~	10	ND	U	10	ND	U	10	ND	U	10
WD-16 (0-6")	0-6"	12/22/04	12/27/04	**28.51**	ND	ND	U	20	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10
WD-17 (0-6")	0-6"	12/22/04	5/17/06	**29.54**	**1,080**	ND	U	20	ND	U	10	ND	U	10	ND	U	10	1080	~	10	ND	U	10	ND	U	10	ND	U	10
WD-17.46	0-6"	4/20/05	4/26/05	**25.29**	282	ND	U	52	ND	U	26	ND	U	26	ND	U	26	282	~	26	ND	U	26	ND	U	26	ND	U	26
WD-17.57	0-6"	4/20/05	4/26/05	52.92	35	ND	U	25	ND	U	13	ND	U	13	ND	U	13	35	~	13	ND	U	13	ND	U	13	ND	U	13
WD18-0-6"	0-6"	12/23/04	1/4/05	58.28	724	ND	U	20	ND	U	10	ND	U	10	ND	U	10	724	~	10	ND	U	10	ND	U	10	ND	U	10
WD19-0-6"	0-6"	12/23/04	1/4/05	52.15	**2,090**	ND	U	20	ND	U	10	ND	U	10	ND	U	10	2090	~	10	ND	U	10	ND	U	10	ND	U	10
WD20-0-6"	0-6"	12/23/04	12/30/04	76.64	22	ND	U	20	ND	U	10	ND	U	10	ND	U	10	22	~	10	ND	U	10	ND	U	10	ND	U	10
WD21-0-6"	0-6"	12/23/04	1/4/05	38.46	**1,390**	ND	U	20	ND	U	10	ND	U	10	ND	U	10	1390	~	10	ND	U	10	ND	U	10	ND	U	10
WD21-0-6" MS	0-6"	12/23/04	1/4/05	~	479	ND	U	20	ND	U	10	ND	U	10	ND	U	10	479	~	10	ND	U	10	ND	U	10	ND	U	10
WD21-0-6" MSD	0-6"	12/23/04	1/4/05	~	547	ND	U	20	ND	U	10	ND	U	10	ND	U	10	547	~	10	ND	U	10	ND	U	10	ND	U	10
WD22-0-6"	0-6"	12/23/04	1/4/05	79.93	96	ND	U	20	ND	U	10	ND	U	10	ND	U	10	96	~	10	ND	U	10	ND	U	10	ND	U	10
WD23-0-6"	0-6"	12/23/04	1/4/05	57.49	**9,480**	ND	U	20	ND	U	10	ND	U	10	ND	U	10	9480	~	10	ND	U	10	ND	U	10	ND	U	10
WD24-0-6"	0-6"	12/23/04	1/7/05	30.30	**3,850**	ND	U	20	ND	U	10	ND	U	10	ND	U	10	3850	~	10	ND	U	10	ND	U	10	ND	U	10
WD25-0-6"	0-6"	12/23/04	1/4/05	38.05	**11,800**	ND	U	20	ND	U	10	ND	U	10	ND	U	10	11800	~	10	ND	U	10	ND	U	10	ND	U	10
WD25-A-0-6"	0-6"	1/19/05	1/20/05	~	419	ND	U	100	ND	U	50	ND	U	50	ND	U	50	419	~	50	ND	U	50	ND	U	50	ND	U	50
WD25-B-0-6"	0-6"	1/19/05	1/20/05	~	482	ND	U	96	ND	U	48	ND	U	48	ND	U	48	482	~	48	ND	U	48	ND	U	48	ND	U	48
WD25-C-0-6"	0-6"	1/19/05	1/20/05	~	459	ND	U	99	ND	U	50	ND	U	50	ND	U	50	459	~	50	ND	U	50	ND	U	50	ND	U	50
WD25-D-0-6"	0-6"	1/19/05	1/20/06	~	987	ND	U	100	ND	U	50	ND	U	50	ND	U	50	987	~	50	ND	U	50	ND	U	50	ND	U	50
WD-25 (6"-12")	6"-12"	8/11/05	8/15/05	~	849	ND	U	20	ND	U	10	ND	U	10	ND	U	10	849	~	10	ND	U	10	NA	~	~	NA	~	~
WD-25 (12"-24")	12"-24"	8/11/05	8/15/05	~	35	ND	U	20	ND	U	10	ND	U	10	ND	U	10	35	~	10	ND	U	10	NA	~	~	NA	~	~
WD-25 (24"-30")	24"-30"	8/11/05	8/15/05	~	119	ND	U	20	ND	U	10	ND	U	10	ND	U	10	119	~	10	ND	U	10	NA	~	~	NA	~	~
WD26-0-6"	0-6"	12/23/04	1/10/05	63.95	**2,770**	ND	U	20	ND	U	10	ND	U	10	ND	U	10	2770	~	10	ND	U	10	ND	U	10	ND	U	10
Duplicate 203 (WD26-0-6")	0-6"	12/23/04	1/4/05	47.48	**5,510**	ND	U	20	ND	U	10	ND	U	10	ND	U	10	5510	~	10	ND	U	10	ND	U	10	ND	U	10
WD27-0-6"	0-6"	12/23/04	1/10/05	51.11	**4,100**	ND	U	20	ND	U	10	ND	U	10	ND	U	10	4100	~	10	ND	U	10	ND	U	10	ND	U	10
WD.5-2.5	0-6"	4/25/05	5/2/05	75.79	**4,340**	ND	U	27	ND	U	14	ND	U	14	ND	U	14	4340	~	14	ND	U	14	ND	U	14	ND	U	14
WD.5-3	0-6"	4/25/05	5/2/05	65.08	655	ND	U	32	ND	U	16	ND	U	16	ND	U	16	655	~	16	ND	U	16	ND	U	16	ND	U	16

Table 1
Laboratory Analytical Results - Polychlorinated Biphenyls
Wetlands

Sample Identification	Depth	Collection Date	Analysis Date	% Solids	Total PCBs (ug/kg)	PCB-1221 (ug/kg)	Q	RL	PCB-1232 (ug/kg)	Q	RL	PCB-1016/1242 (ug/kg)	Q	RL	PCB-1248 (ug/kg)	Q	RL	PCB-1254 (ug/kg)	Q	RL	PCB-1260 (ug/kg)	Q	RL	PCB-1262 (ug/kg)	Q	RL	PCB-1268 (ug/kg)	Q	RL
RCS-1					2,000	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
Turnkey Acceptance Limit					50,000	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
UCL					100,000	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
WD.5-3.5	0-6"	4/25/05	5/2/05	**18.69**	**1,130**	ND	U	111	ND	U	56	ND	U	56	ND	U	56	1130	~	56	ND	U	56	ND	U	56	ND	U	56
WD.5-3.5MS	0-6"	4/25/05	5/2/05	**22.51**	**1,780**	ND	U	94	ND	U	47	ND	U	47	ND	U	47	1780	~	47	ND	U	47	ND	U	47	ND	U	47
WD.5-3.5MDS	0-6"	4/25/05	5/2/05	**15.41**	**3,010**	ND	U	150	ND	U	75	ND	U	75	ND	U	75	3010	~	75	ND	U	75	ND	U	75	ND	U	75
WD.5-4.5	0-6"	4/22/05	4/30/05	**12.95**	ND	ND	U	165	ND	U	83	ND	U	83	ND	U	83	ND	U	83	ND	U	83	ND	U	83	ND	U	83
WD.5-5.5	0-6"	4/22/05	4/30/05	**13.72**	ND	ND	U	157	ND	U	78	ND	U	78	ND	U	78	ND	U	78	ND	U	78	ND	U	78	ND	U	78
WD.5-6.5	0-6"	4/22/05	4/30/05	**13.86**	ND	ND	U	160	ND	U	80	ND	U	80	ND	U	80	ND	U	80	ND	U	80	ND	U	80	ND	U	80
WD.5-17.14	0-6"	4/20/05	4/26/05	31.23	65	ND	U	44	ND	U	22	ND	U	22	ND	U	22	65	~	22	ND	U	22	ND	U	22	ND	U	22
WD.5-17.28	0-6"	4/20/05	4/26/05	50.33	ND	ND	U	26	ND	U	13	ND	U	13	ND	U	13	ND	U	13	ND	U	13	ND	U	13	ND	U	13
WD.5-17.46	0-6"	4/20/05	4/26/05	31.10	118	ND	U	45	ND	U	23	ND	U	23	ND	U	23	118	~	23	ND	U	23	ND	U	23	ND	U	23
WD.5-17.57	0-6"	4/20/05	4/26/05	41.19	**9,380**	ND	U	34	ND	U	17	ND	U	17	ND	U	17	9380	~	17	ND	U	17	ND	U	17	ND	U	17
WD.5-17.57 (6"-12")	6"-12"	8/11/05	8/15/05	43.95	58	ND	U	20	ND	U	10	ND	U	10	ND	U	10	58	~	10	ND	U	10	NA	~	~	NA	~	~
WE-2.5	0-6"	4/25/05	5/2/05	70.56	777	ND	U	31	ND	U	15	ND	U	15	ND	U	15	777	~	15	ND	U	15	ND	U	15	ND	U	15
WE-3 (0-6")	0-6"	12/22/04	12/27/04	**18.08**	**1,950**	ND	U	20	ND	U	10	ND	U	10	ND	U	10	1950	~	10	ND	U	10	ND	U	10	ND	U	10
WE-3.5	0-6"	4/25/05	5/2/05	**14.37**	ND	ND	U	166	ND	U	83	ND	U	83	ND	U	83	ND	U	83	ND	U	83	ND	U	83	ND	U	83
WE-4 (0-6")	0-6"	12/22/04	12/27/04	**12.59**	122	ND	U	20	ND	U	10	ND	U	10	ND	U	10	122	~	10	ND	U	10	ND	U	10	ND	U	10
WE-5 (0-6")	0-6"	12/22/04	12/27/04	**19.53**	320	ND	U	20	ND	U	10	ND	U	10	ND	U	10	320	~	10	ND	U	10	ND	U	10	ND	U	10
WE-6	0-6"	12/21/04	12/27/04	**18.46**	ND	ND	U	44	ND	U	22	ND	U	22	ND	U	22	ND	U	22	ND	U	22	ND	U	22	ND	U	22
WE-6 (0-6")	0-6"	12/22/04	12/27/04	**13.18**	ND	ND	U	20	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10
WE-7	0-6"	12/21/04	12/27/04	**21.93**	ND	ND	U	36	ND	U	18	ND	U	18	ND	U	18	ND	U	18	ND	U	18	ND	U	18	ND	U	18
WE8-0-6"	0-6"	12/21/04	12/23/04	**19.32**	44	ND	U	41	ND	U	21	ND	U	21	ND	U	21	44	~	21	ND	U	21	ND	U	21	ND	U	21
WE.5-2.5	0-6"	4/25/05	5/2/05	**19.00**	601	ND	U	121	ND	U	61	ND	U	61	ND	U	61	601	~	61	ND	U	61	ND	U	61	ND	U	61
WE.5-3	0-6"	4/25/05	5/2/05	**10.00**	ND	ND	U	221	ND	U	111	ND	U	111	ND	U	111	ND	U	111	ND	U	111	ND	U	111	ND	U	111
Duplicate 220 (WE.5-3)	0-6"	4/25/05	5/2/05	**14.23**	ND	ND	U	147	ND	U	74	ND	U	74	ND	U	74	ND	U	74	ND	U	74	ND	U	74	ND	U	74
WE.5-3.5	0-6"	4/25/05	5/2/05	**13.66**	ND	ND	U	151	ND	U	76	ND	U	76	ND	U	76	ND	U	76	ND	U	76	ND	U	76	ND	U	76
WF-3 (0-6")	0-6"	12/22/04	12/27/04	**19.34**	740	ND	U	20	ND	U	10	ND	U	10	ND	U	10	740	~	10	ND	U	10	ND	U	10	ND	U	10
WF-4 (0-6")	0-6"	12/22/04	12/27/04	**20.18**	640	ND	U	20	ND	U	10	ND	U	10	ND	U	10	640	~	10	ND	U	10	ND	U	10	ND	U	10
WF-5 (0-6")	0-6"	12/22/04	12/27/04	**18.84**	ND	ND	U	20	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10
WF-6 (0-6")	0-6"	12/22/04	12/27/04	**14.56**	270	ND	U	20	ND	U	10	ND	U	10	ND	U	10	270	~	10	ND	U	10	ND	U	10	ND	U	10
WF-7	0-6"	12/21/04	12/27/04	**19.46**	104	ND	U	42	ND	U	21	ND	U	21	ND	U	21	104	~	21	ND	U	21	ND	U	21	ND	U	21
WF8-0-6"	0-6"	12/21/04	12/23/04	**23.72**	325	ND	U	35	ND	U	18	ND	U	18	ND	U	18	325	~	18	ND	U	18	ND	U	18	ND	U	18
WG-3 (0-6")	0-6"	12/22/04	12/27/04	**22.43**	ND	ND	U	20	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10
WG-4 (0-6")	0-6"	12/22/04	12/27/04	**18.64**	280	ND	U	20	ND	U	10	ND	U	10	ND	U	10	280	~	10	ND	U	10	ND	U	10	ND	U	10
WG-4.5	0-6"	4/22/05	4/30/05	50.05	**1,162**	ND	U	43	ND	U	23	ND	U	23	ND	U	23	870	~	23	292	~	23	ND	U	23	ND	U	23
WG-5 (0-6")	0-6"	12/22/04	1/6/05	**23.40**	ND	ND	U	2000	ND	U	1000	ND	U	1000	ND	U	1000	ND	U	1000	ND	U	1000	ND	U	1000	ND	U	1000
WG-5 (0-6") MS	0-6"	12/22/04	1/6/05	~	**5,850**	ND	U	1960	ND	U	980	ND	U	980	ND	U	980	5850	~	980	ND	U	980	ND	U	980	ND	U	980
WG-5 (0-6") MSD	0-6"	12/22/04	1/6/05	~	**4,940**	ND	U	1960	ND	U	980	ND	U	980	ND	U	980	4940	~	980	ND	U	980	ND	U	980	ND	U	980
WG-6	0-6"	4/22/05	4/30/05	80.14	ND	ND	U	25	ND	U	12	ND	U	12	ND	U	12	ND	U	12	ND	U	12	ND	U	12	ND	U	12
WH-4	0-6"	4/22/05	4/30/05	35.33	113	ND	U	59	ND	U	30	ND	U	30	ND	U	30	113	~	30	ND	U	30	ND	U	30	ND	U	30
WH-4.5	0-6"	4/22/05	4/30/05	72.59	ND	ND	U	29	ND	U	15	ND	U	15	ND	U	15	ND	U	15	ND	U	15	ND	U	15	ND	U	15
WH-5 (0-6")	0-6"	12/22/04	12/27/04	30.27	**3,940**	ND	U	20	ND	U	10	ND	U	10	ND	U	10	3940	~	10	ND	U	10	ND	U	10	ND	U	10
WH-5 (6"-12")	6"-12"	8/11/05	8/15/05	90.77	24	ND	U	20	ND	U	10	ND	U	10	ND	U	10	24	~	10	ND	U	10	NA	~	~	NA	~	~
WH-5 (12"-24")	24"-24"	8/11/05	8/15/05	~	66	ND	U	20	ND	U	10	ND	U	10	ND	U	10	66	~	10	ND	U	10	NA	~	~	NA	~	~
WH-5.5	0-6"	4/22/05	4/30/05	39.80	100	ND	U	52	ND	U	26	ND	U	26	ND	U	26	100	~	26	ND	U	26	ND	U	26	ND	U	26
WH.5-4.5	0-6"	4/22/05	4/30/05	67.00	86	ND	U	29	ND	U	14	ND	U	14	ND	U	14	86	U	14	ND	U	14	ND	U	14	ND	U	14
WH.5-5	0-6"	4/22/05	4/30/05	34.41	77	ND	U	57	ND	U	28	ND	U	28	ND	U	28	77	~	28	ND	U	28	ND	U	28	ND	U	28
WH.5-5MS	0-6"	4/22/05	4/30/05	44.92	647	ND	U	46	ND	U	23	ND	U	23	ND	U	23	647	U	23	ND	U	23	ND	U	23	ND	U	23
WH.5-5MSD	0-6"	4/22/05	4/30/05	46.99	788	ND	U	45	ND	U	23	ND	U	23	ND	U	23	788	U	23	ND	U	23	ND	U	23	ND	U	23
WH.5-5.5	0-6"	4/22/05	4/30/05	55.66	56	ND	U	34	ND	U	17	ND	U	17	ND	U	17	56	~	17	ND	U	17	ND	U	17	ND	U	17
WH-6	0-6"	4/22/05	4/30/05	**28.02**	ND	ND	U	71	ND	U	35	ND	U	35	ND	U	35	ND	U	35	ND	U	35	ND	U	35	ND	U	35

Table 1
Laboratory Analytical Results - Polychlorinated Biphenyls
Wetlands

					Total PCBs	PCB-1221			PCB-1232			PCB-1016/1242			PCB-1248			PCB-1254			PCB-1260			PCB-1262			PCB-1268		
					(ug/kg)	(ug/kg)	Q	RL	(ug/kg)	Q	RL	(ug/kg)	Q	RL	(ug/kg)	Q	RL	(ug/kg)	Q	RL	(ug/kg)	Q	RL	(ug/kg)	Q	RL	(ug/kg)	Q	RL
				RCS-1	**2,000**	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
				Turnkey Acceptance Limit	**50,000**	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
				UCL	**100,000**	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
Sample Identification	**Depth**	**Collection Date**	**Analysis Date**	**% Solids**																									
WI-4	0-6"	4/22/05	4/30/05	**13.76**	240	ND	U	140	ND	U	70	ND	U	70	ND	U	70	240	~	70	ND	U	70	ND	U	70	ND	U	70
WI-5	0-6"	4/22/05	4/30/05	34.85	90	ND	U	50	ND	U	25	ND	U	25	ND	U	25	90	~	25	ND	U	25	ND	U	25	ND	U	25
WI-6	0-6"	4/22/05	4/30/05	**24.25**	254	ND	U	78	ND	U	39	ND	U	39	ND	U	39	254	~	39	ND	U	39	ND	U	39	ND	U	39
WI.5-4	0-6"	4/22/05	4/30/05	41.41	45	ND	U	47	ND	U	23	ND	U	23	ND	U	23	45	~	23	ND	U	23	ND	U	23	ND	U	23
WI.5-4.5	0-6"	4/22/05	4/30/05	**19.58**	85	ND	U	89	ND	U	45	ND	U	45	ND	U	45	85	~	45	ND	U	45	ND	U	45	ND	U	45
WI.5-5	0-6"	4/22/05	4/30/05	**15.90**	**1,123**	ND	U	119	ND	U	59	ND	U	59	ND	U	59	1123	~	59	ND	U	59	ND	U	59	ND	U	59
Duplicate 221 (WI.5-5)	0-6"	4/22/05	4/30/05	**19.66**	458	ND	U	96	ND	U	48	ND	U	48	ND	U	48	458	~	48	ND	U	48	ND	U	48	ND	U	48
WI.5-5.5	0-6"	4/22/05	4/30/05	**21.80**	74	ND	U	84	ND	U	42	ND	U	42	ND	U	42	74	~	42	ND	U	42	ND	U	42	ND	U	42

NOTES:
ND = not detected above method detection limit
RCS-1 = Massachusetts Contingency Plan Method 1 Soil Standard for category S-1 soil.
Gray shading indicates concentration exceeding the cleanup level of 1 ppm.

Table 2
Laboratory Analytical Results - RCRA 8 Metals and Total Organic Carbon
Wetlands

				RCRA 8 Metals														TCLP	
				Arsenic		Barium		Cadmium		Chromium		Lead		Mercury		Selenium		Silver		Lead	TOC
				(mg/kg)	RL	(mg/kg)	RL	(mg/kg)	RL	(mg/kg)	RL	(mg/kg)	RL	(mg/kg)	RL	(mg/kg)	RL	(mg/kg)	RL	(mg/L)	(%)
RCS-1				**30**	**30**	**1,000**	**1,000**	**30**	**30**	**1,000**	**1,000**	**300**	**300**	**20**	**20**	**400**	**400**	**100**	**100**	**~**	**~**
MADEP Background				**20**	**20**	**50**	**50**	**3**	**3**	**40**	**40**	**600**	**600**	**1**	**1**	**1**	**1**	**5**	**5**	**~**	**5**
Toxicity Characteristic (20 Times) Rule				**100**	**100**	**2,000**	**2,000**	**20**	**20**	**100**	**100**	**100**	**100**	**4**	**4**	**20**	**20**	**100**	**100**	**~**	**100**
Regulatory Limit				**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**5.0**	**~**
UCL				**300**	**300**	**10,000**	**10,000**	**800**	**800**	**10,000**	**10,000**	**6,000**	**6,000**	**600**	**600**	**10,000**	**10,000**	**2,000**	**2,000**	**~**	**2,000**
Sample Identification	**Depth**	**Date**	**% Solids**																		
IW1-0-6"	0-6"	12/23/04	77.33	1.81	0.12	19	0.06	0.81	0.06	7.14	0.06	44	0.06	0.063	0.012	ND	0.12	ND	0.06	~	7.37
IW2-0-6"	0-6"	12/23/04	61.79	6.38	0.15	584	0.38	3.77	0.08	57	0.08	**560**	0.38	0.835	0.150	ND	0.15	0.38	0.08	0.2	11.49
WA3-0-6"	0-6"	12/21/04	72.08	1.09	0.14	23	0.07	1.04	0.07	13	0.07	198	0.07	0.037	0.007	ND	0.14	ND	0.07	1.8	2.9
Duplicate 201 (WA3-0-6")	0-6"	12/21/04	69.52	1.04	0.13	28	0.06	1.05	0.06	16	0.06	**374**	0.06	0.057	0.007	ND	0.13	ND	0.06	2.1	3.1
WB4-0-6"	0-6"	12/21/04	39.87	0.27	0.22	55	0.11	1.76	0.11	38	0.11	134	0.11	0.094	0.012	ND	0.22	0.11	0.11	0.21	12
WB5-0-6"	0-6"	12/21/04	**28.44**	0.58	0.32	62	0.16	2.05	0.16	42	0.16	127	0.16	0.096	0.016	ND	0.32	ND	0.16	0.17	12.6
WB6-0-6"	0-6"	12/21/04	**14.87**	ND	0.64	99	0.32	1.8	0.32	18	0.32	170	0.32	0.136	0.032	ND	0.64	ND	0.32	<0.1	38
WB7-0-6"	0-6"	12/21/04	**16.29**	1.11	0.62	40	0.31	0.98	0.31	11	0.31	**502**	0.31	0.235	0.029	0.86	0.62	0.37	0.31	<0.1	57.1
WC-4	0-6"	12/21/04	**18.98**	0.71	0.50	88	0.25	1.56	0.25	17	0.25	178	0.25	0.181	0.025	0.96	0.50	ND	0.25	<0.1	45.2
WC-5	0-6"	12/21/04	**15.83**	ND	0.54	62	0.27	0.98	0.27	11	0.27	50	0.27	0.079	0.031	2.18	0.54	ND	0.27	~	58.6
WC-6	0-6"	12/21/04	**19.49**	ND	0.50	99	0.25	1.58	0.25	3.37	0.25	18	0.25	0.065	0.026	ND	0.50	ND	0.25	~	51
WC7-0-6"	0-6"	12/21/04	**21.65**	ND	0.47	102	0.23	1.31	0.23	12	0.23	184	0.23	0.128	0.023	ND	0.47	ND	0.23	<0.1	37.6
WC8-0-6"	0-6"	12/21/04	**14.26**	ND	0.62	73	0.31	1.11	0.31	9.84	0.31	112	0.31	0.197	0.032	ND	0.62	ND	0.31	<0.1	54.6
WC18-0-6"	0-6"	12/23/04	82.57	0.94	0.12	9.27	0.06	0.78	0.06	5.26	0.06	19	0.06	0.029	0.012	ND	0.12	ND	0.06	~	3.45
WC19-0-6"	0-6"	12/23/04	62.48	1.37	0.16	23	0.08	0.68	0.08	6.95	0.08	47	0.08	0.062	0.016	ND	0.16	ND	0.08	~	3.97
WC20-0-6"	0-6"	12/23/04	53.05	2.38	0.18	23	0.09	0.66	0.09	5.14	0.09	43	0.09	0.06	0.018	ND	0.18	ND	0.09	~	14.75
WC21-0-6"	0-6"	12/23/04	60.01	1.17	0.15	12	0.08	0.65	0.08	3.26	0.08	16	0.08	0.058	0.016	ND	0.15	ND	0.08	~	15.1
WC22-0-6"	0-6"	12/23/04	71.79	1.23	0.14	13	0.07	0.46	0.07	4.62	0.07	28	0.07	0.067	0.013	ND	0.14	ND	0.07	~	5.92
WC23-0-6"	0-6"	12/23/04	64.39	1.91	0.15	16	0.08	0.6	0.08	7.96	0.08	36	0.08	0.096	0.015	0.74	0.15	ND	0.08	~	16.23
WC24-0-6"	0-6"	12/23/04	79.84	0.65	0.11	10	0.06	0.26	0.06	3.42	0.06	9.42	0.06	0.025	0.012	ND	0.11	ND	0.06	~	6.15
WC25-0-6"	0-6"	12/23/04	60.9	2.25	0.14	49	0.07	0.78	0.07	10	0.07	54	0.07	0.111	0.016	ND	0.14	ND	0.07	~	13.28
WC26-0-6"	0-6"	12/23/04	51.45	1.94	0.19	163	0.09	1.64	0.09	25	0.09	119	0.09	0.055	0.018	ND	0.19	ND	0.09	<0.1	4.94
WC27-0-6"	0-6"	12/23/04	73.58	1.94	0.12	109	0.06	1.24	0.06	16	0.06	120	0.06	0.033	0.014	0.2	0.12	ND	0.06	<0.1	6.69
WC.5-4.5	0-6"	4/22/05	**11.74**	ND	0.75	44	0.38	0.53	0.38	5.94	0.38	20	0.38	ND	0.081	1.73	0.75	ND	0.38	~	~
WC.5-5.5	0-6"	4/22/05	**17.34**	ND	0.52	52	0.26	0.83	0.26	5.67	0.26	43	0.26	0.11	0.051	1.08	0.52	ND	0.26	~	~
WC.5-6.5	0-6"	4/22/05	**12.23**	ND	0.68	62	0.34	0.75	0.34	5.94	0.34	14	0.34	0.083	0.078	2.12	0.68	ND	0.34	~	~
WC.5-8.5	0-6"	4/22/05	**15.21**	ND	0.60	48	0.30	0.66	0.30	5.89	0.30	27	0.30	0.078	0.062	2.34	0.60	ND	0.30	~	~
WC.5-9.5	0-6"	4/22/05	**14.46**	ND	0.69	78	0.35	0.76	0.35	7.12	0.35	23	0.35	0.075	0.067	2.21	0.69	ND	0.35	~	~
WC.5-10.5	0-6"	4/20/05	**14.16**	ND	0.62	80	0.31	1.18	0.31	6.27	0.31	63	0.31	0.088	0.059	1.86	0.62	ND	0.31	~	~
WC.5-11.5	0-6"	4/20/05	**23.44**	ND	0.38	44	0.19	0.45	0.19	6.01	0.19	15	0.19	0.056	0.038	3.61	0.38	ND	0.19	~	~
WC.5-12.5	0-6"	4/20/05	**18.14**	0.83	0.46	78	0.23	0.78	0.23	16	0.23	26	0.23	0.117	0.050	4.04	0.46	ND	0.23	~	~
WC.5-13.5	0-6"	4/20/05	**19.51**	ND	0.46	86	0.23	1.15	0.23	12	0.23	55	0.23	0.114	0.043	2.89	0.46	ND	0.23	~	~
Duplicate 222 (WC.5-13.5)	0-6"	4/20/05	**23.05**	1.42	0.39	47	0.20	0.71	0.20	36	0.20	19	0.20	0.121	0.038	3.78	0.39	ND	0.20	~	~
WC.5-14.5	0-6"	4/20/05	32.31	5.27	0.27	275	0.13	4.73	0.13	26	0.13	**524**	0.13	0.457	0.027	0.38	0.27	0.40	0.13	~	~
WC.5-14.5MS	0-6"	4/20/05	35.94	23	0.25	121	0.12	22	0.12	33	0.12	156	0.12	0.198	0.109	21	0.25	20	0.12	~	~
WC.5-14.5MSD	0-6"	4/20/05	36.12	18	0.24	45	0.12	18	0.12	34	0.12	25	0.12	0.092	0.023	17	0.24	16	0.12	~	~
WC.5-15.5	0-6"	4/20/05	**29.21**	0.82	0.32	35	0.16	0.70	0.16	26	0.16	13	0.16	0.039	0.025	ND	0.32	ND	0.16	~	~
WC.5-16.5	0-6"	4/20/05	85.97	ND	0.10	5.20	0.05	0.22	0.05	3.90	0.05	1.70	0.05	ND	0.011	ND	0.10	ND	0.05	~	~
WC.5-17.14	0-6"	4/20/05	**22.50**	1.70	0.41	0.28	0.21	0.71	0.21	34	0.21	12	0.21	0.091	0.037	1.08	0.41	ND	0.21	~	~
WC.5-17.28	0-6"	4/20/05	**22.86**	ND	0.40	30	0.20	0.96	0.20	20	0.20	14	0.20	0.238	0.038	ND	0.40	ND	0.20	~	~

Table 2
Laboratory Analytical Results - RCRA 8 Metals and Total Organic Carbon
Wetlands

				RCRA 8 Metals														TCLP	
				Arsenic		Barium		Cadmium		Chromium		Lead		Mercury		Selenium		Silver		Lead	TOC
				(mg/kg)	RL	(mg/kg)	RL	(mg/kg)	RL	(mg/kg)	RL	(mg/kg)	RL	(mg/kg)	RL	(mg/kg)	RL	(mg/kg)	RL	(mg/L)	(%)
			RCS-1	30	30	1,000	1,000	30	30	1,000	1,000	300	300	20	20	400	400	100	100	~	~
			MADEP Background	20	20	50	50	3	3	40	40	600	600	1	1	1	1	5	5	~	5
			Toxicity Characteristic (20 Times) Rule	100	100	2,000	2,000	20	20	100	100	100	100	4	4	20	20	100	100	~	100
			Regulatory Limit	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	5.0	~
			UCL	300	300	10,000	10,000	800	800	10,000	10,000	6,000	6,000	600	600	10,000	10,000	2,000	2,000	~	2,000
Sample Identification	Depth	Date	% Solids																		
WC.5-18.5	0-6"	4/25/05	68.72	0.38	0.13	6.59	0.07	0.29	0.07	3.71	0.07	7.41	0.07	0.026	0.014	ND	0.13	ND	0.07	~	~
WC.5-19.5	0-6"	4/25/05	85.78	1.03	0.10	9.30	0.05	0.6	0.05	5.97	0.05	4.22	0.05	ND	0.010	ND	0.10	ND	0.05	~	~
WC.5-20.5	0-6"	4/25/05	64.63	0.78	0.13	9.31	0.07	0.31	0.07	4.16	0.07	7.10	0.07	0.022	0.014	ND	0.13	ND	0.07	~	~
WC.5-21.5	0-6"	4/25/05	62.87	0.96	0.15	23	0.07	0.41	0.07	4.94	0.07	18	0.07	0.101	0.015	0.24	0.15	ND	0.07	~	~
WC.5-22.5	0-6"	4/25/05	53.46	1.08	0.15	13	0.08	0.63	0.08	8.38	0.08	34	0.08	0.056	0.061	ND	0.15	ND	0.08	~	~
WC.5-23.5	0-6"	4/25/05	59.47	2.60	0.16	20	0.08	0.80	0.08	8.39	0.08	46	0.08	0.078	0.016	0.30	0.16	ND	0.08	~	~
WC.5-24.5	0-6"	4/25/05	46.98	1.03	0.18	25	0.09	0.65	0.09	7.90	0.09	57	0.09	0.128	0.021	0.45	0.18	0.11	0.09	~	~
Duplicate 223 (WC.5-24.5)	0-6"	4/25/05	33.63	2.12	0.54	69	0.27	1.03	0.27	9.46	0.27	53	0.27	0.113	0.026	2.12	0.54	0.27	0.27	~	~
WC.5-25.5	0-6"	4/25/05	59.00	0.96	0.15	11	0.08	0.31	0.08	5.41	0.08	17	0.08	0.046	0.016	0.43	0.15	ND	0.08	~	~
WC.5-26.5	0-6"	4/25/05	54.29	0.84	0.17	23	0.08	0.69	0.08	11	0.08	41	0.08	0.073	0.017	0.25	0.17	ND	0.08	~	~
WC.5-27.5	0-6"	4/25/05	74.83	1.91	0.13	83	0.06	0.91	0.06	18	0.06	107	0.06	2.06	0.130	ND	0.13	0.11	0.06	0.3	~
WD-3 (0-6")	0-6"	12/22/04	50.19	ND	0.19	28	0.09	0.36	0.09	3.71	0.09	23	0.09	0.06	0.019	0.83	0.19	ND	0.09	~	23
WD-4 (0-6")	0-6"	12/22/04	**19.48**	ND	0.45	83	0.22	1.38	0.22	15	0.22	64	0.22	0.123	0.047	ND	0.45	ND	0.22	~	54.4
WD-4.5	0-6"	4/22/05	**16.62**	0.76	0.54	55	0.27	0.6	0.27	9.19	0.27	27	0.27	0.093	0.054	2.50	0.54	ND	0.27	~	~
WD-5 (0-6")	0-6"	12/22/04	48.83	1.75	0.20	35	0.10	1.1	0.10	7.2	0.10	61	0.10	0.103	0.019	ND	0.20	ND	0.10	~	11.7
WD-5 (6"-12")	6"-12"	8/11/05	**29.71**	3.41	0.31	39	0.15	1.64	0.15	4.22	0.15	166	0.15	0.083	0.016	2.11	0.31	ND	0.15	<0.1	~
Duplicate 202 (WD5-0-6")	0-6"	12/22/04	56.37	1.43	0.15	34	0.08	0.83	0.08	7.55	0.08	61	0.08	0.091	0.017	ND	0.15	ND	0.08	~	9.41
WD-6 (0-6")	0-6"	12/22/04	**28.93**	ND	0.31	82	0.16	1.15	0.16	7.48	0.16	128	0.16	0.177	0.034	ND	0.31	ND	0.16	<0.1	32.2
WD-6.5	0-6"	4/22/05	**14.56**	ND	0.63	68	0.31	1.07	0.31	4.64	0.31	36	0.31	0.077	0.055	1.57	0.63	ND	0.31	~	~
WD-7	0-6"	12/21/04	30.22	0.6	0.34	104	0.17	2.62	0.17	26	0.17	**477**	0.17	0.245	0.016	ND	0.34	ND	0.17	0.1	24
WD8-0-6"	0-6"	12/21/04	**18.85**	ND	0.51	150	0.25	2.44	0.25	16	0.25	162	0.25	0.155	0.026	ND	0.51	ND	0.25	<0.1	39.9
WD-9 (0-6")	0-6"	12/22/04	**23.53**	ND	0.39	77	0.20	0.86	0.20	4.26	0.20	33	0.20	0.117	0.038	0.78	0.39	ND	0.20	~	58.7
WD-10 (0-6")	0-6"	12/22/04	**26.85**	ND	0.36	223	0.18	0.79	0.18	3.07	0.18	25	0.18	0.91	0.036	ND	0.36	ND	0.18	~	33.4
WD-10.5	0-6"	4/20/05	**18.79**	0.67	0.48	25	0.24	0.29	0.24	7.17	0.24	4.16	0.24	0.077	0.048	1.43	0.48	ND	0.24	~	~
WD-10.5 (6"-12")	6"-12"	8/11/05	48.95	2.57	0.20	23	0.10	0.18	0.10	36	0.10	7.24	0.10	0.03	0.009	ND	0.20	ND	0.10	~	~
WD-11 (0-6")	0-6"	12/22/04	**20.90**	ND	0.42	109	0.21	1.18	0.21	12	0.21	112	0.21	0.201	0.042	ND	0.42	ND	0.21	<0.1	46.9
WD-12 (0-6")	0-6"	12/22/04	**20.19**	ND	0.44	138	0.22	1.9	0.22	15	0.22	**386**	0.22	0.293	0.047	1.32	0.44	0.31	0.22	<0.1	41.9
WD-13 (0-6")	0-6"	12/22/04	**22.29**	ND	0.41	156	0.21	1.23	0.21	6.37	0.21	59	0.21	0.141	0.041	1.19	0.41	ND	0.21	~	48.9
WD-14 (0-6")	0-6"	12/22/04	**17.00**	5.23	0.54	136	0.27	1.46	0.27	70	0.27	81	0.27	0.339	0.058	3.62	0.54	ND	0.27	~	41
WD-14 (6"-12")	6"-12"	8/11/05	32.75	2.67	0.30	26	0.15	1.51	0.15	21	0.15	88	0.15	0.047	0.015	1.27	0.30	ND	0.15	~	~
WD-15 (0-6")	0-6"	12/22/04	**26.17**	ND	0.37	147	0.18	1.86	0.18	13	0.18	144	0.18	0.218	0.037	ND	0.37	ND	0.18	<0.1	43.9
WD-15.5	0-6"	4/20/05	70.11	0.25	0.12	14	0.06	0.20	0.06	8.80	0.06	4.41	0.06	0.035	0.013	ND	0.12	ND	0.06	~	~
WD-16 (0-6")	0-6"	12/22/04	**28.51**	2.93	0.31	77	0.16	0.81	0.16	40	0.16	47	0.16	0.164	0.035	1.97	0.31	ND	0.16	~	29.2
WD-17 (0-6")	0-6"	12/22/04	**29.54**	0.68	0.32	84	0.16	1.26	0.16	19	0.16	107	0.16	0.145	0.032	ND	0.32	ND	0.16	<0.1	46.9
WD-17.57	0-6"	4/20/05	**25.29**	6.57	0.80	63	0.40	0.48	0.40	70	0.40	22	0.40	0.111	0.017	ND	0.80	ND	0.40	~	~
WD-17.46	0-6"	4/20/05	52.92	1.05	0.35	89	0.18	1.05	0.18	13	0.18	97	0.18	0.072	0.037	1.16	0.35	ND	0.18	~	~
WD18-0-6"	0-6"	12/23/04	58.28	1.61	0.17	36	0.08	0.79	0.08	8.8	0.08	70	0.08	0.115	0.017	ND	0.17	ND	0.18	~	17.56
WD19-0-6"	0-6"	12/23/04	52.15	1.15	0.17	69	0.09	1.03	0.09	16	0.09	93	0.09	0.136	0.074	ND	0.17	0.09	0.09	~	13.7
WD20-0-6"	0-6"	12/23/04	76.64	0.17	0.11	11	0.05	0.4	0.05	6.76	0.05	6.14	0.05	0.015	0.013	ND	0.11	ND	0.05	~	2.3
WD21-0-6"	0-6"	12/23/04	38.46	1.26	0.25	70	0.13	0.65	0.13	8.12	0.13	93	0.13	0.221	0.026	ND	0.25	ND	0.13	~	17.09

Table 2
Laboratory Analytical Results - RCRA 8 Metals and Total Organic Carbon
Wetlands

				RCRA 8 Metals														TCLP	
				Arsenic		Barium		Cadmium		Chromium		Lead		Mercury		Selenium		Silver		Lead	TOC
				(mg/kg)	RL	(mg/kg)	RL	(mg/kg)	RL	(mg/kg)	RL	(mg/kg)	RL	(mg/kg)	RL	(mg/kg)	RL	(mg/kg)	RL	(mg/L)	(%)
RCS-1				**30**	**30**	**1,000**	**1,000**	**30**	**30**	**1,000**	**1,000**	**300**	**300**	**20**	**20**	**400**	**400**	**100**	**100**	**~**	**~**
MADEP Background				**20**	**20**	**50**	**50**	**3**	**3**	**40**	**40**	**600**	**600**	**1**	**1**	**1**	**1**	**5**	**5**	**~**	**5**
Toxicity Characteristic (20 Times) Rule				**100**	**100**	**2,000**	**2,000**	**20**	**20**	**100**	**100**	**100**	**100**	**4**	**4**	**20**	**20**	**100**	**100**	**~**	**100**
Regulatory Limit				**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**5.0**	**~**
UCL				**300**	**300**	**10,000**	**10,000**	**800**	**800**	**10,000**	**10,000**	**6,000**	**6,000**	**600**	**600**	**10,000**	**10,000**	**2,000**	**2,000**	**~**	**2,000**
Sample Identification	**Depth**	**Date**	**% Solids**																		
WD21-0-6" MS	0-6"	12/23/04	~	~		~		~		~		~		~		~		~		~	~
WD21-0-6" MSD	0-6"	12/23/04	~	~		~		~		~		~		~		~		~		~	~
WD22-0-6"	0-6"	12/23/04	79.93	0.74	0.12	26	0.06	0.51	0.06	6.99	0.06	50	0.06	0.072	0.012	ND	0.12	ND	0.06	~	7.48
WD23-0-6"	0-6"	12/23/04	57.49	3.85	0.17	278	0.09	3.04	0.09	51	0.09	**325**	0.09	0.507	0.161	ND	0.17	0.28	0.09	0.2	8.53
WD24-0-6"	0-6"	12/23/04	30.30	3.18	0.32	344	0.16	2.11	0.16	26	0.16	264	0.16	0.341	0.012	2.46	0.32	ND	0.16	<0.1	30.27
WD25-0-6"	0-6"	12/23/04	38.05	6.9	0.25	966	0.63	4.3	0.13	79	0.13	**810**	0.63	0.648	0.236	ND	0.25	0.5	0.13	0.2	13.14
WD26-0-6"	0-6"	12/23/04	63.95	0.98	0.15	13	0.07	0.37	0.07	4.59	0.07	7.34	0.07	0.164	0.057	ND	0.15	ND	0.07	~	9.36
Duplicate 203 (WD26-0-6")	0-6"	12/23/04	47.48	3.45	0.20	251	0.10	2.34	0.10	60	0.10	220	0.10	0.378	0.082	ND	0.20	0.18	0.10	<0.1	19.11
WD27-0-6"	0-6"	12/23/04	51.11	1.25	0.18	21	0.09	0.52	0.09	4.81	0.09	24	0.09	0.204	0.078	ND	0.18	ND	0.09	~	17.18
WD.5-2.5	0-6"	4/25/05	75.79	2.35	0.19	24	0.09	1.03	0.09	5.44	0.09	77	0.09	0.046	0.013	ND	0.19	ND	0.09	~	~
WD.5-3	0-6"	4/25/05	65.08	2.27	0.12	26	0.06	0.75	0.06	4.64	0.06	64	0.06	0.043	0.014	ND	0.12	0.06	0.06	~	~
WD.5-3.5	0-6"	4/25/05	**18.69**	ND	0.90	38	0.45	1.17	0.45	6.32	0.45	73	0.45	ND	0.052	ND	0.90	ND	0.45	~	~
WD.5-3.5MS	0-6"	4/25/05	**22.51**	84	0.84	127	0.42	77	0.42	89	0.42	228	0.42	0.247	0.044	84	0.84	81	0.42	~	~
WD.5-3.5MDS	0-6"	4/25/05	**15.41**	115	1.21	158	0.60	106	0.60	121	0.60	228	0.60	0.303	0.054	110	1.21	111	0.60	~	~
WD.5-4.5	0-6"	4/22/05	**12.95**	ND	0.74	39	0.37	0.37	0.37	3.99	0.37	11	0.37	ND	0.077	1.62	0.74	ND	0.37	~	~
WD.5-5.5	0-6"	4/22/05	**13.72**	ND	0.67	48	0.33	0.53	0.33	8.14	0.33	23	0.33	0.087	0.066	2.54	0.67	ND	0.33	~	~
WD.5-6.5	0-6"	4/22/05	**13.86**	ND	0.70	37	0.35	0.49	0.35	10	0.35	5.04	0.35	0.125	0.063	2.80	0.70	ND	0.35	~	~
WD.5-17.14	0-6"	4/20/05	31.23	1.29	0.24	46	0.12	0.43	0.12	17	0.12	54	0.12	0.159	0.031	2.70	0.24	ND	0.12	~	~
WD.5-17.28	0-6"	4/20/05	50.33	0.59	0.19	40	0.09	0.42	0.09	8.59	0.09	11	0.09	0.134	0.016	1.13	0.19	ND	0.09	~	~
WD.5-17.46	0-6"	4/20/05	31.10	0.44	0.29	51	0.15	0.56	0.15	4.79	0.15	14	0.15	0.278	0.024	2.19	0.29	ND	0.15	~	~
WD.5-17.57 (0-6")	0-6"	4/20/05	41.19	5.57	0.21	363	0.10	3.86	0.10	52	0.10	**658**	1.04	0.411	0.024	0.79	0.21	0.17	0.10	~	~
WD.5-17.57 (6"-12")	6"-12"	8/11/05	43.95	2.33	0.25	49	0.13	0.8	0.13	15	0.13	69	0.13	0.06	0.011	1.78	0.25	ND	0.13	~	~
WE-2.5	0-6"	4/25/05	70.56	1.86	0.11	28	0.05	1.11	0.05	5.58	0.05	105	0.05	0.085	0.013	ND	0.11	0.05	0.05	0.1	~
WE-3 (0-6")	0-6"	12/22/04	**18.08**	ND	0.51	95	0.26	1.9	0.26	12	0.26	**431**	0.26	0.194	0.052	ND	0.51	ND	0.26	<0.1	62.2
WE-3.5	0-6"	4/25/05	**14.37**	ND	0.63	50	0.31	0.56	0.31	4.01	0.31	10	0.31	0.101	0.063	1.63	0.63	ND	0.31	~	~
WE-4 (0-6")	0-6"	12/22/04	**12.59**	ND	0.77	107	0.38	1	0.38	7	0.38	53	0.38	0.172	0.079	1.77	0.77	ND	0.38	~	73.5
WE-5 (0-6")	0-6"	12/22/04	**19.53**	0.63	0.48	86	0.24	1.16	0.24	11	0.24	167	0.24	0.235	0.047	1.94	0.48	ND	0.24	~	62.5
WE-6	0-6"	12/21/04	**18.46**	ND	0.51	106	0.26	1.12	0.26	14	0.26	25	0.26	0.07	0.027	4.44	0.51	ND	0.26	~	52.1
WE-6 (0-6")	0-6"	12/22/04	**13.18**	ND	0.76	57	0.38	0.84	0.38	6.3	0.38	9.03	0.38	0.185	0.071	1.67	0.76	ND	0.38	<0.1	73.4
WE-7	0-6"	12/21/04	**21.93**	ND	0.42	48	0.21	0.54	0.21	3.64	0.21	15	0.21	0.108	0.023	1.3	0.42	ND	0.21	~	53.7
WE8-0-6"	0-6"	12/21/04	**19.32**	ND	0.49	71	0.24	0.78	0.24	4.7	0.24	29	0.24	0.108	0.026	0.88	0.49	ND	0.24	~	44
WE.5-2.5	0-6"	4/25/05	**19.00**	ND	0.99	57	0.50	1.00	0.50	6.96	0.50	105	0.50	0.158	0.048	ND	0.99	ND	0.50	<0.1	~
WE.5-3	0-6"	4/25/05	**10.00**	ND	1.87	51	0.93	ND	0.93	4.67	0.93	15	0.93	0.101	0.088	ND	1.87	ND	0.93	~	~
Duplicate 220 (WE.5-3)	0-6"	4/25/05	**14.23**	ND	0.61	74	0.30	0.85	0.30	5.12	0.30	17	0.30	0.150	0.067	2.31	0.61	ND	0.30	~	~
WE.5-3.5	0-6"	4/25/05	**13.66**	ND	0.68	65	0.34	0.48	0.34	6.64	0.34	9.65	0.34	0.106	0.071	3.08	0.68	ND	0.34	~	~
WF-3 (0-6")	0-6"	12/22/04	**19.34**	ND	0.51	64	0.26	0.72	0.26	4.3	0.26	42	0.26	0.244	0.049	2.05	0.51	ND	0.26	~	39
WF-4 (0-6")	0-6"	12/22/04	**20.18**	ND	0.48	129	0.24	1.62	0.24	6.09	0.24	251	0.24	0.175	0.046	ND	0.48	ND	0.24	<0.1	48.6
WF-5 (0-6")	0-6"	12/22/04	**18.84**	ND	0.47	84	0.23	0.99	0.23	8.31	0.23	231	0.23	0.294	0.051	ND	0.47	ND	0.23	<0.1	33.5
WF-6 (0-6")	0-6"	12/22/04	**14.56**	0.88	0.59	210	0.29	3.33	0.29	13	0.29	177	0.29	0.188	0.064	2.11	0.59	ND	0.29	<0.1	46
WF-7	0-6"	12/21/04	**19.46**	ND	0.48	112	0.24	1.26	0.24	7.34	0.24	106	0.24	0.135	0.025	1.69	0.48	ND	0.24	<0.1	61.8

Table 2
Laboratory Analytical Results - RCRA 8 Metals and Total Organic Carbon
Wetlands

				RCRA 8 Metals														TCLP	
				Arsenic		Barium		Cadmium		Chromium		Lead		Mercury		Selenium		Silver		Lead	TOC
				(mg/kg)	RL	(mg/kg)	RL	(mg/kg)	RL	(mg/kg)	RL	(mg/kg)	RL	(mg/kg)	RL	(mg/kg)	RL	(mg/kg)	RL	(mg/L)	(%)
RCS-1				**30**	**30**	**1,000**	**1,000**	**30**	**30**	**1,000**	**1,000**	**300**	**300**	**20**	**20**	**400**	**400**	**100**	**100**	**~**	**~**
MADEP Background				**20**	**20**	**50**	**50**	**3**	**3**	**40**	**40**	**600**	**600**	**1**	**1**	**1**	**1**	**5**	**5**	**~**	**5**
Toxicity Characteristic (20 Times) Rule				**100**	**100**	**2,000**	**2,000**	**20**	**20**	**100**	**100**	**100**	**100**	**4**	**4**	**20**	**20**	**100**	**100**	**~**	**100**
Regulatory Limit				**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**~**	**5.0**	**~**
UCL				**300**	**300**	**10,000**	**10,000**	**800**	**800**	**10,000**	**10,000**	**6,000**	**6,000**	**600**	**600**	**10,000**	**10,000**	**2,000**	**2,000**	**~**	**2,000**
Sample Identification	**Depth**	**Date**	**% Solids**																		
WF8-0-6"	0-6"	12/21/04	**23.72**	4.13	0.41	426	0.21	5.75	0.21	78	0.21	**633**	0.21	0.36	0.198	ND	0.41	0.58	0.21	0.37	28
WG-3 (0-6")	0-6"	12/22/04	**22.43**	ND	0.45	83	0.23	1.04	0.23	10	0.23	139	0.23	0.188	0.043	ND	0.45	ND	0.23	<0.1	28.6
WG-4 (0-6")	0-6"	12/22/04	**18.64**	ND	0.50	116	0.25	1.21	0.25	7.2	0.25	92	0.25	0.212	0.053	1.46	0.50	ND	0.25	~	50.5
WG-4.5	0-6"	4/22/05	50.05	0.33	0.17	51	0.08	0.43	0.08	4.70	0.08	48	0.08	0.064	0.017	0.55	0.17	ND	0.08	~	~
WG-5 (0-6")	0-6"	12/22/04	**23.40**	ND	0.40	141	0.20	1.37	0.20	6.6	0.20	134	0.20	0.141	0.040	1.41	0.40	ND	0.20	<0.1	37
WG-6	0-6"	4/22/05	80.14	ND	0.12	8.73	0.06	0.22	0.06	4.24	0.06	2.48	0.06	ND	0.012	ND	0.12	ND	0.06	~	~
WH-4	0-6"	4/22/05	35.33	ND	0.24	17	0.12	0.33	0.12	4.72	0.12	16	0.12	0.032	0.028	ND	0.24	ND	0.12	~	~
WH-4.5	0-6"	4/22/05	72.59	ND	0.12	8.91	0.06	0.22	0.06	3.51	0.06	3.41	0.06	ND	0.011	ND	0.12	ND	0.06	~	~
WH-5 (0-6")	0-6"	12/22/04	30.27	ND	0.33	94	0.16	0.82	0.16	6.07	0.16	46	0.16	0.17	0.032	1.38	0.33	ND	0.16	~	44.4
WH-5 (6"-12")	6"-12"	8/11/05	90.77	0.7	0.12	8.69	0.06	0.93	0.06	9.66	0.06	16	0.06	0.011	0.005	0.43	0.12	ND	0.06	~	~
WH-5.5	0-6"	4/22/05	~	ND	0.22	34	0.11	0.35	0.11	4.49	0.11	13	0.11	0.040	0.023	0.77	0.22	ND	0.11	~	~
WH-6	0-6"	4/22/05	39.80	ND	0.31	36	0.15	0.31	0.15	7.9	0.15	6.83	0.15	ND	0.033	0.82	0.31	ND	0.15	~	~
WH.5-4.5	0-6"	4/22/05	67.00	ND	0.14	17	0.07	0.34	0.07	4.3	0.07	11	0.07	0.024	0.021	ND	0.14	ND	0.07	~	~
WH.5-5	0-6"	4/22/05	34.41	ND	0.24	37	0.12	0.44	0.12	5.40	0.12	15	0.12	0.047	0.023	0.93	0.24	ND	0.12	~	~
WH.5-5MS	0-6"	4/22/05	44.92	17	0.18	40	0.09	15	0.09	21	0.09	37	0.09	0.102	0.021	16	0.18	16	0.09	~	~
WH.5-5MSD	0-6"	4/22/05	46.99	18	0.21	44	0.10	17	0.10	24	0.10	39	0.10	0.090	0.017	17	0.21	18	0.10	~	~
WH.5-5.5	0-6"	4/22/05	55.66	ND	0.16	12	0.08	0.25	0.08	3.12	0.08	12	0.08	0.024	0.015	ND	0.16	ND	0.08	~	~
WI-4	0-6"	4/22/05	**13.76**	ND	0.65	93	0.33	1.18	0.33	6.09	0.33	71	0.33	0.128	0.066	3.01	0.65	0.33	0.33	~	~
WI-5	0-6"	4/22/05	34.85	0.79	0.24	27	0.12	0.51	0.12	8.86	0.12	6.72	0.12	0.031	0.028	1.64	0.24	ND	0.12	~	~
WI-6	0-6"	4/22/05	**24.25**	ND	0.36	88	0.18	0.97	0.18	5.26	0.18	100	0.18	0.114	0.037	1.36	0.36	ND	0.18	~	~
WI.5-4	0-6"	4/22/05	41.41	0.49	0.21	14	0.11	0.19	0.11	3.73	0.11	5.44	0.11	0.038	0.020	0.71	0.21	ND	0.11	~	~
WI.5-4.5	0-6"	4/22/05	**19.58**	2.62	0.44	54	0.22	0.48	0.22	11	0.22	14	0.22	0.13	0.050	2.18	0.44	ND	0.22	~	~
WI.5-5	0-6"	4/22/05	**15.90**	ND	0.47	63	0.23	0.65	0.23	11	0.23	63	0.23	0.120	0.055	2.43	0.47	ND	0.23	~	~
Duplicate 221 (WI.5-5)	0-6"	4/22/05	**19.66**	ND	0.49	68	0.25	0.79	0.25	8.10	0.25	81	0.25	0.134	0.042	1.78	0.49	ND	0.25	~	~
WI.5-5.5	0-6"	4/22/05	**21.80**	0.80	0.40	51	0.20	0.56	0.20	6.57	0.20	13	0.20	0.080	0.039	2.15	0.40	ND	0.20	~	~

NOTES:
ND = not detected above method detection limit
RCS-1 = Massachusetts Contingency Plan Method 1 Soil Standard for category S-1 soil.
Gray shading indicates concentration exceeding the RCS-1 standard.

Table 3
Laboratory Analytical Results - Polynuclear Aromatic Hydrocarbons
Wetlands

Sample Identification	Depth	Date	Solids	Naphthalene (ug/kg)	RL	2-Methylnaphthalene (ug/kg)	RL	Acenaphthylene (ug/kg)	RL	Acenaphthene (ug/kg)	RL	Fluorene (ug/kg)	RL	Phenanthrene (ug/kg)	RL	Anthracene (ug/kg)	RL	Fluoranthene (ug/kg)	RL	Pyrene (ug/kg)	RL	Benzo(a)anthracene (ug/kg)	RL	Chrysene (ug/kg)	RL	Benzo(b)fluoranthene (ug/kg)	RL	Benzo(k)fluoranthene (ug/kg)	RL	Benzo(a)pyrene (ug/kg)	RL	Ideno(1,2,3-cd)pyrene (ug/kg)	RL	Dibenz(a,h)anthracene (ug/kg)	RL	Benzo(g,h,i)perylene (ug/kg)	RL
RCS-1				50,000	50,000	500,000	500,000	60,000	60,000	1,000,000	1,000,000	700	700	700	700	100,000	100,000	2,000	2,000	100,000	100,000	500,000	500,000	700	700	50,000	50,000	50,000	50,000	6,000	6,000	50,000	50,000	100,000	100,000	100,000	100,000
MADEP Background				~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
UCL				~	~	~	~	10,000,000	10,000,000	~	~	7,000	7,000	10,000,000	10,000,000	5,000,000	5,000,000	2,000,000	2,000,000	5,000,000	5,000,000	~	~	90,000	90,000	~	~	~	~	500,000	500,000	~	~	~	~	~	~
IW1-0-6"	0-6"	12/23/04	77.33	ND	88	ND	88	ND	88	110		89		1,400		250		2,200		1,600		920		8,800		1,400		450		930		550		ND	88	490	490
IW2-0-6"	0-6"	12/23/04	61.79	ND	110	ND	110	ND	110	140		140		1,900		440		3,000		ND	110	1,400		1,000		2,300		560		1,400		780		ND	110	820	820
WA3-0-6"	0-6"	12/21/04	72.08	ND	69	ND	69	ND	69	ND	69	ND	69	ND	69	ND	69	ND	69	ND	69	ND	69	ND	69	ND	69	ND	69	ND	69	ND	69	ND	69	ND	69
Duplicate 201 (WA3-0-6")	0-6"	12/21/04	69.52	ND	71	ND	71	ND	71	ND	71	ND	71	ND	71	ND	71	ND	71	ND	71	ND	71	ND	71	ND	71	ND	71	ND	71	ND	71	ND	71	ND	71
WB4-0-6"	0-6"	12/21/04	39.87	ND	120	ND	120	ND	120	ND	120	ND	120	1,000		ND	120	2,200		1,500		750		810		ND	120	ND	120	ND	120	ND	120	ND	120	ND	120
WB5-0-6"	0-6"	12/21/04	28.44	ND	180	ND	180	ND	180	ND	180	ND	180	ND	180	ND	180	470		350		ND	180	ND	180	ND	180	ND	180	ND	180	ND	180	ND	180	ND	180
WB6-0-6"	0-6"	12/21/04	14.87	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330
WB7-0-6"	0-6"	12/21/04	16.29	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310
WC-4	0-6"	12/21/04	18.98	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	260		ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260
WC-5	0-6"	12/21/04	15.83	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310
WC-6	0-6"	12/21/04	19.49	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260
WC7-0-6"	0-6"	12/21/04	21.65	ND	230	ND	230	ND	230	ND	230	ND	230	ND	230	ND	230	ND	230	ND	230	ND	230	ND	230	ND	230	ND	230	ND	230	ND	230	ND	230	ND	230
WC8-0-6"	0-6"	12/21/04	14.26	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360
WC18-0-6"	0-6"	12/23/04	82.57	ND	79	ND	79	ND	79	ND	79	ND	79	ND	79	ND	79	ND	79	ND	79	ND	79	ND	79	ND	79	ND	79	ND	79	ND	79	ND	79	ND	79
WC19-0-6"	0-6"	12/23/04	62.48	ND	92	ND	92	ND	92	ND	92	ND	92	95		ND	92	180		170		100		110		160		ND	92	110		ND	92	ND	92	ND	92
WC20-0-6"	0-6"	12/23/04	53.05	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130
WC21-0-6"	0-6"	12/23/04	60.01	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110
WC22-0-6"	0-6"	12/23/04	71.79	ND	84	ND	84	ND	84	ND	84	ND	84	ND	84	ND	84	120		140		ND	84	ND	84	ND	84	ND	84	ND	84	ND	84	ND	84	ND	84
WC23-0-6"	0-6"	12/23/04	64.39	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	110		120		ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110
WC24-0-6"	0-6"	12/23/04	79.84	ND	84	ND	84	ND	84	ND	84	ND	84	ND	84	ND	84	ND	84	ND	84	ND	84	ND	84	ND	84	ND	84	ND	84	ND	84	ND	84	ND	84
WC25-0-6"	0-6"	12/23/04	60.9	ND	110	ND	110	ND	110	ND	110	ND	110	130		ND	110	220		230		ND	110	110		ND	110	ND	110	ND	110	ND	110	ND	110	ND	110
WC26-0-6"	0-6"	12/23/04	51.45	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130
WC27-0-6"	0-6"	12/23/04	73.58	ND	130	ND	130	ND	130	ND	130	ND	130	140		ND	130	260		240		140		140		ND	130	ND	130	ND	130	ND	130	ND	130	ND	130
WC.5-4.5	0-6"	4/22/05	11.74	ND	4,100	ND	4,100	ND	4,100	ND	4,100	ND	4,100	ND	4,100	ND	4,100	ND	4,100	ND	4,100	ND	4,100	ND	4,100	ND	4,100	ND	4,100	ND	4,100	ND	4,100	ND	4,100	ND	4,100
WC.5-5.5	0-6"	4/22/05	17.34	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510
WC.5-6.5	0-6"	4/22/05	12.23	ND	840	ND	840	ND	840	ND	840	ND	840	ND	840	ND	840	ND	840	ND	840	ND	840	ND	840	ND	840	ND	840	ND	840	ND	840	ND	840	ND	840
WC.5-8.5	0-6"	4/22/05	15.21	ND	650	ND	650	ND	650	ND	650	ND	650	ND	650	ND	650	ND	650	ND	650	ND	650	ND	650	ND	650	ND	650	ND	650	ND	650	ND	650	ND	650
WC.5-9.5	0-6"	4/22/05	14.46	ND	600	ND	600	ND	600	ND	600	ND	600	ND	600	ND	600	ND	600	ND	600	ND	600	ND	600	ND	600	ND	600	ND	600	ND	600	ND	600	ND	600
WC.5-10.5	0-6"	4/20/05	14.16	ND	700	ND	700	ND	700	ND	700	ND	700	ND	700	ND	700	ND	700	ND	700	ND	700	ND	700	ND	700	ND	700	ND	700	ND	700	ND	700	ND	700
WC.5-11.5	0-6"	4/20/05	23.44	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440
WC.5-12.5	0-6"	4/20/05	18.14	ND	540	ND	540	ND	540	ND	540	ND	540	ND	540	ND	540	ND	540	ND	540	ND	540	ND	540	ND	540	ND	540	ND	540	ND	540	ND	540	ND	540
WC.5-13.5	0-6"	4/20/05	19.51	ND	470	ND	470	ND	470	ND	470	ND	470	ND	470	ND	470	ND	470	ND	470	ND	470	ND	470	ND	470	ND	470	ND	470	ND	470	ND	470	ND	470
Duplicate 222 (WC.5-13.5)	0-6"	4/20/05	23.05	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440
WC.5-14.5	0-6"	4/20/05	32.31	ND	140	ND	140	ND	140	ND	140	ND	140	2,200		540		1,800		4,200		1,400		1,200		1,500		740		1,400		1,100		ND	140	1,100	
WC.5-15.5	0-6"	4/20/05	29.21	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340
WC.5-16.5	0-6"	4/20/05	85.97	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130
WC.5-17.14	0-6"	4/20/05	22.50	ND	430	ND	430	ND	430	ND	430	ND	430	ND	430	ND	430	ND	430	ND	430	ND	430	ND	430	ND	430	ND	430	ND	430	ND	430	ND	430	ND	430
WC.5-17.28	0-6"	4/20/05	22.86	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	760		1,500		540		540		770		490		680		ND	440	ND	440	ND	440
WC.5-18.5	0-6"	4/25/05	68.72	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140
WC.5-19.5	0-6"	4/25/05	85.78	ND	56	ND	56	ND	56	ND	56	ND	56	ND	56	ND	56	ND	56	ND	56	ND	56	ND	56	ND	56	ND	56	ND	56	ND	56	ND	56	ND	56
WC.5-20.5	0-6"	4/25/05	64.63	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160
WC.5-21.5	0-6"	4/25/05	62.87	ND	95	ND	95	ND	95	ND	95	ND	95	ND	95	ND	95	ND	95	ND	95	ND	95	ND	95	ND	95	ND	95	ND	95	ND	95	ND	95	ND	95
WC.5-22.5	0-6"	4/25/05	53.46	ND	88	ND	88	ND	88	ND	88	ND	88	ND	88	ND	88	110		170		ND	88	ND	88	120		ND	88	ND	88	ND	88	ND	88	ND	88
WC.5-23.5	0-6"	4/25/05	59.47	ND	190	ND	190	ND	190	ND	190	ND	190	ND	190	ND	190	ND	190	ND	190	ND	190	ND	190	ND	190	ND	190	ND	190	ND	190	ND	190	ND	190
WC.5-24.5	0-6"	4/25/05	46.98	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	400		ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300
Duplicate 223 (WC.5-24.5)	0-6"	4/25/05	33.63	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340
WC.5-25.5	0-6"	4/25/05	59.00	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170
WC.5-26.5	0-6"	4/25/05	54.29	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200
WC.5-27.5	0-6"	4/25/05	74.83	ND	150	ND	150	ND	150	ND	150	ND	150	160		ND	150	310		420		180		160		380		180		250		ND	150	ND	150	ND	150
WD-3 (0-6")	0-6"	12/22/04	50.19	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130
WD-4 (0-6")	0-6"	12/22/04	19.48	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340
WD-4.5	0-6"	4/22/05	16.62	ND	570	ND	570	ND	570	ND	570	ND	570	ND	570	ND	570	ND	570	ND	570	ND	570	ND	570	ND	570	ND	570	ND	570	ND	570	ND	570	ND	570
WD-5 (0-6")	0-6"	12/22/04	48.83	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140
WD-5 (6"-12")	6"-12"	8/11/05	29.71	ND	210	ND	210	ND	210	ND	210	ND	210	ND	210	ND	210	ND	210	ND	210	ND	210	ND	210	ND	210	ND	210	ND	210	ND	210	ND	210	ND	210
Duplicate 202 (WD5-0-6")	0-6"	12/22/04	56.37	ND	120	ND	120	ND	120	ND	120	ND	120	ND	120	ND	120	ND	120	ND	120	ND	120	ND	120	ND	120	ND	120	ND	120	ND	120	ND	120	ND	120
WD-6 (0-6")	0-6"	12/22/04	28.93	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220
WD-6.5	0-6"	4/22/05	14.56	ND	3,500	ND	3,500	ND	3,500	ND	3,500	ND	3,500	ND	3,500	ND	3,500	ND	3,500	ND	3,500	ND	3,500	ND	3,500	ND	3,500	ND	3,500	ND	3,500	ND	3,500	ND	3,500	ND	3,500
WD-7	0-6"	12/21/04	30.22	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	190		190		ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170
WD8-0-6"	0-6"	12/21/04	18.85	ND	270	ND	270	ND	270	ND	270	ND	270	ND	270	ND	270	ND	270	ND	270	ND	270	ND	270	ND	270	ND	270	ND	270	ND	270	ND	270	ND	270
WD-9 (0-6")	0-6"	12/22/04	23.53	ND	280	ND	280	ND	280	ND	280	ND	280	ND	280	ND	280	ND	280	ND	280	ND	280	ND	280	ND	280	ND	280	ND	280	ND	280	ND	280	ND	280
WD-10 (0-6")	0-6"	12/22/04	26.85	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240
WD-10.5	0-6"	4/20/05	18.79	ND	50	ND	50	ND	50	ND	50	ND	50	ND	50	ND	50	ND	50	ND	50	ND	50	ND	50	ND	50	ND	50	ND	50	ND	50	ND	50	ND	50
WD-10.5 (6"-12")	6"-12"	8/11/05	48.95	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200
WD-11 (0-6")	0-6"	12/22/04	20.90	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310	ND	310
WD-12 (0-6")	0-6"	12/22/04	20.19	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330
WD-13 (0-6")	0-6"	12/22/04	22.29	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300
WD-14 (0-6")	0-6"	12/22/04	17.00	ND	390	ND	390	ND	390	ND	390	ND	390	ND	390	ND	390	ND	390	ND	390	ND	390	ND	390	ND	390	ND	390	ND	390	ND	390	ND	390	ND	390
WD-14 (6"-12")	6"-12"	8/11/05	32.75	ND	250	ND	250	ND	250	ND	250	ND	250	ND	250	ND	250	ND	250	ND	250	ND	250	ND	250	ND	250	ND	250	ND	250	ND	250	ND	250	ND	250
WD-15 (0-6")	0-6"	12/22/04	26.17	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260
WD-15.5	0-6"	4/20/05	70.11	ND	50	ND	50	ND	50	ND	50	ND	50	ND	50	ND	50	ND	50	ND	50	ND	50	ND	50	ND	50	ND	50	ND	50	ND	50	ND	50	ND	50
WD-16 (0-6")	0-6"	12/22/04	28.51	ND	230	ND	230	ND	230	ND	230	ND	230	ND	230	ND	230	ND	230	ND	230	ND	230	ND	230	ND	230	ND	230	ND	230	ND	230	ND	230	ND	230
WD-17 (0-6")	0-6"	12/22/04	29.54	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220
WD-17.57	0-6"	4/20/05	25.29	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170
WD-17.46	0-6"	4/20/05	52.92	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	590		ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360
WD18-0-6"	0-6"	12/23/04	58.28	ND	110	ND	110	ND	110	ND	110	ND	110	180		ND	110	260		260		150		130		ND	110	ND	110	ND	110	ND	110	ND	110	ND	110
WD19-0-6"	0-6"	12/23/04	52.15	ND	130	ND	130	ND	130	ND	130	ND	130	180		ND	130	310		430		180		190		460		130		330		ND	130	ND	130	ND	130
WD20-0-6"	0-6"	12/23/04	76.64	ND	87	ND	87	ND	87	ND	87	ND	87	ND	87	ND	87	ND	87	ND	87	ND	87	ND	87	ND	87	ND	87	ND	87	ND	87	ND	87	ND	87
WD21-0-6"	0-6"	12/23/04	38.46	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	260		250		ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170	ND	170
WD22-0-6"	0-6"	12/23/04	79.93	ND	91	ND	91	ND	91	ND	91	ND	91	ND	91	ND	91	ND	91	ND	91	ND	91	ND	91	ND	91	ND	91	ND	91	ND	91	ND	91	ND	91
WD23-0-6"	0-6"	12/23/04	57.49	ND	120	ND	120	ND	120	ND	120	ND	120	470		ND	120	690		760		360		300		490		200		380	380	ND	120	ND	120	ND	120
WD24-0-6"	0-6"	12/23/04	30.30	ND	82	ND	82	ND	82	ND	82	ND	82	ND	82	ND	82	ND	82	ND	82	ND	82	ND	82	ND	82	ND	82	ND	82	ND	82	ND	82	ND	82
WD25-0-6"	0-6"	12/23/04	38.05	ND	180	ND	180	ND	180	ND	180	ND	180	220		ND	180	380		460		210		180		310		ND	180	ND	180	ND	180	ND	180	ND	180
WD26-0-6"	0-6"	12/23/04	63.95	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	140		130		ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110
Duplicate 203 (WD26-0-6")	0-6"	12/23/04	47.48	ND	140	ND	140	ND	140	ND	140	ND	140	490		ND	140	690		640		350		290		440		160		350		ND	140	ND	140	ND	140
WD27-0-6"	0-6"	12/23/04	51.11	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	150		180		ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130
WD.5-2.5	0-6"	4/25/05	75.79	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	170		190		ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160
WD.5-3	0-6"	4/25/05	65.08	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160
WD.5-3.5	0-6"	4/25/05	18.69	ND	610	ND	610	ND	610	ND	610	ND	610	ND	610	ND	610	ND	610	ND	610	ND	610	ND	610	ND	610	ND	610	ND	610	ND	610	ND	610	ND	610
WD.5-4.5	0-6"	4/22/05	12.95	ND	790	ND	790	ND	790	ND	790	ND	790	ND	790	ND	790	ND	790	ND	790	ND	790	ND	790	ND	790	ND	790	ND	790	ND	790	ND	790	ND	790
WD.5-5.5	0-6"	4/22/05	13.72	ND	730	ND	730	ND	730	ND	730	ND	730	ND	730	ND	730	ND	730	ND	730	ND	730	ND	730	ND	730	ND	730	ND	730	ND	730	ND	730	ND	730
WD.5-6.5	0-6"	4/22/05	13.86	ND	570	ND	570	ND	570	ND	570	ND	570	ND	570	ND	570	ND	570	ND	570	ND	570	ND	570	ND	570	ND	570	ND	570	ND	570	ND	570	ND	570
WD.5-17.14	0-6"	4/20/05	31.23	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	330		ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300
WD.5-17.28	0-6"	4/20/05	50.33	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200	ND	200
WD.5-17.46	0-6"	4/20/05	31.10	ND	320	ND	320	ND	320	ND	320	ND	320	ND	320	ND	320	ND	320	ND	320	ND	320	ND	320	ND	320	ND	320	ND	320	ND	320	ND	320	ND	320
WD.5-17.57	0-6"	4/20/05	41.19	ND	240	ND	240	ND	240	ND	240	ND	240	2,600		740		3,600		5,600		2,300		1,800		2,900		1,400		2,300		ND	240	ND	240	700	
WD.5-17.57 (6"-12")	6"-12"	8/11/05	43.95	ND	150	ND	150	ND	150	ND	150	ND	150	190		ND	150	350		360		ND	150	ND	150	ND	150	240		ND	150	ND	150	ND	150	ND	150
WE-2.5	0-6"	4/25/05	70.56	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	190		ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160	ND	160
WE-3 (0-6")	0-6"	12/22/04	18.08	ND	370	ND	370	ND	370	ND	370	ND	370	ND	370	ND	370	ND	370	ND	370	ND	370	ND	370	ND	370	ND	370	ND	370	ND	370	ND	370	ND	370
WE-3.5	0-6"	4/25/05	14.37	ND	780	ND	780	ND	780	ND	780	ND	780	ND	780	ND	780	ND	780	ND	780	ND	780	ND	780	ND	780	ND	780	ND	780	ND	780	ND	780	ND	780
WE-4 (0-6")	0-6"	12/22/04	12.59	ND	500	ND	500	ND	500	ND	500	ND	500	ND	500	ND	500	ND	500	ND	500	ND	500	ND	500	ND	500	ND	500	ND	500	ND	500	ND	500	ND	500
WE-5 (0-6")	0-6"	12/22/04	19.53	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330	ND	330
WE-6	0-6"	12/21/04	18.46	ND	270	ND	270	ND	270	ND	270	ND	270	ND	270	ND	270	ND	270	ND	270	ND	270	ND	270	ND	270	ND	270	ND	270	ND	270	ND	270	ND	270
WE-6 (0-6")	0-6"	12/22/04	13.18	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510
WE-7	0-6"	12/21/04	21.93	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220
WE-8 (0-6")	0-6"	12/21/04	19.32	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260
WE.5-2.5	0-6"	4/25/05	19.00	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510	ND	510
WE.5-3	0-6"	4/25/05	10.00	ND	1,100	ND	1,100	ND	1,100	ND	1,100	ND	1,100	ND	1,100	ND	1,100	ND	1,100	ND	1,100	ND	1,100	ND	1,100	ND	1,100	ND	1,100	ND	1,100	ND	1,100	ND	1,100	ND	1,100
Duplicate 220 (WE.5-3)	0-6"	4/25/05	14.23	ND	760	ND	760	ND	760	ND	760	ND	760	ND	760	ND	760	ND	760	ND	760	ND	760	ND	760	ND	760	ND	760	ND	760	ND	760	ND	760	ND	760

Table 3
Laboratory Analytical Results - Polynuclear Aromatic Hydrocarbons
Wetlands

				Naphthalene		2-Methylnaphthalene		Acenaphthylene		Acenaphthene		Fluorene		Phenanthrene		Anthracene		Fluoranthene		Pyrene		Benzo(a)anthracene		Chrysene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Benzo(a)pyrene		Ideno(1,2,3-cd)pyrene		Dibenz(a,h)anthracene		Benzo(g,h,i)perylene	
				(ug/kg)	RL	(ug/kg)	RL	(ug/kg)	RL	(ug/kg)	RL	(ug/kg)	RL	(ug/kg)	RL	(ug/kg)	RL	(ug/kg)	RL	(ug/kg)	RL	(ug/kg)	RL	(ug/kg)	RL	(ug/kg)	RL	(ug/kg)	RL	(ug/kg)	RL	(ug/kg)	RL	(ug/kg)	RL	(ug/kg)	RL	(ug/kg)	RL
			RCS-1	50,000	50,000	500,000	500,000	60,000	60,000	1,000,000	1,000,000	700	700	700	700	100,000	100,000	2,000	2,000	100,000	100,000	500,000	500,000	700	700	50,000	50,000	50,000	50,000	6,000	6,000	50,000	50,000	100,000	100,000	100,000	100,000
			MADEP Background	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
			UCL	~	~	~	~	10,000,000	10,000,000	~	~	7,000	7,000	10,000,000	10,000,000	5,000,000	5,000,000	2,000,000	2,000,000	5,000,000	5,000,000	~	~	90,000	90,000	~	~	~	~	500,000	500,000	~	~	~	~	~	~
Sample Identification	**Depth**	**Date**	**Solids**																																		
WE.5-3.5	0-6"	4/25/05	**13.66**	ND	930	ND	930	ND	930	ND	930	ND	**930**	ND	**930**	ND	930	ND	930	ND	930	ND	930	ND	**930**	ND	930	ND	930	ND	930	ND	930	ND	930	ND	930
WF-3 (0-6")	0-6"	12/22/04	**19.34**	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340
WF-4 (0-6")	0-6"	12/22/04	**20.18**	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340	ND	340
WF-5 (0-6")	0-6"	12/22/04	**18.84**	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360
WF-6 (0-6")	0-6"	12/22/04	**14.56**	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440	ND	440
WF-7	0-6"	12/21/04	**19.46**	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260	ND	260
WF9 (0-6"	0-6"	12/21/04	**23.72**	ND	210	ND	210	ND	210	ND	210	ND	210	**700**		ND	210	1,000		1,200		510		390		540		210		430		ND	210	ND	210	ND	210
WG-3 (0-6")	0-6"	12/22/04	**22.43**	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300	ND	300
WG-4 (0-6")	0-6"	12/22/04	**18.64**	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360	ND	360
WG-4.5	0-6"	4/22/05	50.05	ND	180	ND	180	ND	180	ND	180	ND	180	ND	180	ND	180	ND	180	ND	180	ND	180	ND	180	ND	180	ND	180	ND	180	ND	180	ND	180	ND	180
WG-5 (0-6")	0-6"	12/22/04	**23.40**	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140
WG-6	0-6"	4/22/05	80.14	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140	ND	140
WH-4	0-6"	4/22/05	35.33	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240
WH-4.5	0-6"	4/22/05	72.59	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130	ND	130
WH-5 (0-6")	0-6"	12/22/04	30.27	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220	ND	220
WH-5 (6"-12")	6"-12"	8/11/05	90.77	ND	55	ND	55	ND	55	ND	55	ND	55	72	72	ND	55	110	110	100	100	ND	55	61	61	ND	55	ND	55	ND	55	ND	55	ND	55	ND	55
WH-5.5	0-6"	4/22/05	~	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240
WH-6	0-6"	4/22/05	39.80	ND	1,800	ND	1,800	ND	1,800	ND	1,800	ND	**1,800**	ND	**1,800**	ND	1,800	ND	1,800	ND	1,800	ND	1,800	ND	**1,800**	ND	1,800	ND	1,800	ND	1,800	ND	1,800	ND	1,800	ND	1,800
WH.5-4.5	0-6"	4/22/05	67.00	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110	ND	110
WH.5-5	0-6"	4/22/05	34.41	ND	280	ND	280	ND	280	ND	280	ND	280	ND	280	ND	280	ND	280	ND	280	ND	280	ND	280	ND	280	ND	280	ND	280	ND	280	ND	280	ND	280
WI-4	0-6"	4/22/05	**13.76**	ND	620	ND	620	ND	620	ND	620	ND	620	ND	620	ND	620	ND	620	ND	620	ND	620	ND	620	ND	620	ND	620	ND	620	ND	620	ND	620	ND	620
WI-5	0-6"	4/22/05	34.85	ND	250	ND	250	ND	250	ND	250	ND	250	ND	250	ND	250	ND	250	ND	250	ND	250	ND	250	ND	250	ND	250	ND	250	ND	250	ND	250	ND	250
WI-6	0-6"	4/22/05	**24.25**	ND	430	ND	430	ND	430	ND	430	ND	430	ND	430	ND	430	ND	430	ND	430	ND	430	ND	430	ND	430	ND	430	ND	430	ND	430	ND	430	ND	430
WI.5-4	0-6"	4/22/05	41.41	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240	ND	240
WI.5-4.5	0-6"	4/22/05	**19.58**	ND	2,300	ND	2,300	ND	2,300	ND	2,300	ND	**2,300**	ND	**2,300**	ND	2,300	ND	**2,300**	ND	2,300	ND	2,300	ND	**2,300**	ND	2,300	ND	2,300	ND	2,300	ND	2,300	ND	2,300	ND	2,300
WI.5-5	0-6"	4/22/05	**15.90**	ND	530	ND	530	ND	530	ND	530	ND	530	ND	530	ND	530	ND	530	ND	530	ND	530	ND	530	ND	530	ND	530	ND	530	ND	530	ND	530	ND	530
Duplicate 221 (WI.5-5)	0-6"	4/22/05	**19.66**	ND	500	ND	500	ND	500	ND	500	ND	500	ND	500	ND	500	ND	500	810		ND	500	ND	500	ND	500	ND	500	ND	500	ND	500	ND	500	ND	500
WI.5-5.5	0-6"	4/22/05	**21.80**	ND	480	ND	480	ND	480	ND	480	ND	480	ND	480	ND	480	ND	480	ND	480	ND	480	ND	480	ND	480	ND	480	ND	480	ND	480	ND	480	ND	480

NOTES:
ND = not detected above method detection limit
RCS-1 = Massachusetts Contingency Plan Method 1 Soil
Gray shading indicates concentration exceeding the RCS-

McCoy Field
Project No. 02685

Table 6
Wetlands Samples
Data Quality Assessment - Holding Times

QAQC Checks

Holding time from sampling to extraction should not exceed 14 days.
Holding time from extraction to analysis should not exceed 40 days.

Summary

Percent of samples extracted within holding time = 100%
Percent of samples analyzed within holding time = 100%

Sample Identification	Depth	Collection Date	PCB Analysis Date	Holding Time (Sampling to Analysis)	Sample Analyzed within 40 days of Collection?	Sample Analyzed within 14 days of Collection	Extraction Date	Holding Time (Sampling to Extraction)
IW1-0-6"	0-6"	12/23/04	1/7/05	15	YES	NO	12/30/04	7
IW2-0-6"	0-6"	12/23/04	1/11/05	19	YES	NO	12/30/04	7
WA3-0-6"	0-6"	12/21/04	12/23/04	2	YES	YES	N/A	N/A
Duplicate 201 (WA3-0-6")	0-6"	12/21/04	12/23/04	2	YES	YES	N/A	N/A
WB4-0-6"	0-6"	12/21/04	12/23/04	2	YES	YES	N/A	N/A
WB5-0-6"	0-6"	12/21/04	12/23/04	2	YES	YES	N/A	N/A
WB6-0-6"	0-6"	12/21/04	12/23/04	2	YES	YES	N/A	N/A
WB7-0-6"	0-6"	12/21/04	12/23/04	2	YES	YES	N/A	N/A
WC-4	0-6"	12/21/04	12/27/04	6	YES	YES	N/A	N/A
WC-5	0-6"	12/21/04	12/27/04	6	YES	YES	N/A	N/A
WC-6	0-6"	12/21/04	12/27/04	6	YES	YES	N/A	N/A
WC7-0-6"	0-6"	12/21/04	12/23/04	2	YES	YES	N/A	N/A
WC8-0-6"	0-6"	12/21/04	12/23/04	2	YES	YES	N/A	N/A
WC18-0-6"	0-6"	12/23/04	12/30/04	7	YES	YES	N/A	N/A
WC19-0-6"	0-6"	12/23/04	1/7/05	15	YES	NO	12/30/04	7
WC20-0-6"	0-6"	12/23/04	1/7/05	15	YES	NO	12/30/04	7
WC21-0-6"	0-6"	12/23/04	1/7/05	15	YES	NO	12/30/04	7
WC22-0-6"	0-6"	12/23/04	12/30/04	7	YES	YES	N/A	N/A
WC23-0-6"	0-6"	12/23/04	1/7/05	15	YES	NO	12/30/04	7
WC24-0-6"	0-6"	12/23/04	12/30/04	7	YES	YES	N/A	N/A
WC25-0-6"	0-6"	12/23/04	12/30/04	7	YES	YES	N/A	N/A
WC26-0-6"	0-6"	12/23/04	12/30/04	7	YES	YES	N/A	N/A
WC27-0-6"	0-6"	12/23/04	12/30/04	7	YES	YES	N/A	N/A
WC.5-4.5	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
WC.5-5.5	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
WC.5-6.5	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
WC.5-8.5	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
WC.5-9.5	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
WC.5-10.5	0-6"	4/20/05	4/26/05	6	YES	YES	N/A	N/A
WC.5-11.5	0-6"	4/20/05	4/26/05	6	YES	YES	N/A	N/A
WC.5-12.5	0-6"	4/20/05	4/26/05	6	YES	YES	N/A	N/A
WC.5-13.5	0-6"	4/20/05	4/26/05	6	YES	YES	N/A	N/A
Duplicate 222 (WC.5-13.5)	0-6"	4/20/05	4/26/05	6	YES	YES	N/A	N/A
WC.5-14.5	0-6"	4/20/05	4/26/05	6	YES	YES	N/A	N/A
WC.5-14.5MS	0-6"	4/20/05	4/26/05	6	YES	YES	N/A	N/A
WC.5-14.5MSD	0-6"	4/20/05	4/26/05	6	YES	YES	N/A	N/A
WC.5-15.5	0-6"	4/20/05	4/26/05	6	YES	YES	N/A	N/A
WC.5-16.5	0-6"	4/20/05	4/26/05	6	YES	YES	N/A	N/A
WC.5-17.14	0-6"	4/20/05	4/26/05	6	YES	YES	N/A	N/A
WC.5-17.28	0-6"	4/20/05	4/26/05	6	YES	YES	N/A	N/A
WC.5-18.5	0-6"	4/25/05	5/2/05	7	YES	YES	N/A	N/A
WC.5-19.5	0-6"	4/25/05	5/2/05	7	YES	YES	N/A	N/A
WC.5-20.5	0-6"	4/25/05	5/2/05	7	YES	YES	N/A	N/A
WC.5-21.5	0-6"	4/25/05	5/2/05	7	YES	YES	N/A	N/A
WC.5-22.5	0-6"	4/25/05	5/2/05	7	YES	YES	N/A	N/A
WC.5-23.5	0-6"	4/25/05	5/2/05	7	YES	YES	N/A	N/A
WC.5-24.5	0-6"	4/25/05	5/2/05	7	YES	YES	N/A	N/A
Duplicate 223 (WC.5-24.5)	0-6"	4/25/05	5/2/05	7	YES	YES	N/A	N/A
WC.5-25.5	0-6"	4/25/05	5/2/05	7	YES	YES	N/A	N/A
WC.5-26.5	0-6"	4/25/05	5/2/05	7	YES	YES	N/A	N/A
WC.5-27.5	0-6"	4/25/05	5/2/05	7	YES	YES	N/A	N/A
WD-3 (0-6")	0-6"	12/22/04	12/27/04	5	YES	YES	N/A	N/A
WD-4 (0-6")	0-6"	12/22/04	12/27/04	5	YES	YES	N/A	N/A
WD-4.5	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A

Table 6
Wetlands Samples
Data Quality Assessment - Holding Times

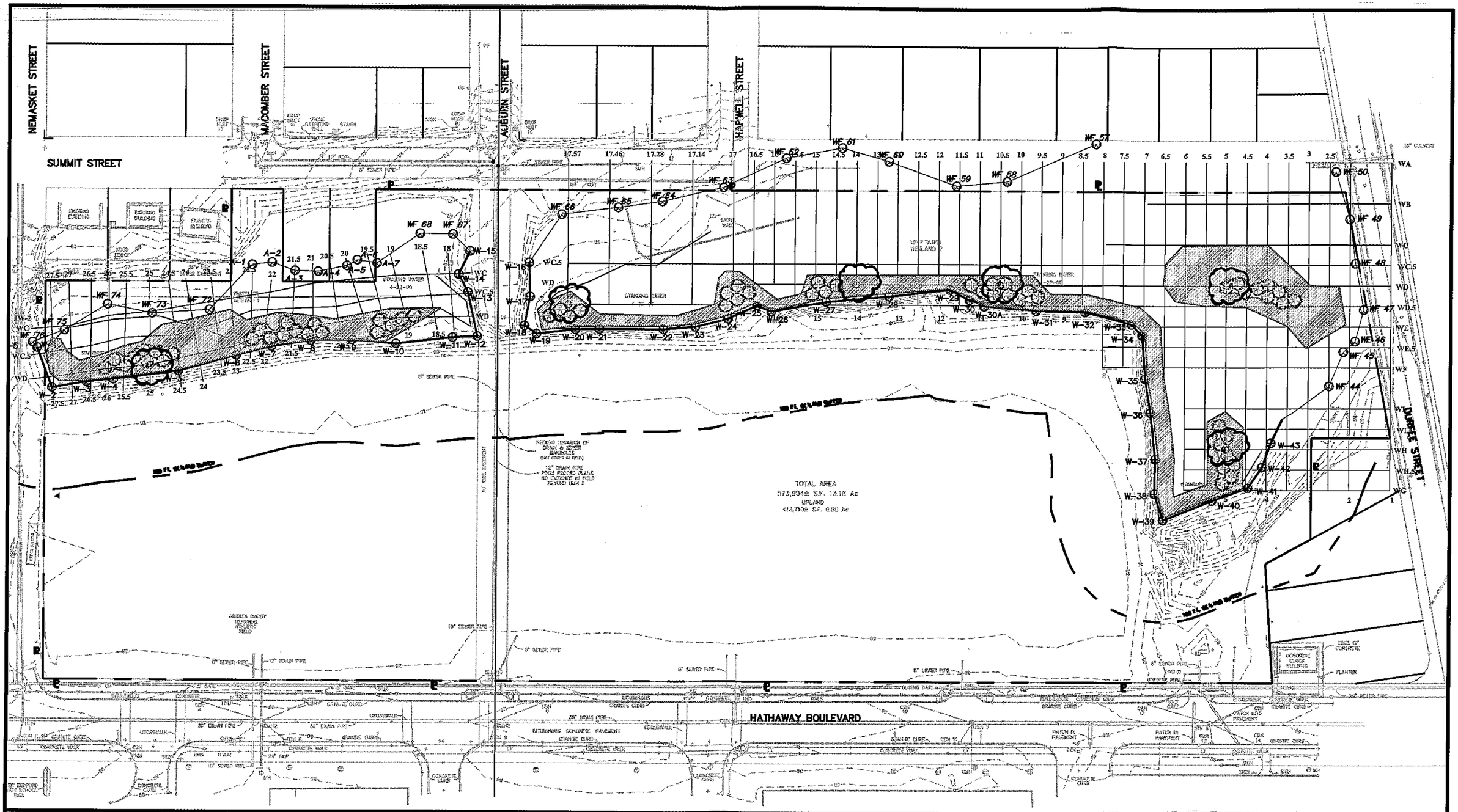
Sample Identification	Depth	Collection Date	PCB Analysis Date	Holding Time (Sampling to Analysis)	Sample Analyzed within 40 days of Collection?	Sample Analyzed within 14 days of Collection	Extraction Date	Holding Time (Sampling to Extraction)
WD-5 (0-6")	0-6"	12/22/04	12/27/04	5	YES	YES	N/A	N/A
Duplicate 202 (WD-5-0-6")	0-6"	12/22/04	12/27/04	5	YES	YES	N/A	N/A
WD-6 (0-6")	0-6"	12/22/04	12/27/04	5	YES	YES	N/A	N/A
WD-6.5	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
WD-7	0-6"	12/21/04	12/27/04	6	YES	YES	N/A	N/A
WD8-0-6"	0-6"	12/21/04	12/23/04	2	YES	YES	N/A	N/A
WD-9 (0-6")	0-6"	12/22/04	12/27/04	5	YES	YES	N/A	N/A
WD-10 (0-6")	0-6"	12/22/04	12/27/04	5	YES	YES	N/A	N/A
WD-10.5	0-6"	4/20/05	4/26/05	6	YES	YES	N/A	N/A
WD-11 (0-6")	0-6"	12/22/04	12/27/04	5	YES	YES	N/A	N/A
WD-12 (0-6")	0-6"	12/22/04	12/27/04	5	YES	YES	N/A	N/A
WD-13 (0-6")	0-6"	12/22/04	12/27/04	5	YES	YES	N/A	N/A
WD-14 (0-6")	0-6"	12/22/04	12/27/04	5	YES	YES	N/A	N/A
WD-15 (0-6")	0-6"	12/22/04	12/27/04	5	YES	YES	N/A	N/A
WD-15.5	0-6"	4/20/05	4/26/05	6	YES	YES	N/A	N/A
WD-16 (0-6")	0-6"	12/22/04	12/27/04	5	YES	YES	N/A	N/A
WD-17 (0-6")	0-6"	12/22/04	12/27/04	5	YES	YES	N/A	N/A
WD-17.46	0-6"	4/20/05	4/26/05	6	YES	YES	N/A	N/A
WD-17.57	0-6"	4/20/05	4/26/05	6	YES	YES	N/A	N/A
WD18-0-6"	0-6"	12/23/04	1/4/05	12	YES	YES	N/A	N/A
WD19-0-6"	0-6"	12/23/04	1/4/05	12	YES	YES	N/A	N/A
WD20-0-6"	0-6"	12/23/04	12/30/04	7	YES	YES	N/A	N/A
WD21-0-6"	0-6"	12/23/04	1/4/05	12	YES	YES	N/A	N/A
WD21-0-6" MS	0-6"	12/23/04	1/4/05	12	YES	YES	N/A	N/A
WD21-0-6" MSD	0-6"	12/23/04	1/4/05	12	YES	YES	N/A	N/A
WD22-0-6"	0-6"	12/23/04	1/4/05	12	YES	YES	N/A	N/A
WD23-0-6"	0-6"	12/23/04	1/4/05	12	YES	YES	N/A	N/A
WD24-0-6"	0-6"	12/23/04	1/7/05	15	YES	NO	12/30/04	7
WD25-0-6"	0-6"	12/23/04	1/4/05	12	YES	YES	N/A	N/A
WD25-A-0-6"	0-6"	1/19/05	1/20/05	1	YES	YES	N/A	N/A
WD25-B-0-6"	0-6"	1/19/05	1/20/05	1	YES	YES	N/A	N/A
WD25-C-0-6"	0-6"	1/19/05	1/20/05	1	YES	YES	N/A	N/A
WD25-D-0-6"	0-6"	1/19/05	1/20/05	1	YES	YES	N/A	N/A
WD26-0-6"	0-6"	12/23/04	1/10/05	18	YES	NO	12/30/04	7
Duplicate 203 (WD26-0-6")	0-6"	12/23/04	1/4/05	12	YES	YES	N/A	N/A
WD27-0-6"	0-6"	12/23/04	1/10/05	18	YES	NO	12/30/04	7
WD.5-2.5	0-6"	4/25/05	5/2/05	7	YES	YES	N/A	N/A
WD.5-3	0-6"	4/25/05	5/2/05	7	YES	YES	N/A	N/A
WD.5-3.5	0-6"	4/25/05	5/2/05	7	YES	YES	N/A	N/A
WD.5-3.5MS	0-6"	4/25/05	5/2/05	7	YES	YES	N/A	N/A
WD.5-3.5MDS	0-6"	4/25/05	5/2/05	7	YES	YES	N/A	N/A
WD.5-4.5	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
WD.5-5.5	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
WD.5-6.5	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
WD.5-17.14	0-6"	4/20/05	4/26/05	6	YES	YES	N/A	N/A
WD.5-17.28	0-6"	4/20/05	4/26/05	6	YES	YES	N/A	N/A
WD.5-17.46	0-6"	4/20/05	4/26/05	6	YES	YES	N/A	N/A
WD.5-17.57	0-6"	4/20/05	4/26/05	6	YES	YES	N/A	N/A
WE-2.5	0-6"	4/25/05	5/2/05	7	YES	YES	N/A	N/A
WE-3 (0-6")	0-6"	12/22/04	12/27/04	5	YES	YES	N/A	N/A
WE-3.5	0-6"	4/25/05	5/2/05	7	YES	YES	N/A	N/A
WE-4 (0-6")	0-6"	12/22/04	12/27/04	5	YES	YES	N/A	N/A
WE-5 (0-6")	0-6"	12/22/04	12/27/04	5	YES	YES	N/A	N/A
WE-6	0-6"	12/21/04	12/27/04	6	YES	YES	N/A	N/A
WE-6 (0-6")	0-6"	12/22/04	12/27/04	5	YES	YES	N/A	N/A
WE-7	0-6"	12/21/04	12/27/04	6	YES	YES	N/A	N/A
WE8-0-6"	0-6"	12/21/04	12/23/04	2	YES	YES	N/A	N/A
WE.5-2.5	0-6"	4/25/05	5/2/05	7	YES	YES	N/A	N/A
WE.5-3	0-6"	4/25/05	5/2/05	7	YES	YES	N/A	N/A
Duplicate 220 (WE.5-3)	0-6"	4/25/05	5/2/05	7	YES	YES	N/A	N/A
WE.5-3.5	0-6"	4/25/05	5/2/05	7	YES	YES	N/A	N/A
WF-3 (0-6")	0-6"	12/22/04	12/27/04	5	YES	YES	N/A	N/A

Table 6
Wetlands Samples
Data Quality Assessment - Holding Times

Sample Identification	Depth	Collection Date	PCB Analysis Date	Holding Time (Sampling to Analysis)	Sample Analyzed within 40 days of Collection?	Sample Analyzed within 14 days of Collection	Extraction Date	Holding Time (Sampling to Extraction)
WF-4 (0-6")	0-6"	12/22/04	12/27/04	5	YES	YES	N/A	N/A
WF-5 (0-6")	0-6"	12/22/04	12/27/04	5	YES	YES	N/A	N/A
WF-6 (0-6")	0-6"	12/22/04	12/27/04	5	YES	YES	N/A	N/A
WF-7	0-6"	12/21/04	12/27/04	6	YES	YES	N/A	N/A
WF8-0-6"	0-6"	12/21/04	12/23/04	2	YES	YES	N/A	N/A
WG-3 (0-6")	0-6"	12/22/04	12/27/04	5	YES	YES	N/A	N/A
WG-4 (0-6")	0-6"	12/22/04	12/27/04	5	YES	YES	N/A	N/A
WG-4.5	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
WG-5 (0-6")	0-6"	12/22/04	1/6/05	15	YES	NO	1/5/05	14
WG-5 (0-6") MS	0-6"	12/22/04	1/6/05	15	YES	NO	1/5/05	14
WG-5 (0-6") MSD	0-6"	12/22/04	1/6/05	15	YES	NO	1/5/05	14
WG-6	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
WH-4	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
WH-4.5	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
WH-5 (0-6")	0-6"	12/22/04	12/27/04	5	YES	YES	N/A	N/A
WH-5.5	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
WH.5-4.5	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
WH.5-5	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
WH.5-5MS	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
WH.5-5MSD	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
WH.5-5.5	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
WH-6	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
WI-4	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
WI-5	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
WI-6	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
WI.5-4	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
WI.5-4.5	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
WI.5-5	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
Duplicate 221 (WI.5-5)	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A
WI.5-5.5	0-6"	4/22/05	4/30/05	8	YES	YES	N/A	N/A

Figure 4

Wetland Sample Location Plan – 6-12 inch Deep Samples



BETA Group, Inc.
Engineers · Scientists · Planners

315 Norwood Park South
Norwood, MA 02062 781.255.1982
email: BETA@BETA-inc.com

McCoy Field

New Bedford, Massachusetts

Figure 4

Wetland Sample Location Plan -
6-12 inch Deep Samples
Rev. 0 - 9/1/05

New Bedford, Masschusetts

Attachment D

QA/QC Plan for Cleanup Verification

QA/QC Plan for Cleanup Verification

1.0 Special Sampling Considerations

1.1 Sample Collection

Sediment is considered to be those depositional silts, clays, fine sands, and small particulate matter that are found below an aqueous layer (i.e., in a pond, lake, river, stream, wetland, etc.). This very fine depositional material is where the contaminants of concern are most likely to collect, and it is this material that the sampler must seek out and locate. Sampling should be avoided toward the center of the stream bed (median line) where the medium to large grain size sands are found. These sands are of little interest because they are transient and do not represent the depositional areas of ecological and human interaction.

The McCoy Field Site Wetlands consists of Type III sediments, which are high in organic peat content, but are mixed with silt and fine sand that make them somewhat consolidated. Often times these sediments are held together by a network of fine root mass. These sediments are sufficiently consolidated that they can be collected using standard coring techniques.

Type III sediments can be found in slow flowing streams, or on the edge of wetlands. During high water flow, organic peat from area wetlands is transported and deposited into streams where they are intrinsically mixed with the fine silts and sands of the stream bottoms.

1.2 Moisture Content

The wetland samples pose a special sampling issue in that they contain high moisture content which may adversely impact the overall usability of results (***e.g.,*** EPA Region I requires all results for samples containing less than 30% solids to be considered estimated).

Large leaves, twigs, stones, or entangled root masses will be removed. Once sufficient sample is obtained, the sediment will be mixed by stirring with a clean decontaminated stainless steel (SS) spatula or spoon. The sample will be allowed to re-settle and as much standing surface water as possible will be decanted. Only standing water, which is clear and does not contain dispersed fine sediment, will be decanted. Then, the sample containers will then be filled with the decanted sample. The sampling team will use *Region I, EPA-New England, Sediment Sampling Guidance*, Draft September 1998, as a guide to minimizing water content in the samples.

Removal of standing water is fairly straight forward and does not affect the sediment sample. However, as de-watering goes beyond the standing water and into the interstitial water, the effects on the non-volatile organic parameters become an issue. That is, the non-volatile organic contaminants tend to bind to the organic peat in a sediment matrix. As the interstitial water is removed, the

bonds between the organic contaminants and the organic matrix effectively tighten up as the sediment constricts in the drying process. This drastically reduces the amount of contaminants that can be extracted from the sample and biases the sample results low. For inorganic analytes, the bonds do not act in this manner.

2.0 Laboratory Requirements

2.1 Analytical Requirements

Upon receipt at the laboratory, the samples should quickly be analyzed for percent solids content prior to analysis. All samples with percent solids ≤ 30% will need to be pre-treated before solvent extraction to increase the solids content. For PCBs, either air drying or freeze drying should be performed in a clean environment. After pre-treatment, the percent solids content should be determined and must be over 30% before the sample is extracted (NOTE: the percent solids used in calculation of dry weight for calculation of final results must be the solids content after pre-treatment, if performed).

2.2 Submittals

The laboratory will be requested to provide data using the MADEP Massachusetts Contingency Plan (MCP) methods and reporting requirements (*e.g.,* WSC-CAM-VA for SW-846 Method 8082); whereby a project is reported with a MADEP MCP Analytical Method Report Certification Form; however, due to the project requirement for Data Usability assessment, the laboratory must also provide, at a minimum, the following information:

- Narrative which clearly indicates any non-compliance issues with MCP criteria and which clearly states of compliance of analysis (*e.g.,* instrument calibrations within criteria). If there are any non-compliance issues, a summary of the non-compliance must be present in the data package (e.g., if an initial calibration is non-compliant, a summary of the initial calibration must be present in the data package).
- Copies of percent solids determinations (prior to pre-treatment and after pre-treatment, if applicable) and sample preparation logbooks indicating extraction methods, weights of sample extracted, final volume for analysis, and dilutions for analysis. This includes information for the entire extraction batch.
- The laboratory must qualify any Aroclor data which have imprecision between Column 1 and 2 of more than 25% (percent difference, %D > 25%) and provide a summary of the Column 1 and 2 results.
- The laboratory must maintain all chromatograms for standards and samples and have these readily available if requested by the client, if these are not provided in the data package.

2.3 Data Quality Objectives

The primary data quality objective for the wetlands confirmation samples is to determine whether the cleanup goal has been achieved (i.e., to determine whether the samples contain more or less than 1 ppm of total PCBs). The secondary objective, for disposal considerations, is to confirm whether the samples contain more or less than 50 ppm of total PCBs.

2.3.1 MCP Presumptive Certainty

As previously discussed under Section 2.2, the laboratory will be requested to provide data using the MADEP MCP methods and reporting requirements.

All response action submittals to the Department will include details on any known conditions or findings which may affect the validity of analytical data, including unsatisfactory results obtained for blank, duplicate, surrogate or spiked samples.

The samples will be collected, analyzed, and reported in accordance with the "Compendium of Analytical Methods (CAM)". Data conforming to the specifications of this program will be assured of overall "Presumptive Certainty" of data submittals.

In achieving the status of Presumptive Certainty, we will be assured that analytical data sets:

- Satisfy the broad QA/QC requirements of 310 CMR 40.0017 and 40.0191 regarding the scientific defensibility, precision and accuracy, and reporting of analytical data;
- May be used in a data usability assessment, and, if in compliance with all MCP Analytical Method standards, laboratory QC requirements, and field QC recommended limits and action levels, the data set will be considered usable data to support site characterization decisions made pursuant to the MCP; and
- May be used to support a data representativeness assessment.

2.3.2 Data Validation Overview

The purpose of data validation is to provide for environmental decisions based on only data of known and documented quality. The goal of data validation is to identify analytical error and sampling error associated with the data set. The usability of the data will then be assessed with respect to the aforementioned data quality objectives.

2.4 Tier I Validation

2.4.1 Data Package Completeness

All data will undergo a Tier I-type evaluation whereby a completeness check (+ review of performance evaluation (PE) samples) is made by the data assessor to ensure that there are data for all of the samples sent to the

lab and that the data package contains all of the necessary sample delivery group (SDG) paperwork so that the data package is considered complete and could be used to perform Tier II or Tier III DV, if required.

2.4.2 Performance Evaluation (PE) Sample Results

The EPA Work Plan details the need for acquiring field duplicates and sufficient sample on a per project basis to allow matrix spike/matrix spike duplicate (MS/MSD) analysis be performed. These PE samples will continue to be collected going forward.

PE samples are designed to identify problems in three specific areas:

- laboratory/instrument performance;
- sample preparation/matrix effects; and
- field performance.

Assessing Laboratory/Instrument Performance

The laboratory and instrument performance is checked by reviewing items such as laboratory blank contamination and instrument calibration. If problems with any blank exist, all associated data must be carefully evaluated to determine whether or not there is an inherent measurement error associated with the entire data set, or if the problem is an isolated occurrence limited to specific samples.

Assessing Matrix Effects

Unusual matrix effects can be detected by examining the results from matrix spike/matrix spike duplicates (MS/MSD), surrogate spike recoveries, and internal standard responses. These matrix effects can be caused by high concentrations of non-target analytes which mask the analytes of interest. High levels of peat or clay can bind the target analytes to produce unwanted matrix effects.

Assessing Field Performance

Potential problems originating from field sampling work are assessed by examining the field duplicates. Field duplicates assess sample data repeatability that combines the cumulative precision of the sampling technique, non-homogeneity of the matrix, and the analytical method.

2.4.3 Cover Letter

A Tier I Validation Cover Letter will be provided for each sample delivery group (SDG) to document that the associated data were validated in accordance with the Region I Tier I Validation Guidance and to justify the use of a Tier I validation. The letter will also document the evaluation of PE sample results that were analyzed with the field samples, thereby providing a limited assessment of laboratory performance.

2.5 Tier II Validation

2.5.1 Quality Control Checks

A modified Tier II-type review will be performed on all of the data using the following QC indicators:

- Holding Time (criteria: solids extracted within 14 days from collection and extracts analyzed within 40 days of extraction)
- Surrogate recovery (criteria: 40-140% recovery)
- Laboratory Control Sample recovery (criteria: 40-140% recovery)
- MS/MSD recovery and precision (criteria: 40-140% recovery and RPD ≤ 50%)
- The matrix spike will include the analyte of interest, Aroclor 1254, and the spiking limit will be in the range of the project action limit.
- Acceptability of Method Blanks and Field Blanks, if applicable (criteria: Aroclors < Reporting Limit)
- Acceptability of Initial Calibrations and Continuing Calibration Verification (initial calibration criteria: minimum of 5-level for Aroclors 1016 and 1260 and single level for all others, %RSD ≤ 20% or 'r' ≥ 0.99; continuing calibration criteria: %D or % Drift ≤ 15%)
- Field Duplicate precision (criteria: RPD ≤ 50%)
- Percent Solids content of sample (criteria: percent solids > 30%)
- Dual Column precision (criteria %D < 25% accept data as reported or 25% < %D < 500%, estimate results)

2.5.2 Qualification of Results

During the validation process, individual sample results will be evaluated with respect to established quality control criteria and subsequently accepted, rejected or qualified. The following discussion addresses how data will be qualified based on percent solids content.

The Region I, EPA-New England Data Validation Functional Guidelines for Evaluating Environmental Analyses adheres to the Office of Water Regulations and Standards Industrial Technology Division's definition of a soil/sediment as that which contains greater than 30% solids (i.e., < 70 % moisture). Base on this definition, all sediment sample data is validated accordingly:

- All sediment data may be accepted when the percent moisture is less than 70 %.

- For sediment samples whose percent moisture is greater than or equal to 70 % and less than or equal to 90 %, all positive results are to be considered estimated and are qualified with a "J".

- For sediment samples whose percent moisture is greater than 90 %, all positive results are rejected and qualified with an "R".

- For sediment samples whose percent moisture is greater than or equal to 70 %, all non-detected results are rejected and qualified with an "R".

2.5.3 Data Validation Memorandum

If the evaluation of QC checks indicates laboratory or field problems, then their impact on the data will be discussed in the Data Validation Memorandum and the sample results will be qualified.

2.6 Tier III Validation

If necessary, the raw data will be examined in detail to check for calculation, compound identification, and/or transcription errors. For Tier III validations, a Data Validation Report will be produced.

2.7 Data Assessment

Data assessment will use the Data Quality Objectives specified and in the Work Plan and will use *Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, Part I and Part II (Volatile/Semivolatile Data Validation Functional Guidelines),* December 1996 and *Part III (Pesticide/PCB Data Validation Functional Guidelines)*, Draft February 2004.

2.8 Letter Report

A letter report will be prepared to briefly identify the scope of the analytical effort, provide a general overview of analytical quality, describe in detail and interpret all specific problem areas that were identified. Specific problems that impact the potential usability of the data will be emphasized.

2.9 Interpretation of Usable Results

The analytical results for an individual sample point will be applied to the sample point and to an area of inference extending to four imaginary lines parallel to the grid axes and one half grid interval distant from the sample point in four different directions, as specified in 40 CFR 761 Subpart O.

Attachment H

Order of Conditions –
August 31, 2005

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

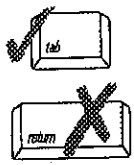
WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

DEP File Number: 49-543

A. General Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



From: New Bedford
1. Conservation Commission

2. This issuance is for (check one): a. ☒ Order of Conditions b. ☐ Amended Order of Conditions

3. To: Applicant:

Jacqueline (a. First Name) | Coucci (b. Last Name) | City of New Bedford (c. Company)
133 William Street (d. Mailing Address)
New Bedford (e. City/Town) | MA (f. State) | 02740 (g. Zip Code)

4. Property Owner (if different from applicant):

(a. First Name) | (b. Last Name) | City of New Bedford (c. Company)
133 William Street (d. Mailing Address)
New Bedford (e. City/Town) | MA (f. State) | 02740 (g. Zip Code)

5. Project Location:

225 Hathaway Boulevard (a. Street Address) | New Bedford (b. City/Town)
69; 75 (c. Assessors Map/Plat Number) | 125; 167 (d. Parcel/Lot Number)
Latitude and Longitude, if known (**note:** electronic filers will click for GIS locator): (e. Latitude) | (f. Longitude)

6. Property recorded at the Registry of Deeds for (attach additional information if more than one parcel):

Bristol (a. County) | (b. Certificate (if registered land))
849; 885 (c. Book) | 329; 401 (d. Page)

7. Dates: 5/27/05 (a. Date Notice of Intent Filed) | 8/29/05 (b. Date Public Hearing Closed) | 8/31/05 (c. Date of Issuance)

8. Final Approved Plans and Other Documents (attach additional plan or document references as needed):

See Attachment A "List of Approved Plans SE49-543" (a. Plan Title)
See Attachment A (b. Prepared By) | See Attachment A (c. Signed and Stamped by)
See Attachment A (d. Final Revision Date) | 1"=40' (e. Scale)
(f. Additional Plan or Document Title) | (g. Date)

B. Findings

1. Findings pursuant to the Massachusetts Wetlands Protection Act:

Following the review of the above-referenced Notice of Intent and based on the information provided in this application and presented at the public hearing, this Commission finds that the areas in which work is proposed is significant to the following interests of the Wetlands Protection Act. Check all that apply:

a. ☐ Public Water Supply
b. ☐ Land Containing Shellfish
c. ☒ Prevention of Pollution
d. ☒ Private Water Supply
e. ☒ Fisheries
f. ☒ Protection of Wildlife Habitat
g. ☒ Groundwater Supply
h. ☒ Storm Damage Prevention
i. ☒ Flood Control

2. This Commission hereby finds the project, as proposed, is: (check one of the following boxes)

Approved subject to:

a. ☒ the following conditions which are necessary in accordance with the performance standards set forth in the wetlands regulations. This Commission orders that all work shall be performed in accordance with the Notice of Intent referenced above, the following General Conditions, and any other special conditions attached to this Order. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, these conditions shall control.

Denied because:

b. ☐ the proposed work cannot be conditioned to meet the performance standards set forth in the wetland regulations. Therefore, work on this project may not go forward unless and until a new Notice of Intent is submitted which provides measures which are adequate to protect these interests, and a final Order of Conditions is issued. **A description of the performance standards which the proposed work cannot meet is attached to this Order.**

c. ☐ the information submitted by the applicant is not sufficient to describe the site, the work, or the effect of the work on the interests identified in the Wetlands Protection Act. Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides sufficient information and includes measures which are adequate to protect the Act's interests, and a final Order of Conditions is issued. **A description of the specific information which is lacking and why it is necessary is attached to this Order as per 310 CMR 10.05(6)(c).**

Inland Resource Area Impacts: Check all that apply below. (For Approvals Only)

3. ☒ Buffer Zone Impacts: Shortest distance between limit of project disturbance and wetland boundary (if available) — 0' a. linear feet

Resource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
4. ☐ Bank	a. linear feet	b. linear feet	c. linear feet	d. linear feet
5. ☒ Bordering Vegetated Wetland	37,900 a. square feet	37,900 b. square feet	37,900 c. square feet	37,900 d. square feet
6. ☐ Land Under Waterbodies and Waterways	a. square feet	b. square feet	c. square feet	d. square feet
	e. cu.yd dredged	f. cu.yd dredged		

B. Findings (cont.)

Resource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
7. ☐ Bordering Land Subject to Flooding	a. square feet	b. square feet	c. square feet	d. square feet
Cubic Feet Flood Storage	e. cubic feet	f. cubic feet	g. cubic feet	h. cubic feet
8. ☐ Isolated Land Subject to Flooding	a. square feet	b. square feet		
Cubic Feet Flood Storage	c. cubic feet	d. cubic feet	e. cubic feet	f. cubic feet
9. ☐ Riverfront area	a. total sq. feet	b. total sq. feet		
Sq ft within 100 ft	c. square feet	d. square feet	e. square feet	f. square feet
Sq ft between 100-200 ft	g. square feet	h. square feet	i. square feet	j. square feet

Coastal Resource Area Impacts: Check all that apply below. (For Approvals Only)

10. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below			
11. ☐ Land Under the Ocean	a. square feet	b. square feet		
	c. cu.yd dredged	d. cu.yd dredged		
12. ☐ Barrier Beaches	Indicate size under Coastal Beaches and/or Coastal Dunes below			
13. ☐ Coastal Beaches	a. square feet	b. square feet	c. c/y nourishmt.	d. c/y nourishmt.
14. ☐ Coastal Dunes	a. square feet	b. square feet	c. c/y nourishmt.	d. c/y nourishmt
15. ☐ Coastal Banks	a. linear feet	b. linear feet		
16. ☐ Rocky Intertidal Shores	a. square feet	b. square feet		
17. ☐ Salt Marshes	a. square feet	b. square feet	c. square feet	d. square feet
18. ☐ Land Under Salt Ponds	a. square feet	b. square feet		
	c. cu.yd dredged	d. cu.yd dredged		
19. ☐ Land Containing Shellfish	a. square feet	b. square feet	c. square feet	d. square feet
20. ☐ Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above			
	a. cu.yd dredged	b. cu.yd dredged		
21. ☐ Land Subject to Coastal Storm Flowage	a. square feet	b. square feet		

C. General Conditions Under Massachusetts Wetlands Protection Act

(only applicable to approved projects)

1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Order.

2. The Order does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.

3. This Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state, or local statutes, ordinances, bylaws, or regulations.

4. The work authorized hereunder shall be completed within three years from the date of this Order unless either of the following apply:
   a. the work is a maintenance dredging project as provided for in the Act; or
   b. the time for completion has been extended to a specified date more than three years, but less than five years, from the date of issuance. If this Order is intended to be valid for more than three years, the extension date and the special circumstances warranting the extended time period are set forth as a special condition in this Order.

5. This Order may be extended by the issuing authority for one or more periods of up to three years each upon application to the issuing authority at least 30 days prior to the expiration date of the Order.

6. Any fill used in connection with this project shall be clean fill. Any fill shall contain no trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.

7. This Order is not final until all administrative appeal periods from this Order have elapsed, or if such an appeal has been taken, until all proceedings before the Department have been completed.

8. No work shall be undertaken until the Order has become final and then has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of the registered land, the Final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is done. The recording information shall be submitted to this Conservation Commission on the form at the end of this Order, which form must be stamped by the Registry of Deeds, prior to the commencement of work.

9. A sign shall be displayed at the site not less then two square feet or more than three square feet in size bearing the words,

"Massachusetts Department of Environmental Protection" [or, "MA DEP"]

"File Number 49-543 "

C. General Conditions Under Massachusetts Wetlands Protection Act

10. Where the Department of Environmental Protection is requested to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before DEP.

11. Upon completion of the work described herein, the applicant shall submit a Request for Certificate of Compliance (WPA Form 8A) to the Conservation Commission.

12. The work shall conform to the plans and special conditions referenced in this order.

13. Any change to the plans identified in Condition #12 above shall require the applicant to inquire of the Conservation Commission in writing whether the change is significant enough to require the filing of a new Notice of Intent.

14. The Agent or members of the Conservation Commission and the Department of Environmental Protection shall have the right to enter and inspect the area subject to this Order at reasonable hours to evaluate compliance with the conditions stated in this Order, and may require the submittal of any data deemed necessary by the Conservation Commission or Department for that evaluation.

15. This Order of Conditions shall apply to any successor in interest or successor in control of the property subject to this Order and to any contractor or other person performing work conditioned by this Order.

16. Prior to the start of work, and if the project involves work adjacent to a Bordering Vegetated Wetland, the boundary of the wetland in the vicinity of the proposed work area shall be marked by wooden stakes or flagging. Once in place, the wetland boundary markers shall be maintained until a Certificate of Compliance has been issued by the Conservation Commission.

17. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. At no time shall sediments be deposited in a wetland or water body. During construction, the applicant or his/her designee shall inspect the erosion controls on a daily basis and shall remove accumulated sediments as needed. The applicant shall immediately control any erosion problems that occur at the site and shall also immediately notify the Conservation Commission, which reserves the right to require additional erosion and/or damage prevention controls it may deem necessary. Sedimentation barriers shall serve as the limit of work unless another limit of work line has been approved by this Order.

18. All work associated with this Order is required to comply with the Massachusetts Stormwater Policy Standards.

Special Conditions:

If you need more space for additional conditions, select box to attach a text document ☒

See Special Conditions 19-70 (ATTACHED)

D. Findings Under Municipal Wetlands Bylaw or Ordinance

1. Is a municipal wetlands bylaw or ordinance applicable? ☐ Yes ☐ No
2. The _____ hereby finds (check one that applies):
   Conservation Commission
3. ☐ that the proposed work cannot be conditioned to meet the standards set forth in a municipal ordinance or bylaw specifically:

   _____ _____
   a. Municipal Ordinance or Bylaw b. Citation

   Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides measures which are adequate to meet these standards, and a final Order of Conditions is issued.

4. ☐ that the following additional conditions are necessary to comply with a municipal ordinance or bylaw:

   _____ _____
   a. Municipal Ordinance or Bylaw b. Citation

   The Commission orders that all work shall be performed in accordance with the following conditions and with the Notice of Intent referenced above. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, the conditions shall control.

If you need more space for additional conditions, select box to attach a text document ☐

c. The special conditions relating to municipal ordinance or bylaw are as follows:

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

DEP File Number: 49-543

E. Issuance

This Order is valid for three years, unless otherwise specified as a special condition pursuant to General Conditions #4, from the date of issuance.
Please indicate the number of members who will sign this form:
This Order must be signed by a majority of the Conservation Commission.

8/31/05
1. Date of Issuance

4
2. Number of Signers

The Order must be mailed by certified mail (return receipt requested) or hand delivered to the applicant. A copy also must be mailed or hand delivered at the same time to the appropriate Department of Environmental Protection Regional Office, if not filing electronically, and the property owner, if different from applicant.

Signatures:

Notary Acknowledgement

Commonwealth of Massachusetts County of Bristol

On this 29th Day of August Month 2005 Year

Before me, the undersigned Notary Public, personally appeared Conservation Commissioners
Name of Document Signer

proved to me through satisfactory evidence of identification, which was/were all personally known to me
Description of evidence of identification

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 member of New Bedford City/Town Conservation Commission

JOAN M. JONES
Notary Public
Commonwealth of Massachusetts
My Commission Expires
December 15 2006

Joan M Jones
Signature of Notary Public

JOAN M JONES
Printed Name of Notary Public

December 15, 2006
My Commission Expires (Date)

Place notary seal and/or any stamp above

This Order is issued to the applicant as follows:

☒ by hand delivery on 8/31/05
Date

☐ by certified mail, return receipt requested, on
Date

F. Appeals

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land subject to this Order, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the appropriate DEP Regional Office to issue a Superseding Order of Conditions. The request must be made by certified mail or hand delivery to the Department, with the appropriate filing fee and a completed Request of Departmental Action Fee Transmittal Form, as provided in 310 CMR 10.03(7) within ten business days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant. Any appellants seeking to appeal the Department's Superseding Order associated with this appeal will be required to demonstrate prior participation in the review of this project. Previous participation in the permit proceeding means the submission of written information to the Conservation Commission prior to the close of the public hearing, requesting a Superseding Order or Determination, or providing written information to the Department prior to issuance of a Superseding Order or Determination.

The request shall state clearly and concisely the objections to the Order which is being appealed and how the Order does not contribute to the protection of the interests identified in the Massachusetts Wetlands Protection Act, (M.G.L. c. 131, § 40) and is inconsistent with the wetlands regulations (310 CMR 10.00). To the extent that the Order is based on a municipal ordinance or bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.

Section G, Recording Information is available on the following page.

CITY OF NEW BEDFORD
MASSACHUSETTS

CONSERVATION COMMISSION
133 WILLIAM STREET, ROOM 309
NEW BEDFORD, MA 02740
Tel: (508) 991-6188; Fax: (508) 961-3045; TYY: (508) 979-1661

Attachment A
List of Approved Plans

SE: 49-543
City of New Bedford
Wetlands Risk-Based Cleanup
Map 69, Lot 125 & Map 75, Lot 167

NEW BEDFORD, MA

1.Sheet 1: Wetlands Sediment Remediation Area A (South) McCoy Field/ New Keith Middle School revised date of 8/26/05.
Prepared by BETA Group Inc. Stamped by Robert W. Kelly PE

2. Sheet 2: Wetlands Sediment Remediation Areas B & C (North) McCoy Field/ New Keith Middle School revised date of 8/26/05.
Prepared by BETA Group Inc. Stamped by Robert W. Kelly PE

3. Sheet 3: Wetlands Sediment Remediation Profiles McCoy Field/ New Keith Middle School revised date 8/11/05.
Prepared by BETA Group Inc. Stamped by Robert W. Kelly PE

4. Sheet 4: Wetlands Sediment Restoration Area A (South) McCoy Field/ New Keith Middle School dated 8/16/05.
Prepared by BETA Group Inc & Gates Leighton & Associates, Inc Stamped by Wilfrid L. Gates RLA

5. Sheet 5: Wetlands Sediment Restoration Areas B & C (North) McCoy Field/ New Keith Middle School dated 8/11/05.
Prepared by BETA Group Inc & Gates Leighton & Associates, Inc Stamped by Wilfrid L. Gates RLA

8/31/05

CITY OF NEW BEDFORD
MASSACHUSETTS

CONSERVATION COMMISSION
133 WILLIAM STREET, ROOM 311
NEW BEDFORD, MA 02740
Tel: (508) 991-6188; Fax: (508) 961-3045; TYY: (508) 979-1661

SPECIAL CONDITION Numbers 19-70
SE: 49-543
City of New Bedford
Wetlands Risk-Based Cleanup
Map 69, Lot 125 & Map 75, Lot 167

NEW BEDFORD, MA

19. No activity shall occur prior to obtaining all necessary and required permits, licenses, and approvals; and until copies of the same have been furnished to the Conservation Commission.

20. Any design modifications, alterations, amendments, or additions shall be subject to the approval of the New Bedford Conservation Commission. Requests for any changes shall be made in writing and shall be accompanied by a revised plan.

21. No modification to surface features, drainage or topography shall be permitted except as indicated by this Order of Conditions.

22. Contours shall remain unchanged except as permitted by this Order of Conditions.

23. There shall be no construction other than that proposed by the Notice of Intent and included on the submitted plan.

24. Immediately upon completion of the exterior construction and grading, permanent stabilization landscaping shall be carried out in order to minimize erosion.

25. All wet areas not to be altered shall be kept clear of rubbish, debris, and construction material.

26. All exposed soil or subsoil shall be replanted with vegetation such as grass, groundcover or shrubs so as to minimize erosion and siltation.

27. There shall be minimum disruption of existing grades and vegetation in order to minimize erosion.

28. No runoff shall be caused to drain on to adjoining property or on any public ways.

29. All excess material shall be removed from the site.

30. The owners shall notify the Conservation Commission of the work-start date prior to its commencement so that regular inspections may be made.

31. All work performed in accordance with said plans and this Order of Conditions shall be in compliance with the state building and/or plumbing code.

32. The Inspector and/or the Commission members shall have the right to enter upon the land for the purpose of the inspection and/or the taking of pictures to determine and evaluate compliance with this order.

33. The design engineer will certify, in writing, that this project has been complete in accordance with the above Order of Conditions before the Certificate of Compliance will be issued.

34. All facilities and equipment shall be continually operated and maintained so as to comply with this order of conditions and M.G.L. Ch. 131, S 40, the Wetlands Protection Act.

35. Certain conditions, such as maintenance or monitoring are on-going and are not to expire at the end of three years or with the issuance of a Certificate of Compliance.

36. This order of Conditions shall apply to any successor in interest or successor in control.

37. Any changes required by any other board or authority may require a new filing with the Conservation Commission.

38. At the discretion of the Conservation Commission, the applicant may be required to file with any or all of the following agencies:

The Department of Environmental Protection
Army Corps of Engineers
Coastal Zone Management
MA Division of Waterways

39. The Conservation Commission shall not be responsible or liable for the construction, the operation, or the maintenance of any part of this project and does not warrant the safety of the same.

40. Any fill and/or construction materials shall be placed in upland areas.

41. Any mitigation and resource protection devices and measures, e.g. hay bales,

siltation fence, etc., are to be installed prior to initiation of any work under this Order of Conditions. The Conservation Agent shall be notified when in place for inspection and verification. No work to be undertaken under the Order of Conditions until written or verbal approval is received from the Conservation Commission or its Agent.

42. In accordance with Condition number thirteen (13), no activity shall take place until the applicant has furnished written documentation that the plans on file with the Conservation Commission are consistent with permits and approvals of other Town Boards.

43. Prior to any construction, an on-site inspection is to be held between the proposed contractor, the engineer, and the Conservation Commission Agent to go over the sequence of construction and all other restrictions and requirements as noted on the Order of Conditions. A written construction schedule to be received at that time.

44. All erosion control barriers shall be constructed of snow fencing, silt fencing and staked hay bales and clearly depicted on the plans, and placement shall be inspected both pre and post construction by Agent

45. Any changes in proposed drainage patterns will require written approval by the Conservation Commission.

46. Wetland flagging to remain in place until the project has been completed and Certificate of Compliance issued.

47. Notice of Intent, Order of Conditions and plans shall be retained on the site during construction and made available to all contractors.

48. All conditions are on going and do not expire until the issuance of a Certificate of Compliance.

49. The design engineer will certify, with an as-built plan, that this project has been complete in accordance with the above Order of Conditions before the certificate of Compliance will be issued.

50. The sequence of Remediation & Restoration activities shall be submitted to the Conservation Commission 24 hours prior to the initial on site inspection by the Commission or its designee (See Sheet 3 of the approved plans for sequence of inspections by the Conservation Commission).

51. The resume of the Applicant's Wetland Professional who shall oversee the wetland restoration, is to be submitted to the Conservation Commission for approval two weeks prior to initiation of restoration activities.

52. The Wetland Professional shall be responsible for immediately notifying the Conservation Commission when field conditions or activities arise that deviate from the Order of Conditions and approved plans. Verbal notification shall be verified with written notification within 24 hours.

53. The Wetland Professional shall be responsible for the marking of all trees within the "work area", which are greater than 6" in Diameter at Breast Height (DBH). This Order shall require all trees with a DBH greater than 6" in be saved. The trees to be saved shall be marked in the field using "lead free" paint and the word "SAVE" or a similar designation is to be painted onto the tree in letters a minimum of 4" in height.

54. The manufacturer's specifications for the "wetland crossing mats" are to be submitted to the Conservation Commission 72 hours prior to their installation.

55. Test results of the wetland restoration soils shall be submitted to the Conservation Commission to document that they are clean and contain a minimum of 24% organic matter (12% organic content). The parameters and methods for testing of soils shall include those listed in the Contract Specifications for the Wetland Restoration Section 02265 (Section 3.02 A. 1 through 6) dated 8/16/05.

56. The organic mulch to be spread around the base of all wetland plantings shall be contaminant free. The contaminant free certification and the source of the organic mulch shall be provided to the Conservation Commission (wood chips are not permitted as mulch).

57. The species of vegetation contained in wetland seed mix shall be submitted to the Conservation Commission for approval two weeks prior to use. The labels from the wetland seed mix and all wetland tree & shrub plantings shall be submitted to the Conservation Commission.

58. Plantings of trees and shrubs shall only occur during the spring (April 15 to June 15) or Fall (September 15 to October 28) weather permitting.

59. Shrub plantings in the Restoration Area shall occur so as to mimic existing conditions as much as possible. The Wetland Professional shall submit to the Conservation Commission, the planting scheme that they shall provide to the contractor, which shall designate the locations, or clumps where applicable, of the tree and shrub plantings, the number and species and any special conditions that the Wetland Professional deems necessary to ensure success. The planting scheme shall be submitted to the Conservation Commission one week prior to undertaking plantings.

60. This Order requires that a wetland seed mix be spread over the final graded wetland restoration substrate for stabilization purposes following verification of the final restoration elevations (See Special Condition # 69). All tree and shrub plantings shall be completed by year-end 2006.

61. The manufacturer's specifications for the root barrier shall be submitted to the Conservation Commission 72 hours prior to installation. Root Barrier installation shall follow all parts of Contract Document Section 02265 entitled Wetland Restoration Section 3.01 (A through E) dated 8/16/05.

62. The Wetland Professional shall submit annual monitoring reports to the Conservation Commission through the year 2008. Reports shall be submitted following the growing season in '06, '07, '08. Reports shall include all documentation required to satisfy the Performance Standards for wetland replication as stipulated in 310 CMR 10.55 (4) A and B wherever such Performance Standards apply to Wetland Restoration. Annual Reports shall also provide documentation of the success/failure of the Root Barrier System in controlling *Phragmites australis* invasion into the restoration areas and recommendations for short-term and long-term maintenance.

63. Swamp mats, or a Conservation Commission approved equivalent, are hereby approved to be utilized to access the remediation areas. Solid fill (stone, rock, dirt) is prohibited within the restoration area or temporary impact area.

64. Any temporary stockpiling of contaminated material within the "Temporary Impact Area" shall be placed on an impervious liner and surrounded by staked hay bales. Contaminated soils shall not be stockpiled within Temporary Impact Areas overnight and any contaminated material, which inadvertently falls onto wetland substrate or vegetation, outside of the remediation areas, shall be immediately removed.

65. The identification of any proposed access points or temporary stockpile areas within the Temporary Impact Areas shown on the approved plans shall be identified in the field via the placement of 1" x 1" x 3' oak stakes at each corner of the proposed access location/stockpile area. The Wetland Professional shall inventory the temporary access/stockpile area(s), documenting species, size and numbers of plants and other wildlife characteristics and hydrologic indicators. Digital photos shall be submitted along with the inventory to the Conservation Commission. The Commission or its designee, shall respond within 72 hours of notification and 1. Inspect the proposed location, 2.verify that the submitted wetland inventory is complete and 3. provide written approval or denial of the proposed temporary impact location.

66. Within 7 business days of removal of any temporary impact (access roadway or stockpile) from the Temporary Impact Area, The Wetland Professional shall submit documentation to the Conservation Commission of any impacts in the Temporary Impact Area (including impacts to the BVW vegetation, soils and topography) and a Proposed Restoration Plan, as required. Any required restoration shall be completed by the end of 2006. Documentation of the restoration to All Temporary Impact Areas shall be included in the annual monitoring report (Reference Special Condition Number 62).

67. Within 14 business days of completion of all phases of restoration (soil replacement, & plantings) a Construction Summary Report shall be prepared by the Wetland Professional and submitted to the Conservation Commission. The report shall document compliance with the Order of Conditions and note any deviations from approved means and methods, their significance, and proposed remedy if appropriate. The report shall include photographic documentation. If remediation extends beyond 2005, a fall closure report shall be submitted documenting stabilization methods in place for the winter.

68. A Topographical survey (< or = 1' contour intervals) shall be prepared by a MA Registered Land Surveyor and shall be performed when all contaminated soil has been removed and prior to soil replacement. This RLS stamped plan is to be submitted to the Conservation Commission 72 hours prior to placing any replacement wetland soils into the remediation area.

69. A Topographical survey (< or = 1' contour intervals) shall be prepared by a MA Registered Land Surveyor and shall be performed when the replacement wetland soils and wetland seeds, shrubs and trees have been planted and the site stabilized with the approved erosion controls. This survey shall be submitted to the Conservation Commission prior to or at the same time as the Construction Summary Report is submitted (Special Condition # 61). The RLS shall certify the seasonal high groundwater elevations in the restoration areas and include it on the topographical survey.

70. This Order of Conditions shall require the remediation/restoration to be performed in "the dry" whenever feasible ("the dry" defined, for this site, as when the water table is at or below the existing wetland substrate). Field conditions shall likely arise, even if done in "the dry" that require dewatering. All dewatering facilities shall be located and constructed as shown on the approved plans. The Wetland Professional shall notify the Conservation Commission prior to commencement of the dewatering of the remediation area.

G. Recording Information

This Order of Conditions must be recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land subject to the Order. In the case of registered land, this Order shall also be noted on the Land Court Certificate of Title of the owner of the land subject to the Order of Conditions. The recording information on Page 7 of this form shall be submitted to the Conservation Commission listed below.

Conservation Commission

Detach on dotted line, have stamped by the Registry of Deeds and submit to the Conservation Commission.

To:

New Bedford
Conservation Commission

Please be advised that the Order of Conditions for the Project at:

Hathaway Blvd - New Bedford
Project Location

49-543
DEP File Number

Has been recorded at the Registry of Deeds of:

Bristol
County

849; 885
Book

329; 401
Page

for:

City of New Bedford c/o Jacqueline Coucci
Property Owner

and has been noted in the chain of title of the affected property in:

Book

Page

In accordance with the Order of Conditions issued on:

Date

If recorded land, the instrument number identifying this transaction is:

Instrument Number

If registered land, the document number identifying this transaction is:

Document Number

Signature of Applicant

Attachment I

August 15, 2005 MEPA Letter

The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114-2524

MITT ROMNEY
GOVERNOR
KERRY HEALEY
LIEUTENANT GOVERNOR
STEPHEN R. PRITCHARD
SECRETARY

Tel. (617) 626-1000
Fax. (617) 626-1181
http://www.mass.gov/envir

August 15, 2005

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS
ON THE
ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME	: Wetlands Risk-Based Cleanup for McCoy Field/New Keith Middle School Property
PROJECT MUNICIPALITY	: New Bedford
PROJECT WATERSHED	: Buzzards Bay
EOEA NUMBER	: 13577
PROJECT PROPONENT	: City of New Bedford
DATE NOTICED IN MONITOR	: July 9, 2005

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **does not require** the preparation of an Environmental Impact Report (EIR).

Project Description

As described in the Environmental Notification Form (ENF), the project entails the removal of up to six inches of sediments contaminated with polychlorinated biphenyls (PCBs) at selected locations comprising 0.87± acres of a 3.87-acre wetland area located at the rear of the McCoy Field and the New Keith Middle School, which are currently under construction.

The project is proposed as part of ongoing site assessment and remediation activities for the McCoy Field/New Keith Middle School project. The location of this project is a disposal site, identified by Release Tracking Number (RTN) 4-15685. The sediments to be excavated contain polychlorinated biphenyls (PCBs), metals and polycyclic aromatic hydrocarbons. This project received a Special Project Designation from the

Department of Environmental Protection (DEP) on October 10, 2001. Both DEP and the U.S. Environmental Protection Agency (EPA) are providing direct oversight of the proposed work. Specific project activities include the following:

- Clearing of vegetation and physical removal of leaf litter, surface vegetation, and surface sediment/soil;
- Live loading, transportation, and disposal of sediment to an appropriately licensed receiving facility; and
- Complete restoration of all disturbed areas, including replacement of the removed sediment/soil with clean soil and seeding with wetlands seed mix.

MEPA Jurisdiction and Required Permits

The project is undergoing review pursuant to Section 11.03 (3)(b)(1)(d) of the MEPA regulations because it will alter 5,000 or more sf of Bordering Vegetated Wetlands (BVWs). The project will require a 401 Water Quality Certification from the Department of Environmental Protection (DEP); A Section 404 Permit from the U.S. Army Corps of Engineers (ACOE); and an Order of Conditions from the New Bedford Conservation Commission (and hence, a Superceding Order of Conditions from DEP if the local Order is appealed). Because the City is not seeking financial assistance from the Commonwealth for the project, MEPA jurisdiction extends to those aspects of the project that may cause significant Damage to the Environment and that are within the subject matter of required or potentially requires state permits. In this case, MEPA jurisdiction extends to issues of wetlands and hazardous waste.

Wetlands Permitting Issues

The City has filed a Notice of Intent (NOI) with the New Bedford Conservation Commission. Compliance with Bordering Vegetated Wetland (BVW), Limited Project and Stormwater Management performance standards, as well as other Wetlands Protection Act standards, will be addressed during the review of the NOI. The public hearing process is on-going and, to date, the Conservation Commission has not issued an Order of Conditions.

In addition, DEP has received an individual Major 401 Water Quality Certification application for the removal of contaminated soils and sediments from BVW located adjacent to the McCoy Field/New Keith Middle School construction project. As a result of the August 3, 2005 on-site consultation conducted by DEP

staff, the City has been directed to submit project design clarifications and specifications for wetland restoration. The City should document all activities, past and present, temporary and permanent, direct and indirect, and cumulative impacts from the site clean-up and restoration effort, construction and ongoing operation of the project site.

Certain activities will require the City to file with the U.S. Army Corp of Engineers to receive a jurisdictional determination pursuant to the 401 and U.S. Section 404 Programs. The City should provide DEP with additional details on the wetland restoration effort including, but not limited to:

- submittal of required public notice;
- illustration of equipment access routes, construction and equipment staging areas, dewatering facilities and temporary stockpile areas;
- bio-barrier manufacturer and installation specifications;
- replacement soil composition and testing protocol; and
- wetland and upland seed mix specifications and supplier information.

During the review of the NOI and the Water Quality Certification process, the City should clearly demonstrate that the project meets performance standards for all applicable resource areas and that adverse effects have been avoided and minimized.

Conclusion

I have received several comment letters from local residents expressing deep concerns about the project. While I acknowledge these concerns, I am confident that both DEP and EPA will provide capable and competent oversight of the project. Moreover, the consultant for the City has adequately responded to these concerns in a letter dated August 11, 2005.

I would like to take this opportunity to emphasize that I do not have the authority to approve or deny this project. MEPA review is not a permitting process, nor does it serve as an appeal for local decisions. It does not pass judgment on whether a project is or is not environmentally beneficial, or whether a project can or should receive a particular permit. Rather, the MEPA process requires public disclosure of a project's environmental impacts as well as the measures that the proponent will undertake to mitigate these impacts. MEPA review occurs

before public agencies act to issue permits for a proposed project to ensure that they are fully cognizant of the environmental consequences of their actions.

I am confident that the review of the ENF has garnered sufficient input from the public so as to make the state agencies with permitting authority for this project (in this case DEP) fully aware of the important environmental issues involved. The impacts of the project within MEPA jurisdiction do not warrant the preparation of an EIR. I conclude that no further MEPA review is required. The proponent may resolve any remaining issues during the state and local permitting processes.

August 15, 2005
Date

Stephen R. Pritchard

Comments received:

07/21/05 Division of Marine Fisheries
07/21/05 Eddie L. Johnson
07/27/05 Brian Woolley
07/27/05 Karen Vilandry
07/29/05 Bonnie Howland
07/29/05 Environmental Research Corps
08/04/05 Department of Environmental Protection Southeast Regional Office
08/11/05 BETA Group, Inc.

SRP/RAB/rab

Attachment J

September 1, 2005 – BETA
Letter addressing August 18,
2005 EPA Review Memorandum

BETA Group, Inc.
Engineers • Scientists • Planners

315 Norwood Park South
Norwood, MA 02062
(781) 255-1982 • fax (781) 255-1974
www.BETA-Inc.com

September 1, 2005

Ms. Kimberly Tisa
EPA New England, Region 1
1 Congress Street
Suite 1100 (CPT)
Boston, MA 02114-2023

Re: Risk Based Cleanup Request
McCoy Field Site - Wetlands Remediation
New Bedford, MA

Dear Ms. Tisa:

This letter addresses your Memorandum dated August 18, 2005 regarding EPA's review of the Risk Based Cleanup Request submitted to EPA on June 20, 2005. The comments and responses are as follows:

General Comment

1. No substantive changes have been made to the original risk based cleanup request. Various discussions with the New Bedford Conservation Commission and representatives from DEP and the ACOE have identified the following specific provisions for minimizing impacts to the surrounding environment:

    - Removal of additional soil/sediment from 6 to 18 inches deep at sixty-three (63) locations of new trees. Each location requires a hole of approximately 18 inches in diameter.
    - Crossing of adjacent wetlands necessary for accessing the indicated work area will only be possible through use of wetlands mats. No filling of wetlands areas is permitted.
    - The locations of the frac tank, soil stockpile staging areas, infiltration basin, and root barrier system have been more clearly delineated on the site plans (Contract Drawings 1 and 2).
    - The technical specifications have been updated to reflect ConComm and DEP review comments. The organic content of the soil (via leaf composting) to be used to restore the wetlands is 24%, with a TOC of 12%. Test requirements have been incorporated from ACOE guidance.

    We have provided you with the Bidding Documents for the remediation project, including a copy of Addendum #1 issued on August 31st. The Addendum includes the final Order of conditions issued by the New Bedford Conservation Commission.

Specific Comments

2. We have not yet pursued further delineation at the periphery of the indicated work area, due to site topography and prior remediation efforts along the embankment under Site Preparation Contract #1. Specifically, elevated levels of PCB concentrations coincide with areas of sediment

deposition and generally do not exist at adjacent areas with higher elevations, particularly along the embankment which has three feet of clean fill. As you know, we plan to complete confirmatory sampling at the horizontal and vertical limits of excavation, as outlined in the risk based cleanup plan, to demonstrate compliance with the target cleanup goal of 1 ppm.

a. As requested, BETA will collect additional surface samples at the periphery of the remediation areas next week, to further define the limits of contamination.

b. Additional vertical delineation sediment/soil samples (9) have been collected at six locations that coincide with elevated levels of PCB concentrations in surface sediments. The sample locations are illustrated on Figure 4 and the results are summarized on revised Tables 1-3, all of which are included in the enclosed Revision 1 to the Wetlands Remediation Risk Based Cleanup Request.

   As anticipated, the PCB concentrations appear to be limited to the surface sediments within the top six inches of the wetland. We will perform confirmatory sampling and analysis, as discussed in the risk based cleanup plan, to confirm that the target cleanup goal of 1 ppm has been achieved.

c. The intent is to remove all surface sediments along the base of the embankment up to the clean backfill placed under Site Preparation Contract #1.

3. The intermittent stream is not a defined channel; however, several samples were collected from the lowest elevations in the wetlands, where sediment deposition would be expected. Review of the results indicates that mostly "non-detect" results were obtained on the western side of the north – south line WC, including several in the location of the "intermittent stream". Specifically, the following sample locations coincide with the approximate location of the intermittent stream and they were all non-detect:

o WC-8	o WC-5	o WB-5
o WC-7	o WC-4	o WB-4
o WC-6.5	o WB-7	
o WC-6	o WB-6	

It is clear from the sampling results and remediation areas indicated on Contract Drawings 1 and 2 that the deposition has largely occurred in the area immediately adjacent to the embankment, presumably from erosion due to surface water runoff.

4. The moisture content of the samples has resulted in some elevated reporting limits; however, almost all of the reporting limits fall below the target cleanup level of 1 ppm PCBs. Reference is made to the revised summary of analytical results (Tables 1-3) that include the %solids and reporting limits for each sample. In addition, Table 4 includes a summary of the sample holding times. 91% of the surrogate recoveries (133 of 146) fall within acceptable ranges (40 – 150%).

   A formal data usability assessment will be submitted to you next week.

We have updated the QA/QC Plan for confirmatory sample analysis to reflect current EPA guidance on analysis of sediment samples. Where solids content is less than 30%, dewatering of samples will be required.

5. The status of the various state and local environmental permits follows:

   - **MEPA Review** - A certificate dated August 15, 2005 was issued by the Massachusetts Executive Office of Environmental Affairs indicating that no further MEPA review is required. A copy is appended for reference.
   - **Conservation Commission – Order of Conditions** was issued on August 31, 2005. A copy is included as attachment E in Addendum #1 sent to you under separate cover.
   - **Section 401 Water Quality Certificate** – We had a meeting on August 30th at DEP to review supplemental requirements requested by DEP. All supplemental information needed by DEP, including the Order of Conditions issued by the Conservation Commission, will be provided to them by September 2, 2005.
   - **Section 404 Corps of Engineers Permit** – According to Brian Valiton, the ACOE will be issuing a programmatic general permit on or about September 2, 2005.

6. The NPDES permit will be applied for by BETA on behalf of the City and the Remediation Contractor. We expect that the permit will be obtained next week. A copy will be forwarded to you.

7. The Contract Documents provide for the dewatering and/or solidification of excavated sediments prior to loading and off-site management, so that no free liquids are present in the sediments prior to shipment. Reference is made to Technical Specification 02215 in Addendum #1.

8a. The depth of confirmatory sampling has been revised in the sampling plan from six (6) to three (3) inches.

8b. Reference to "Appendix D" has been changed to "Attachment D". The recommended changes to the QA/QC Plan have been incorporated. See enclosed revised pages (Rev 1) to the original Wetlands Risk Based Cleanup Request.

9a. See response to Comment 7.

9b. The sediment scheduled for off-site management has already been sampled in-situ for PCBs, heavy metals and PAHs. The temporary stockpiling is a contingent provision only to provide for segregation of "suspect" material that may be characteristically different from the majority of the sediment. The location of the temporary stockpile is indicated on revised Contract Drawing 2, a copy of which is included with this response.

9c. We have made appropriate changes to the depth of confirmatory sampling. See response to Comment 2b.

10a. The Remediation Contractor will be responsible for handling and transportation of contaminated sediment so as to avoid deposition on paved areas (streets) and other areas in the vicinity of the Work. There are provisions in the Order of Conditions that require cleanup and restoration of any such deposition of contaminated sediment within resource areas. BETA, on behalf of the City, will provide full time on-site observation services and will be responsible for sampling any areas impacted by deposition of contaminated materials.

10b. i) Contract Drawings 2 and 3 illustrate the temporary impact areas immediately adjacent to the remediation areas, including access ways. No filling of either the temporary or permanent impact areas will be permitted; the Remediation Contractor is restricted to the use of wetlands mats. The proposed cleanup includes the general excavation and off-site management of up to six inches of leaf litter and surface sediment. Due to highly variable site conditions, the actual depth of sediment excavation will vary to accommodate such items as large rocks, trees to remain, root systems and other physical site conditions.

ii) We have described the anticipated extent of contamination, while reserving the right to direct the Remediation Contractor to excavate additional sediment, both vertically and horizontally, based upon actual results of confirmatory sampling. Reference is made to revised Paragraph 3.02 (B) (2) in Technical Specification Section 02215 included in Addendum #1 to the Bidding Documents.

iii) Reference is made to Technical Specification Section 02265 (Paragraphs 2.01 and 3.02) for test requirements for organic soil to be used in the wetlands restoration. This requirement is consistent with ACOE guidance provided by DEP.

10c. The technical specifications have been updated to reflect review comments and requirements of the New Bedford Conservation Commission and the DEP. Reference is made to the new Technical Specifications included in Addendum #1 to the Bidding Documents.

i) See response to Comment 10b (i).

ii) Figure 2 has been updated and reference has been changed to Contract Drawings 1 and 2.

iii) See response to Comment 10b. Also, we have corrected the text reference to PCBs.

iv) We do not expect to have any contaminated sediment with PCB concentrations greater than 50 ppm, since the highest detection in over sediment 100 samples is 18 ppm. The maximum storage within the work areas is limited to 100 cubic yards. We have eliminated any reference to estimated <u>total</u> of "suspect" material to be segregated.

v) See responses to Comments 9b and 10c.

10d. The NPDES permit is required to temporarily dewater individual work areas, in the event flooding conditions are encountered during the project. Also see response to Comment 6.

Please call either Barbara Laughlin or me with any questions related to the above responses, or any further comments that may arise.

Very truly yours,
BETA GROUP, INC.

Alan D. Hanscom, P.E., LSP
Associate

Cc: Gerard Martin, DEP
Dorothy Blickens, DEP
Brian Valiton, USACOE
Scott Alfonse, City of New Bedford
Sarah Porter, New Bedford ConComm
Jacqueline Coucci, City of New Bedford
Larry Oliveira, New Bedford School Department
William DoCarmo, City Project Manager
Lenore White, Nover-Armstrong
Evan Warner, MVG

The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114-2524

MITT ROMNEY
GOVERNOR
KERRY HEALEY
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August 15, 2005

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS
ON THE
ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME	: Wetlands Risk-Based Cleanup for McCoy Field/New Keith Middle School Property
PROJECT MUNICIPALITY	: New Bedford
PROJECT WATERSHED	: Buzzards Bay
EOEA NUMBER	: 13577
PROJECT PROPONENT	: City of New Bedford
DATE NOTICED IN MONITOR	: July 9, 2005

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project does not require the preparation of an Environmental Impact Report (EIR).

Project Description

As described in the Environmental Notification Form (ENF), the project entails the removal of up to six inches of sediments contaminated with polychlorinated biphenyls (PCBs) at selected locations comprising 0.87± acres of a 3.87-acre wetland area located at the rear of the McCoy Field and the New Keith Middle School, which are currently under construction.

The project is proposed as part of ongoing site assessment and remediation activities for the McCoy Field/New Keith Middle School project. The location of this project is a disposal site, identified by Release Tracking Number (RTN) 4-15685. The sediments to be excavated contain polychlorinated biphenyls (PCBs), metals and polycyclic aromatic hydrocarbons. This project received a Special Project Designation from the

Department of Environmental Protection (DEP) on October 10, 2001. Both DEP and the U.S. Environmental Protection Agency (EPA) are providing direct oversight of the proposed work. Specific project activities include the following:

- Clearing of vegetation and physical removal of leaf litter, surface vegetation, and surface sediment/soil;
- Live loading, transportation, and disposal of sediment to an appropriately licensed receiving facility; and
- Complete restoration of all disturbed areas, including replacement of the removed sediment/soil with clean soil and seeding with wetlands seed mix.

MEPA Jurisdiction and Required Permits

The project is undergoing review pursuant to Section 11.03 (3)(b)(1)(d) of the MEPA regulations because it will alter 5,000 or more sf of Bordering Vegetated Wetlands (BVWs). The project will require a 401 Water Quality Certification from the Department of Environmental Protection (DEP); A Section 404 Permit from the U.S. Army Corps of Engineers (ACOE); and an Order of Conditions from the New Bedford Conservation Commission (and hence, a Superceding Order of Conditions from DEP if the local Order is appealed). Because the City is not seeking financial assistance from the Commonwealth for the project, MEPA jurisdiction extends to those aspects of the project that may cause significant Damage to the Environment and that are within the subject matter of required or potentially requires state permits. In this case, MEPA jurisdiction extends to issues of wetlands and hazardous waste.

Wetlands Permitting Issues

The City has filed a Notice of Intent (NOI) with the New Bedford Conservation Commission. Compliance with Bordering Vegetated Wetland (BVW), Limited Project and Stormwater Management performance standards, as well as other Wetlands Protection Act standards, will be addressed during the review of the NOI. The public hearing process is on-going and, to date, the Conservation Commission has not issued an Order of Conditions.

In addition, DEP has received an individual Major 401 Water Quality Certification application for the removal of contaminated soils and sediments from BVW located adjacent to the McCoy Field/New Keith Middle School construction project. As a result of the August 3, 2005 on-site consultation conducted by DEP

staff, the City has been directed to submit project design clarifications and specifications for wetland restoration. The City should document all activities, past and present, temporary and permanent, direct and indirect, and cumulative impacts from the site clean-up and restoration effort, construction and ongoing operation of the project site.

Certain activities will require the City to file with the U.S. Army Corp of Engineers to receive a jurisdictional determination pursuant to the 401 and U.S. Section 404 Programs. The City should provide DEP with additional details on the wetland restoration effort including, but not limited to:

- submittal of required public notice;
- illustration of equipment access routes, construction and equipment staging areas, dewatering facilities and temporary stockpile areas;
- bio-barrier manufacturer and installation specifications;
- replacement soil composition and testing protocol; and
- wetland and upland seed mix specifications and supplier information.

During the review of the NOI and the Water Quality Certification process, the City should clearly demonstrate that the project meets performance standards for all applicable resource areas and that adverse effects have been avoided and minimized.

Conclusion

I have received several comment letters from local residents expressing deep concerns about the project. While I acknowledge these concerns, I am confident that both DEP and EPA will provide capable and competent oversight of the project. Moreover, the consultant for the City has adequately responded to these concerns in a letter dated August 11, 2005.

I would like to take this opportunity to emphasize that I do not have the authority to approve or deny this project. MEPA review is not a permitting process, nor does it serve as an appeal for local decisions. It does not pass judgment on whether a project is or is not environmentally beneficial, or whether a project can or should receive a particular permit. Rather, the MEPA process requires public disclosure of a project's environmental impacts as well as the measures that the proponent will undertake to mitigate these impacts. MEPA review occurs

before public agencies act to issue permits for a proposed project to ensure that they are fully cognizant of the environmental consequences of their actions.

I am confident that the review of the ENF has garnered sufficient input from the public so as to make the state agencies with permitting authority for this project (in this case DEP) fully aware of the important environmental issues involved. The impacts of the project within MEPA jurisdiction do not warrant the preparation of an EIR. I conclude that no further MEPA review is required. The proponent may resolve any remaining issues during the state and local permitting processes.

August 15, 2005
Date

Stephen R. Pritchard

Comments received:

07/21/05 Division of Marine Fisheries
07/21/05 Eddie L. Johnson
07/27/05 Brian Woolley
07/27/05 Karen Vilandry
07/29/05 Bonnie Howland
07/29/05 Environmental Research Corps
08/04/05 Department of Environmental Protection Southeast Regional Office
08/11/05 BETA Group, Inc.

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