



Wannalancit Mills
650 Suffolk Street
Lowell, MA 01854

978.970.5600 PHONE
978.453.1995 FAX

www.TRCSolutions.com

October 19, 2010

Kimberly N. Tisa, PCB Coordinator
United States Environmental Protection Agency
5 Post Office Square, Suite 100
Mail Code: OSRR07-2
Boston, Massachusetts 02109-3912

**RE: Request for Concurrence on Regulatory Opinion
Remediation of Polychlorinated Biphenyl (PCB) Impacted Soils**
Acquired Residential Properties
101, 102, and 111 Greenwood Street & 98, 108, and 118 Ruggles Street
New Bedford, Massachusetts

Dear Ms. Tisa:

This purpose of this letter is to seek concurrence on a regulatory opinion from the United States Environmental Protection Agency (EPA) for the regulatory classification of soil related to potential remedial actions the City of New Bedford (City) will use to address polychlorinated biphenyl (PCB) impacted soils at the above-referenced Acquired Residential Properties. The remedial actions would be conducted as part of the performance of a Massachusetts Contingency Plan (MCP; 310 CMR 40.0000) Release Abatement Measure (RAM), or other MCP-compliant planning document, to address impacted soils. The intent of the remediation activity would be to conduct the remediation in compliance with both 40 CFR Part 761 and the MCP.

EPA's concurrence on this letter and the regulatory status of soils at the Acquired Residential Properties will allow the City to efficiently integrate the planning for the EPA-governed remedial actions with MCP-regulated remedial actions. The remedial actions are currently in the planning stages and will be overseen by the City's Licensed Site Professional (LSP) and MassDEP.

Background

The City's knowledge of the nature and extent of soil contamination on these properties is based on technical reports prepared by The BETA Group, Incorporated (BETA) and TRC Environmental Corporation (TRC), specifically:

- *Summary of Analytical Data Volumes I and II, Properties Located on: Greenwood Streets, Ruggles Street, Durfee Street, New Bedford, Massachusetts.* Prepared by BETA Group, Inc., March 15, 2006.
- *Summary of Analytical Data 102 Greenwood Street, New Bedford, Massachusetts.* Prepared by BETA Group, Inc., September 14, 2006.
- *Data Summary Report, 102 Greenwood Street, New Bedford, Massachusetts.* Prepared by TRC Environmental Corporation, July 2008.
- *Memorandum. Residential Foundation Sampling Results, Acquired Residential Properties, New Bedford, Massachusetts.* Prepared by TRC Environmental Corporation, May 18, 2010.

Technical Approach

TRC understands that some of the remediation activities at the Acquired Residential Properties may be jurisdictional under the EPA’s PCB regulations under 40 CFR Part 761. The following information for the six Acquired Residential Properties is provided in Table 1 (see below) to facilitate EPA’s evaluation of regulatory applicability, particularly with regard to the application of the definition of PCB Remediation Waste to the soil under 40 CFR Part 761.3.

Table 1 – Information Summary for the Six Acquired Residential Properties							
Location	Number of PCB soil samples	Number of soil samples >50 mg/kg	Max. PCB Conc. (mg/kg)	Depth Detected (feet)	Last Date of Parcel Ownership by City*	Date of Residence Construction	Foundation Type
98 Ruggles St.	27	0	13.3	7-10	1954	2000	SLG
108 Ruggles St.	75	0	10.33	3-6	1954	2000	SLG
118 Ruggles St.	23	1	59.1	2.75-4	1941**	1988	Basement
101 Greenwood St.	68	1	976	3-6	1949	2000	SLG
102 Greenwood St.	49	1	68.3	2	N/A	1986	SLG
111 Greenwood St.	67	0	1.668	3	1949	1965	Basement

*- Before the City’s recent re-acquisition of the parcels in 2008.

**-. Tax title issues in 1992/1993. The parcel was developed by others as a residence by that time.

SLG – slab on grade

N/A – Not applicable. Not in chain of title until acquisition by the City in 2008.

Based on the above information, three of properties each have a *single detection of PCB soil at a concentration greater than 50 mg/kg* (shown in bold face in Table 1): 118 Ruggles Street, 101 Greenwood Street, and 102 Greenwood Street at soil borings A15-2.75-4, H2-3-6, and SB-185-2, respectively. These soil sample locations are illustrated on Figure 1 (attached). All other soil sample results (BETA and TRC) are below a concentration of 50 mg/kg total PCBs. Note that EPA is in receipt of all soil characterization data for these sites, which is contained in the TRC-prepared *Revised Modified Release Abatement Measure Plan, Greenwood Street and Ruggles Street Buildings Demolition Activity* dated July 6, 2010.

A thorough review of all available information (maps, aerial photographs, etc) indicates



that soils located at Acquired Residential Properties were in place on or before 1965, the construction date of 111 Greenwood Street residence.

The available information indicates that the impacted soils at the Acquired Residential Properties have remained in place undisturbed since April 1978 (other than activities conducted with EPA and/or MassDEP acknowledgment and/or oversight such as the demolitions, test pits, and utility disconnection activities), and the properties are not impacted by unauthorized PCB uses. As noted in Table 1, all but one of the residences was constructed post-1978. Four (4) out of the six (6) residential structures that were formerly present on each parcel were of slab-on-grade construction (abbreviated as “SLG” in Table 1). These include: 98 Ruggles Street, 108 Ruggles Street, 101 Greenwood Street, and 102 Greenwood Street. As a result, the degree of post-1978 disturbance of impacted soil at these parcels was minimal or non-existent due to the depth of placement. The principally impacted stratum (i.e., fill) was not disturbed during foundation construction. With the exception of water, sewer, and gas connections, disturbance was limited to the top 6 to 12 inches of soil. Where buried utilities are concerned, any trenching for water, sewer or gas service installation would have been limited, narrow, and localized and would not be a concern for perceived dilution.

The remaining two residences (111 Greenwood Street and 118 Ruggles Street) had basement foundation systems. At 111 Greenwood Street the total PCB concentrations in soil ranged from 0.12 mg/kg to 1.667 mg/kg. This is based on a database of 59 soil samples. Only 3 results were greater than 1 mg/kg (5-percent of the PCB results). Twenty-three (23) results were non-detect for PCBs. In summary, 95-percent of the soil analytical results were non-detect or below 1 mg/kg total PCBs. At 118 Ruggles Street based on a total of 21 soil samples, the total PCB concentrations in soil ranged from 0.04 mg/kg to 59.1 mg/kg. One result was greater than 50 mg/kg. Only four (4) results were greater than 1 mg/kg, and five (5) results were non-detect. Based on the lines of evidence presented in this letter and summarized in Table 2, it is TRC’s position that only the impacted soil at 118 Ruggles Street, 101 Greenwood Street, and 102 Greenwood Street qualifies to be regulated as PCB Remediation Waste. TRC also believes that a PCB Remediation Waste cut-off of 50 mg/kg is applicable to the impacted soil/fill at these three locations. The soil at the remaining properties is not classified as PCB Remediation Waste.

Table 2 – Summary of Regulatory Classification Opinion for Soil						
Location	Pre-1978 Disposal	Number of soil samples >50 mg/kg	Associated with unauthorized use	Post-1978 Disturbance	PCB Remediation Waste?	Notations
98 Ruggles St.	Yes	0	No	No	No	Slab foundation system. No disturbance of impacted fill.
108 Ruggles St.	Yes	0	No	No	No	Slab foundation system. No disturbance of impacted fill.

Table 2 – Summary of Regulatory Classification Opinion for Soil						
Location	Pre-1978 Disposal	Number of soil samples >50 mg/kg	Associated with unauthorized use	Post-1978 Disturbance	PCB Remediation Waste?	Notations
118 Ruggles St.	Yes	1	No	Localized	Yes	Limited to >50 mg/kg. Foundation excavation localized.
101 Greenwood St.	Yes	1	No	No	Yes	Slab foundation system. No disturbance of impacted fill. Limited to >50 mg/kg.
102 Greenwood St.	Yes	1	No	No	Yes	Slab foundation system. No disturbance of impacted fill. Limited to >50 mg/kg.
111 Greenwood St.	Yes	0	No	Localized	No	Nearly all (95-percent) of soil results < 1 mg/kg or non-detect. Foundation excavation localized.

We look forward to discussing this letter at your earliest convenience.

If you have any questions, please call me at 978-656-3565.

Sincerely,

TRC Environmental Corporation

David M. Sullivan, LSP, CHMM
 Sr. Project Manager

cc: Cheryl Henlin, City of New Bedford
 Scott Alfonse, City of New Bedford
 Malcolm A. Beeler, TRC Environmental Corporation
 Molly Cote, Massachusetts Department of Environmental Protection (by electronic PDF)

