

November 28, 2016

Harry D. Warner, P.E. Regional Hazardous Waste Remediation Engineer NYSDEC Region 7 Division of Environmental Remediation 615 Erie Blvd. West Syracuse, New York 13204-2400

**Subject:** Carrier Corporation, Thompson Road Facility, Syracuse, New York

Corrective Action Order — Index CO 7-20051118-4

Site Registry No.: 734043

Sanders Creek Supplemental Sampling

Dear Mr. Warner

During the November 2, 2016 meeting between NYSDEC, UTC and AECOM it was agreed that UTC would conduct additional sampling along Sanders Creek to supplement the data presented in AECOM's Sampling and Analysis Report dated August 2016. In response, the attached Supplemental Work Plan is being submitted for your approval.

Sincerely,

Project Manager

Robert.E.Murphy@AECOM.com

Robert & mughy

cc:

Mr. Michael Belveg, NYSDEC

Ms. Rebecca Quail, NYSDEC Ms. Mary Jo Crance, NYSDEC

Mr. Gary Priscott, NYSDEC Mr. John Wolski, UTC

Mr. Jon Alberg, AECOM



Carrier – Syracuse Facility Campus NYSDEC Site Registry No. 734043

## Sanders Creek Remediation Supplemental Sampling Work Plan

November 28, 2016

## 1. INTRODUCTION

In August 2016, AECOM on behalf of United Technologies Corporation (UTC) submitted to the New York State Department of Environmental Conservation (NYSDEC) a Sampling and Analysis Report (SAR) for the recently completed Sanders Creek investigation. The investigation had been conducted in accordance with the NYSDEC approved Sampling and Analysis Plan (SAP) dated January 2016. The results of the SAR were discussed at a meeting held on November 2, 2016 between NYSDEC, UTC and AECOM. At the meeting it was agreed that additional sampling would be performed at select locations to provide polychlorinated biphenyl (PCB) data at depths of 2 feet (ft) to 4 ft below ground surface (bgs) and to bound the horizontal and vertical limits of the one location reported in the SAR where detection of PCBs exceeded 50 milligrams per kilogram (mg/kg).

This submittal presents an abbreviated work plan for this proposed supplemental investigation. Work will be performed in accordance with the January 2016 SAP.

## 2. SAMPLE LOCATIONS

As discussed during the November meeting, the supplemental samples will be collected from the 2 ft to 4 ft bgs interval at locations that exceeded 5 mg/kg in the 1 ft to 2 ft bgs interval, as reported in the SAR. The exceptions are the SAR sample locations 6820-FP-S and 6550-SB-S in the vicinity of TR-3 North Wall / SWTP Area (TR-3 Area). The soils at depth at these locations will be addressed as part of the proposed soil remediation for the TR-3 Area. Therefore sampling at depth at these locations is not appropriate. To address this stream segment, a new sample location is proposed, 6510-SB-S, approximately 40 feet west of the TR-3 Area. This location will be sampled from the 2 ft to 4 ft interval.

To delineate the 50 ppm detection of PCBs at sample location 4810-SB-N, two side bank samples (1 upstream and 1 downstream) and one flood plain sample (up slope) are proposed.

To provide a site-wide overview, Figure 1 presents these locations. The Figure 3.1 (maps 1 through 11) submitted previously in the SAR can be referenced for a larger scale depiction of these locations. Figure

A=COM

2 shows the layout of the proposed new locations to delineate 4810-SB-N and the proposed new location 65-10-SB-S.

The total number of proposed sample locations are:

· 11 side bank

9 floodplain

· 2 outfall

3. PROFILING OF SAMPLE LOCATIONS

until no PCBs are detected or the deepest interval has been analyzed.

At each location where supplemental depth samples are being collected, a discrete sample will be collected for each 6-inch depth interval below 2 ft (i.e., 2 ft to 2.5 ft, 2.5 ft to 3 ft, 3 ft to 3.5 ft and 3.5 ft to 4 ft). The first interval (2 ft to 2.5 ft) from each location will be analyzed. The samples from the remaining depth intervals will be extracted and held for analysis pending the results from the upper interval. If the upper interval sample exceeds 1 mg/kg PCBs, the next deeper sample will be analyzed

The three proposed sample locations around 4810-SB-N will be collected from ground surface to a total depth of 4 ft bgs. Samples from 0 ft to 2 ft will be analyzed according to the SAP. Samples from 2 ft to 4 ft will be analyzed as described above.

4. FIELD SAMPLING METHOD

Given that the proposed soil borings will need to extend to a depth of 4 ft, samples will be collected using either a hand auger or a macro-core sampler. A tow-behind compressor with a pneumatic drive hammer might be used for the macro-core sampler if advancing the sampler by hand is too difficult.

5. QA/QC SAMPLES

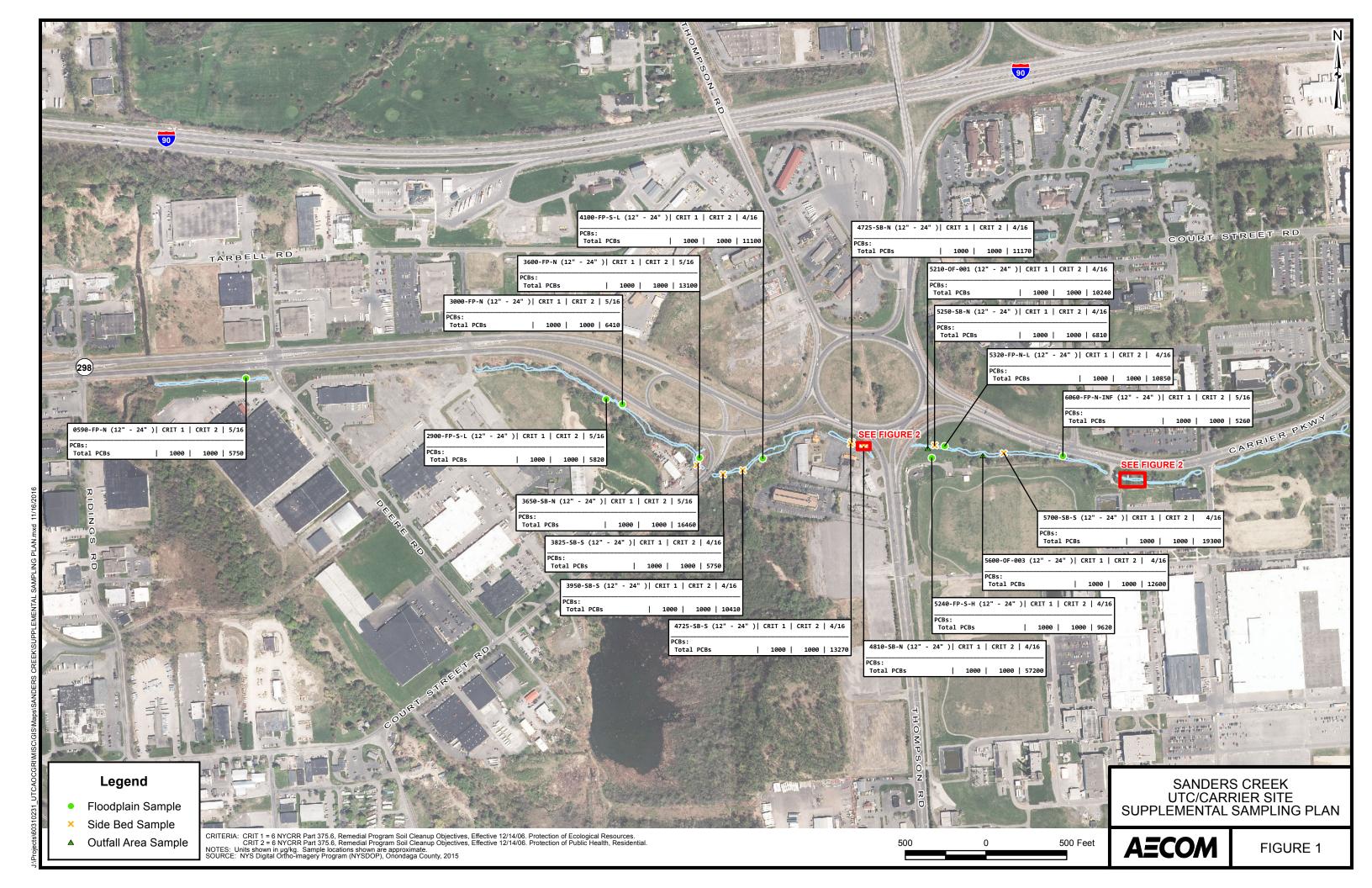
For the proposed 22 locations, at total of 94 samples will be collected: 88 (2 ft to 4 ft) and 6 (0 ft to 2 ft). The following Quality Assurance / Quality Control samples will also be taken:

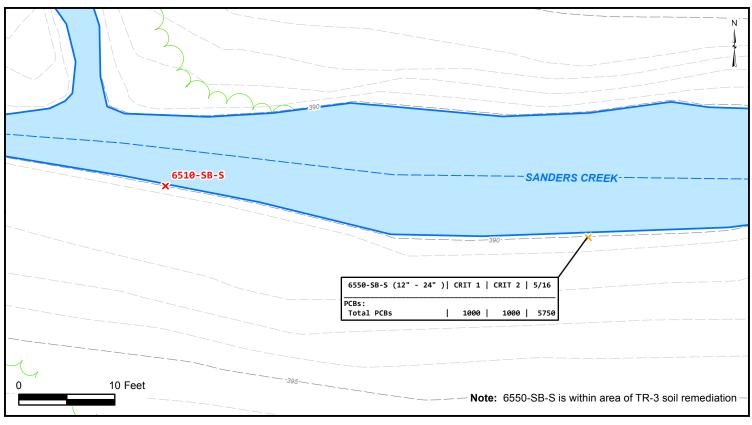
Matrix Spike (MS): 1 per 20 samples

MS Duplicate (MSD): 1 per 20 samples

Field Duplicate: 1 per 20 samples

Equipment/Field Blank: 1 per 10 samples





4810-SB-N SUPPLEMENTAL SAMPLE LOCATIONS

6550-SB-S SHIFTED SUPPLEMENTAL SAMPLE LOCATION

## Legend

- Proposed Floodplain Sample
- × Proposed Side Bed Sample
- × Side Bed Sample

CRITERIA: CRIT 1 = 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Ecological Resources. CRIT 2 = 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Protection of Public Health, Residential. NOTES: Units shown in µg/kg. Sample locations shown are approximate.

SANDERS CREEK UTC/CARRIER SITE SUPPLEMENTAL SAMPLING PLAN

**AECOM** 

FIGURE 2