



Health, Safety, Environment, & Product Safety
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October 7, 2016

Mr. Charles Post
Engineering Geologist
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233-1706

Subject: Red Hook Park, Brooklyn, New York
Site Characterization Work Plan for Tar-Like Material in Soil Boring

Dear Mr. Post,

Attached is a Site Characterization Work Plan for the investigation of tar-like material in a boring within Red Hook Park. This SCWP is being submitted pursuant to your July 25, 2015 [*sic*] comment letter on the Site Characterization Work Plan for the Former Barrett Manufacturing and Mica Roofing Sites, Brooklyn, New York.

We will be directing future correspondence to Mr. Wu as requested at our last meetng.

If you have any questions in regards to the information provided herein, feel free to contact me at 302-791-6738.

Regards,

Steve Coladonato

Honeywell

cc: Andrew Guglielmi, Esq, NYSDEC Office of General Counsel (letter only)
Gardiner Cross, NYSDEC Section Chief
Krista Anders, NYS Department of Health
Jeremy Karpatkin, Esq., Arnold & Porter LLP
James O'Loughlin, Parsons
Paul Feshbach-Meriney, Parsons

Site Characterization Work Plan for Investigation of Solidified Tar-Like Material at Red Hook Park Brooklyn, New York

This focused site characterization work plan contains a scope of work is to investigate the reported presence of “solidified tar-like material” in a former soil boring in Red Hook Park. The presence of tar like material was noted by NYSDEC in a meeting on July 7, 2016 and specifics were provided by NYSDEC in an email dated July 13, 2016. The email noted: “As you will see MW-19 was installed in the park. The boring log indicates that solidified tar-like material was encountered between 13.5 and 16’ below the ground surface.” The attached specifics included excerpted pages from the 2004 Construction Completion Report for the Chemtura site at 688 Court Street.

A field investigation is outlined below to collect additional data to confirm the presence of the solidified tar-like material in the boring at MW-19.

The investigation will be performed under the broad purview of procedures contained in the Field Sampling Plan (FSP), Quality Assurance Project Plan (QAPP), and Health and Safety Plan (HASP), and Community Air Monitoring Plan (CAMP) that are referenced in the Site Characterization Work Plan for the Former Barrett Manufacturing and Mica Roofing Site (Parsons, 2016¹). The SCWP and associated FSP, QAPP, HASP and CAMP were approved, with some modifications to the scope of work, by NYSDEC in a letter dated July 15, 2015. This letter also requires that a separate SCWP be developed by Honeywell to delineate the tar-like material in MW-19, and this focused SCWP represents that work plan.

Background Information of Tar-Like Material in Red Hook Park

The excerpted information provided in the 2004 Construction Completion Report for the Chemtura site at 688 Court Street included a soil boring log for MW-19 and a portion of Figure 3, which shows the location of MW-19 north of the Chemtura 688 Court Street site in Red Hook Park. The excerpted information was reviewed along with boring log information from other reports from the area to determine the extent of information known about the subsurface conditions in Red Hook Park. The boring logs from the following reports were reviewed:

- 1999 Phase II Site Investigation for Chemtura at 688 and 633 Court Street
- 2004 Construction Completion Report, Steam Enhanced Dual-Phase Extraction System Crompton Corporation, 688-700 Court Street
- 2009 PCB Investigation at 688 Court Street
- 2013 Remedial Investigation at Chemtura 688 Court Street
- 2013 Site Investigation at Chemtura 633 Court Street

The review indicates that several boring and wells were installed in Red Hook Park (**Figure 1**). As noted by NYSDEC above, tar-like material was reportedly found in the boring log at MW-19. Upon completion of a review of other logs in this portion of the park, tar was also observed in

¹ Draft Site Characterization Work Plan for the Former Barrett Manufacturing and Mica Roofing Site, NYSDEC Site Numbers 224197 & 224196, Brooklyn, Kings County, New York, prepared for Honeywell by Parsons, April 2016.

the boring at MW-14, which is located in the southwestern portion of Red Hook Park. Five other borings in Red Hook Park west of MW-19 did not contain tar like material.

Scope of Work in Red Hook Park

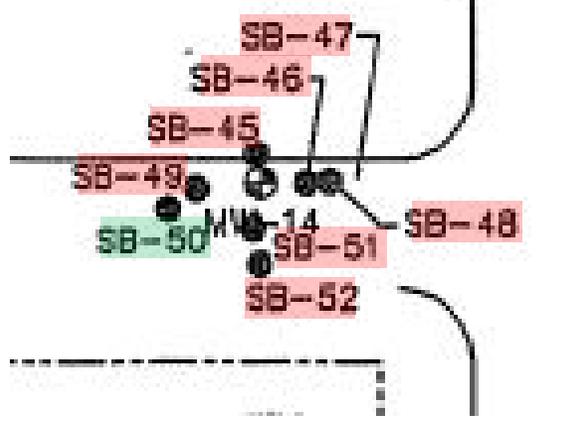
The investigation is designed to characterize the solidified tar-like material reportedly observed at MW-19 and MW-14 (**Figure 1**). The investigation in Red Hook Park will contain the following elements:

- At the location of MW-19, drilling of one shallow soil boring (PSB-01) to a depth of 16 feet using a hollow stem auger drilling rig.
- At the location of MW-14, drilling of one shallow soil boring (PSB-02) to a depth of 14 feet using a hollow stem auger drilling rig.
- At each boring, collection of continuous soil samples using 2-inch split spoon samples to the depths provided above to characterize the fill and specifically observation of the soil for the presence of tar-like material at the following intervals:
 - At MW19 – 14 to 16 feet
 - At MW14 – 6 to 12 feet
- If solidified tar-like material is found at these depths or other depths in the borings, samples of the tar-like material will be collected for laboratory analyses, including:
 - TPH
 - Full forensics (biomarkers, alkylated PAHs, extended PAH list, and Phenol)
 - Metals
 - Mass lost at 102, 150 and 180 deg. C (PTI) with observations as case narrative
 - Viscosity at 70 deg. F and 100 deg. F
 - PCBs
- If no solidified tar-like material is found in either of these two locations, then the visual observations of soil samples will be used as evidence to indicate the absence of tar at these locations and no additional soil borings will be performed.
- If the laboratory analyses of the solidified tar-like material is found to be possibly related to operations at the Former Barrett Manufacturing facility between Smith and Court Streets, the need for further characterization and delineation will be discussed with NYSDEC.

Assumptions:

- It is assumed that the locations of MW-19 and MW-14 will be obtained using coordinates (i.e., easting and northing) provided by the responsible party at Chemtura. Or alternatively, if those coordinates are not available, the locations will be estimated from a map from one of the Chemtura reports and georeferencing that map in GIS to a real coordinates system. Then the coordinates for the two locations will be obtained from the georeferenced overlay.
- Access to the Red Hook Smith Street Site will be provided.

MW-14 Inset Map



Red Hook Park

| | |
|---|--------------------------|
| MW-10 | Missing Well/Boring |
| MW-19 | Existing Well/Boring |
| | Tar Observed |
| | No Tar Observed |
| | Boring Log Not Available |
| | Proposed Boring |
| Boring and well locations are approximate | |



MW-10 (16 ft)

MW-18 (16 ft)

SB-9 (8 ft)

SB-10 (8 ft)

E-16 (18 ft)
[0-10 not sampled]

Chemtura
688 Court St

MW-15 (10 ft)

MW-19 (18 ft)
[Tar: 13.5-16 ft]

PSB-01

MW-108

MW-14 (14 ft)
{Tar: 6-12 ft}

PSB-02

MW-107

SB-17 (16 ft)

MW-110

MW-109

Chemtura
633 Court St

Figure 1. Historical and Proposed Soil Borings / Wells in Red Hook Park