

August 11, 2005

Mr. Richard Bourre  
Acting Assistant Director, MEPA Office  
Executive Office of Environmental Affairs  
100 Cambridge Street  
Boston, MA 02114

**Re: Response to Comment Letter submitted by  
Environmental Research Corps  
Re: McCoy Field – Wetlands Remediation Project**

Dear Mr. Bourre:

This letter addresses comments presented in a letter dated July 29<sup>th</sup> from Environmental Research Corps that you provided to BETA on Friday August 5, 2005. We have reviewed the comments carefully and prepared the following responses, as close as possible to the order in which the comments are presented.

***Comment #1: Incomplete testing of sediments documented in TSCA Risk Based Cleanup Application***

Testing of the sediments has been extensive and commensurate with the testing necessary for in-situ characterization of contaminated sediment for both ecological risk characterization and off-site management. Furthermore, the sampling was performed in strict compliance with provisions of the Work Plan approved by the US EPA and the Risk Based Cleanup Request submitted to EPA on June 20, 2005.

A total of 128 surface soil sediment samples were collected and analyzed as follows:

- All samples were analyzed for PCBs by Method 8082, RCRA Metals by 6010B / 7471A and Polynuclear Aromatic Hydrocarbons (PAHs) by EPA Method 8270C, consistent with the contaminants of concern identified on the adjacent school site;
- Seventeen (17) samples were analyzed for Pesticides by EPA Method 8081A and Herbicides by EPA Method 8051A;
- Sixty-two (62) samples were analyzed for Total Organic Carbon by EPA Method 9060; and
- A total of twenty five (25) sample duplicates, matrix spikes and matrix spike duplicates were also analyzed for quality control.

It is significant to note that the ecological risk characterization (an attachment to the Risk Based Cleanup request submitted with the original MEPA filing) concluded that remediation of the PCB-impacted sediments was not required to be protective of human health and the environment. However, in consultation with MA DEP and US EPA representatives, the City has established a more conservative and protective cleanup goal of 1 mg/kg (part per million) for the Wetland Restoration Project. All PCB concentrations in samples collected outside the designated

Wetlands Remediation Areas are below 1 mg/kg, and many are below the method detection limit of 10 parts per billion (0.01 ppm).

As discussed in the Risk Based Cleanup Request for the Wetlands Restoration Project, we plan to collect samples at the limits of the remediation areas for confirmatory PCB analyses.

***Comment #2: Perennial Stream & Off-Site Migration of PCB-Impacted Sediment***

Despite the designation on the USGS Map, both DEP and the New Bedford Conservation Commission agree that a perennial stream does not exist through the work area. In fact, most of the bordering vegetative wetlands (BVW) are substantially dry this time of year, as observed at recent site walks with MEPA, DEP and Local Conservation Commission representatives. Any reference to "banks" and other site features regulated under the Rivers Protection Act are inappropriate and irrelevant, since neither ponds nor a perennial stream exist.

With respect to the extent of PCB-impacted sediment, our sampling results do not support migration beyond the limits of the designated Wetlands Restoration Areas. Extensive sediment sampling has been performed throughout the wetland area, including just upstream and immediately downstream of the Durfee Street culvert, and the results do not support significant migration of PCB-impacted sediment beyond the limits of the designated areas. Given the historic use of PCBs in the greater New Bedford area, it is quite possible that any PCB-impacted sediment detected in downstream areas originated from one or more other source(s).

***Comment #3: Hydrologic Setting & Mobility of PCB-Impacted Sediment***

The wetland does not exist within the vadose zone. Groundwater in the vicinity of the wetlands, as measured at several monitoring wells over the past several years, is typically on the order of three to five feet below surface water elevation in the wetland. That observation is substantiated by the fact that the wetland is substantially dry during the late summer months of the year, as it currently is. Flooding of the wetland occurs during wet weather periods of the year as a result of runoff from the upstream drainage area, limited permeability of the wetlands soil, and the elevation of the channel downstream of Durfee Street. The downstream channel effectively causes the wetland to act as a storm water detention area, until such time as the surface water elevation rises to the point that outflow to downstream areas can occur.

The above hydrologic condition is the reason that significant migration of PCB-impacted sediment has not occurred. There is little opportunity for any scouring velocity to mobilize the sediment at any point in the wetland, except along the (formerly unprotected) shoulder of the (former) soccer field, the original source of the contamination currently present in the wetland.

***Comment #4: Additional Sediment Sampling & Current Results***

As noted in the response to Comment #1, extensive (and adequate) sampling has been performed in the wetland area to define the extent of PCB-impacted sediment. The only additional sampling to be performed is "confirmatory sampling"; that is, surface soil sampling and analyses required to document that the cleanup goal of 1 ppm PCB in the sediment to remain has been achieved.

All of the PCB analytical results are summarized in the risk based cleanup request for the wetlands submitted to EPA on June 20<sup>th</sup> and placed in the Repository at the New Bedford Public Library on the same date. The maximum PCB concentration detected in the wetland was 18 ppm, and only 22 others (out of 123 samples) were over 2 ppm. None of the other contaminants

detected at the adjacent school site, primarily heavy metals (lead and barium) and PAHs, were detected at levels that pose an environmental or human health concern.

***Comment #5: Historic Use of the Adjacent (School) Property***

The historic use of the former soccer fields is irrelevant to the MEPA filing and it is clearly documented under the Risk Based Cleanup Request for the School site submitted to EPA on March 21, 2005.

***Comment #6: Dewatering & Potential for Downstream Impacts***

Details of temporary dewatering of the wetlands (if necessary) are provided in the Notice of Intent filed with the Conservation Commission, the Water Quality Certification filed with the DEP and the Risk Based Cleanup Request for the Wetlands Restoration project submitted to the EPA. Given current site conditions, it is possible that temporary dewatering will not even be required.

As discussed previously, due to site hydrology, there is little to no potential for impact to downstream wetland areas.

***Comment #7: Storage of PCB-Impacted Soil***

All soil to be removed from the adjacent school property has already left the site. Only minor excavation and off-site management of surface soils remains to be performed at the periphery of the site; therefore, it is not relevant to the subject Wetlands Restoration Project.

***Comment #8: "Replication" versus "Restoration" Project***

The proposed project is not a replication project required as a result of the school construction project. Instead, it is a wetlands remediation and restoration project that includes disturbance of over 5,000 sf of wetlands. There was no threshold for filing of an ENF for construction of the school.

Due to the presence of subsurface contamination and most importantly PCBs over 50 ppm, development of the site is regulated under pertinent EPA (TSCA) and DEP (Massachusetts Contingency Plan) regulations, including the Wetlands Protection Act, since construction is occurring within the 100-foot buffer zone.

***Comment #9: Wetlands Restoration Materials***

The soil to be used to restore the wetlands will be consistent with the US ACOE guidelines. We are requiring soils to be used in the Wetlands Restoration Project to have a minimum 12% organic content, as requested by DEP, the Conservation Commission and the ACOE.

***Comment #10: Phragmites***

There are no requirements to remove the phragmites that have existed in the wetlands for several years, unrelated to the project. Despite the lack of any regulatory obligation to remove existing invasive wetlands species, the City has agreed to install a "biobarrier" to substantially eliminate migration of the phragmites into the restoration areas.

The root systems of phragmites generally exist within the top two feet, particularly in wet environments. The proposed biobarrier will be installed to that depth. With regard to PCB migration, it is obvious that PCBs do not migrate downward in root systems; rather, certain nutrients and heavy metals will migrate upward through the root system. According to available information in the literature, PCB uptake in plants is insignificant.

All applicable regulations have been carefully adhered to and we continue to be responsive to all inquiries from regulatory agencies and the public. To date, we have not identified any comments that change the conclusions and recommendations of the corrective actions we have described in the original MEPA submittal and associated permitting requirements.

If you have any questions or concerns regarding these responses, please call me.

Sincerely,  
BETA GROUP, INC.



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

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