## SOIL SAMPLING AND ANALYSIS WORK PLAN FORMER RUNOFF BASIN AREA KENTUCKY AVENUE WELLFIELD SITE OPERABLE UNIT NO. 3 HORSEHEADS, NEW YORK

This Soil Sampling and Analysis Work Plan (Plan) has been prepared by CBS Corporation (CBS) for the Former Runoff Basin (FRB) Area at the former Westinghouse Electric Corporation plant site located in Horseheads, New York. Specifically, this Plan will be implemented for the western portion of the FRB Area where existing analytical data do not provide delineation of soils with concentrations of trichloroethylene (TCE) meeting the site-specific soil standard of 800 micrograms per kilogram (µg/kg). Data generated as part of this sampling effort will be used to develop excavation limits, explicitly near the western portion of the FRB Area, for future supplemental remedial activities (Addendum to the Remedial Action Work Plan, Cummings/Riter Consultants, Inc. [Cummings/Riter], September 19, 2011).

Implementation of proposed sampling and analysis activities will adhere to the procedures and methods described in documents previously provided to U.S. Environmental Protection Agency (USEPA) during remedial design and referenced in the Remedial Action Work Plan (Cummings/Riter, July 19, 2000), including the following:

- Health and Safety/Contingency Plan;
- Construction Quality Assurance Project Plan;
- Sampling, Analysis, and Monitoring Plan; and
- Quality Assurance Project Plan.

## SUMMARY OF SAMPLING AND ANALYSIS ACTIVITIES

Six soil borings (SFRB-11 through SFRB-16) are planned to be completed at the locations shown on Figure 1. To provide adequate coverage along the western portion of the FRB Area, these soil borings will be located 5, 10, and 25 feet west of existing Soil Boring SFRB-2. Prior to advancing the borings, horizontal survey coordinates will be used to locate existing Soil Boring SFRB-2, which will be used as a reference point.

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Borings will be advanced using direct-push technology methods (Geoprobe<sup>TM</sup> or equivalent). Soil samples will be collected continuously on 2-foot intervals from ground surface to a total depth of up to 12 feet below ground surface (bgs) and logged in the field noting the density, color, soil type, and moisture content. Soil samples from the 2-4 foot, 6-8 foot, and 10-12 foot bgs intervals of each boring will be submitted for laboratory analysis, resulting in a total of 18 samples. These sample depth intervals coincide with the 2004 and 2011 soil sample intervals where analytical results indicated exceedance of the site-specific soil standard for TCE. Samples will be collected from acetate sleeves in accordance with USEPA Method 5035 and analyzed for TCE using USEPA Method 8260 by a USEPA-approved analytical laboratory. Soil samples from the 2-4 foot, 6-8 foot, and 10-12 foot bgs intervals will be screened in the field using a photoionization detector. Soils with the highest field screening readings will be preferentially selected for laboratory analysis.

All 18 samples will be extracted and held by the laboratory. It is anticipated, depending on laboratory capacity and holding time, that samples from each boring will be analyzed sequentially on an expedited turnaround time; samples from the two borings located five feet west of Soil Boring SFRB-2 will be analyzed concurrently, and samples from the two borings located 10 feet west of Soil Boring SFRB-2 will be analyzed only if a corresponding result for the initial six samples is greater than 800 µg/kg. This sequential approach would also apply to the two borings located 25 feet west of Soil Boring SFRB-2.

In addition to the delineation samples, quality assurance/quality control samples (field duplicate, matrix spike, matrix spike duplicate, field blank, and trip blank) will also be collected. Upon completion of sampling activities, horizontal coordinates of each soil boring location will be surveyed.

## DATA VALIDATION

In accordance with the requirements of the Remedial Action Work Plan, delineation sampling data will be validated to verify useable data to support the efficacy of the future supplemental remedial activities.

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## SCHEDULE AND REPORTING

It is anticipated that the activities described herein can be completed in November 2011. Upon completion of these activities, delineation sampling analytical data and an updated figure presenting the limits of excavation of the FRB Area will be provided to USEPA.

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