GALLAGHER BASSETT | TECHNICAL SERVICES

October 1, 2024

Caroline Jalanti
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-7014 via email: caroline.jalanti@dec.ny.gov

Re: Beacon Terminal BCP Site Number: C314117
Surface Soil Sampling Work Plan
GBTS Project: 22003-0094

Dear Ms. Jalanti:

This Surface Soil Sampling Work Plan for the Beacon Terminal BCP Site has been prepared by Gallagher Bassett Technical Services (GBTS) to provide specifications for end-point surface soil sampling.

Background

An "opportunity to cure violation" letter was issued by the NYSDEC on December 1, 2022, which required the Volunteer to implement the remedial action prior to initiating the final Site development plan. In accordance with Section 1.3 of the NYSDEC-approved Remedial Action Work Plan (RAWP, January 2014), which states that a cover system will be installed throughout the Site, the Volunteer has proposed the placement of clean fill at forested areas of the Site where soil contamination exceeds Track 2 criteria (remaining Site areas are sufficiently covered with building foundations and pavement). Additional soil sampling is required in order to account for data gaps from previous environmental investigations.

Scope of Work

The following Scope of Work is proposed:

- Twelve (12) surficial soil samples will be collected in portions of the forested areas that lack sufficient historical data (see Proposed Surface End-point Sampling Map).
- All samples will be submitted for laboratory analysis of TCL VOCs+10 (USEPA 8260), with a subset of samples (25%) to be additionally analyzed for TCL SVOCs+20 (USEPA 8270), TAL metals (USEPA 6010C/7471A), pesticides/PCBs (USEPA 8081/8082), and PFAS (USEPA 1633; Sample collection and laboratory analysis for PFAS will comply with current NYSDEC guidance).

All fieldwork will be in conformance with the NYSDEC-approved RAWP and subsequent directives from NYSDEC.

22 IBM Road, Suite 101
Poughkeepsie, NY 12601
O: 845-867-4715
www.gallagherbassett.com

Sample Handling and Custody

Sample Containers

The following laboratory-supplied containers will be used for sample collection (as applicable):

Media	Analyte Class	Collection Container (subject to laboratory requirements)	Preservation
Soil	PFAS	1, 250-ml HDPE plastic (fill halfway)	6° C
Soil	VOCs	Laboratory prepared 5035 VOA kit, (4, 40-ml glass vials)	Method 5035
Soil	SVOCs, metals, pesticides, herbicides, PCBs, cyanide	1, 8-oz. glass jar	4° C
Soil	PFAS MS/MSD	1, 250-ml HDPE plastic (fill halfway), (may use soil from a sample container)	6° C
Soil	All other MS/MSD	additional 8-oz. glass jar	4° C

Sampling Frequency

The estimated approximate number of samples to be collected is outlined below (actual number of samples may vary based on conditions encountered during the investigation.

Media /QC Parameter	Number of Samples [a]	Analytes (USEPA Method) [b, c]
Soil	12	**all samples**: TCL VOCs +10 (8260) – **at least 25% of samples as per below**: PFAS NYSDEC target list (1633); TCL VOCs +10 and SVOCs +20 (8260C/8270D); TAL metals (6010D and 7473); hexavalent chromium (7196A); cyanide (9010C); pesticides (8081); PCBs (8082); herbicides (8151A)
Trip Blank (PFAS)	1 per sample cooler (each day of sampling)	PFAS NYSDEC target list (1633)
Trip Blank (VOCs)	1 per sample cooler (each day of sampling)	TCL VOCs (8260)
Field Blank (PFAS)	1 per sampling day	PFAS NYSDEC target list (1633)
Equipment Blank [d]	1 for every 20 samples (non-dedicated)	As per sample collection requirements
Duplicates, MS/MSD	1 for every 20 samples (minimum 1/week)	As per sample collection requirements; PFAS soil MS/MSD may be from same container as sample

Notes

a Number of soil samples to be determined based on field conditions, in consultation with NYSDEC.

b PFAS will be analyzed using methodologies based on EPA Method 1633; additional methods may include SPLP (EPA Method 1312), and/or Total Oxidizable Precursor (TOP) Assay.

c 1,4-dioxane by 8270 SIM

d PFAS and 1,4-dioxane: collected at a minimum frequency of one per day for each matrix

Sample Custody

Samples will be kept at cold temperatures (per Table 2.3.1) as warranted. Upon the completion of each day of sample collection activities, all samples will be shipped via either courier or overnight delivery (per laboratory requirements) to a NYSDOH ELAP certified laboratory under proper chain of custody. Laboratory personnel will record the cooler temperature upon receipt and analyze the samples prior to the expiration of the hold times as specified in the NYSDEC Analytical Services Protocols (ASP).

Analytical Methods

Analytical methods for the samples will be implemented as follows:

Matrix	Sample Analysis (Holding Time)	USEPA Analytical Method
Soil	PFAS (28 days)	1633 (reporting limit 0.5 µg/kg)
Soil	TCL VOCs+10 (14 days)	8260C; 8270 for 1,4-dioxane (1,4-dioxane reporting limit 0.1 mg/kg) [a]
Soil	TCL SVOCs+20 (14 days)	8270B
Soil	TAL metals (180 days; mercury 28 days)	6010C/7471B
Soil	Cyanide (14 days)	9010C
Soil	Pesticides/PCBs/herbicides (14 days [b])	8081A/8082/8151A
a Laboratory will meet required reporting limits running standard USEPA Method 8270 b Days for extraction, 40 days after extraction for laboratory analysis		

Laboratory reporting limits for PFOA and PFOS should not exceed 0.50 µg/kg for soil and 2.00 ng/l for water (reporting limits for all other PFAS in soil and water should be as close to these limits as possible).

The results of the surficial soil sampling program, in conjunction with historical data and current Site observations, will be used to design an acceptable soil cover system. All sampling results, a cover system design, and installation methodology will be detailed in a Soil Cover Plan to be provided to NYSDEC for review and approval.

Please review this document and contact Caroline Clark at (845) 867-4721 if you have any questions or require additional information.

Respectfully submitted,

Gallagher Bassett Technical Services

Caroline Clark
Project Manager, Environmental Consultant

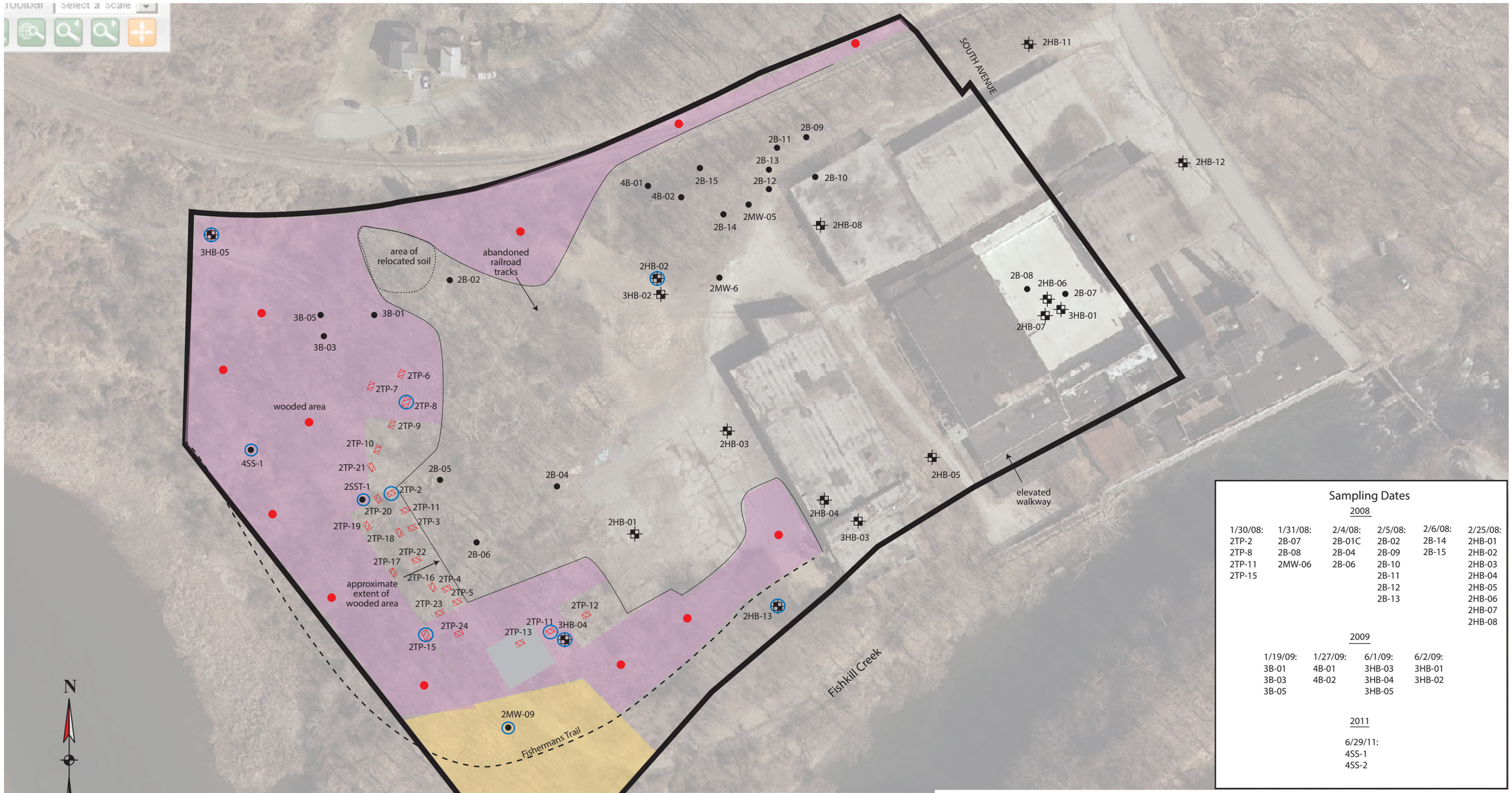
Reviewed by,

Gallagher Bassett Technical Services

Scott Spitzer
Technical Director, Environmental Consulting

Attachment: Proposed Surface End-Point Sampling Map

GALLAGHER BASSETT | TECHNICAL SERVICES



Sampling Dates

2008

1/30/08:	1/31/08:	2/4/08:	2/5/08:	2/6/08:	2/25/08:
2TP-2	2B-07	2B-01C	2B-02	2B-14	2HB-01
2TP-8	2B-08	2B-04	2B-09	2B-15	2HB-02
2TP-11	2MW-06	2B-06	2B-10		2HB-03
2TP-15			2B-11		2HB-04
			2B-12		2HB-05
			2B-13		2HB-06
					2HB-07
					2HB-08

2009

1/19/09:	1/27/09:	6/1/09:	6/2/09:
3B-01	4B-01	3HB-03	3HB-01
3B-03	4B-02	3HB-04	3HB-02
3B-05		3HB-05	

2011

6/29/11:
4SS-1
4SS-2

Legend:

- site boundary
- previous test pit location
- previous boring location
- previous surface sample location
- impacted samples
- excavation area 3
- proposed sampling area
- proposed sampling locations

Proposed Surface End-Point Sampling

Beacon Terminal Site
Site ID: C314117
555 South Avenue
City of Beacon
Dutchess County, New York

File: 22003-0094

Scale: 100'

October 2024

Attachment