NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 8
6274 East Avon-Lima Road, Avon, NY 14414-9516
P: (585) 226-5353 I F: (585) 226-8139
www.dec.ny.gov

March 14, 2016

City of Rochester
Mr. Joseph J. Biondolillo
City Hall, 30 Church Street, Room 300B
Rochester, New York 14614

Dear Mr. Biondolillo;

Re: Portion of Former Vacuum Oil Refinery, Site #C828190
Remedial Investigation Work Plan Modifications
City of Rochester, Monroe County

The New York State Department of Environmental Conservation (NYSDEC) has completed its review of the requested modifications to the approved Remedial Investigation Work Plan for the Portion of Former Vacuum Oil Refinery site located in the City of Rochester, Monroe County. The proposed modifications are described in the following letters and emails prepared on behalf of the City of Rochester by O'Brien & Gere Engineers, Inc. (OB&G):

- Proposed Deviations to Soil Boring/Monitoring Well Field Program dated February 11, 2016;
- Response to February 17, 2016 Conference Call Regarding Proposed Deviations to Soil Boring/Monitoring Well Field Program dated February 24, 2016;
- City of Rochester – Vacuum Oil Site – Use of Geoprobe (email) dated February 26, 2016; and
- RE: Vacuum Oil Deviations Response (email) dated March 11, 2016.

NYSDEC's decision with respect to each requested modification is provided in the table below.

REQUESTED MODIFICATION TO RIWP	NYSDEC DECISION
Add 2 soil borings near TP-116	Approved
Add 2 soil borings near TP-151	Approved
Combine GW-6 and OVR-129	Disapproved. GW-6 and OVR-129 are further apart than indicated in OBG's request.
Delete GW-107 and GW-108	No decision at this time.
Combine SB-113 and OVR-123	Request withdrawn.
Remove grab sample GW-100	Approved
End boring SB-121 at a depth of 4 ft.	Approved
Combine SB-127 and OVR-108	Request withdrawn for now.
Combine SB-130 and OVR-101/BED1-101	Approved
Combine SB-148 and OVR-119	Approved
Combine SB-147 and OVR-104/BED1-104	Approved
Move OVR-105 to avoid utilities	Approved

Combine SB-149 and OVR-120	Approved, but a second soil sample will be collected from an interval other than the re-validation interval.
Combine OVR-115 and OVR-116	Disapproved.
Move OVR-115 to a location about halfway between OVR-114 and OVR-116	Approved
SB-155, SB-156 and OVR-126 to be revised as needed	A specific modification was not requested. No changes approved at this time.
Add a soil boring near TP-131 to collect soil sample that was not collected from TP-131	Approved
Advance soil borings using direct push equipment instead of augers	Approved on the condition that the direct push unit can advance soil borings to the top of bedrock.
Advance SB-112 with a hand auger	Approved
Install monitoring wells at SB-133, SB-135, and SB-176. Limit groundwater sampling at these locations to VOCs and SVOCs.	Approved on the condition that the VOC and SVOC analyses will also include Tentatively Identified Compounds.
Move OVR-103/BED1-103 50 ft. southwest	Approved

We look forward to working together to bring this site back into productive use. If you have questions or concerns on this matter, please contact me at 585-226-5357.

Sincerely,

Frank Sowers

Frank Sowers, P.E.
Environmental Engineer 2

ec:
Mark Gregor
Bernette Schilling
Bridget Boyd
Anthony DiNardo
Paul Sylvestri
John Frazer
Deborah Wright
Wade Silkworth

February 11, 2016

Mr. Frank Sowers
Environmental Engineer 2
NYSDEC
Division of Environmental Remediation
6274 East Avon-Lima Road
Avon, NY

RE: City of Rochester, Former Vacuum Oil Refinery, BCP Site No. C828190
Proposed Deviations to Soil Boring/Monitoring Well Field Program
FILE: 11862/61157

Frank:

Please see attached for a PDF map (presented as **Attachment 1**) with several comments depicted pertaining to soil borings, monitoring wells, and groundwater grab samples. Also attached is a hand sketch (presented as **Attachment 2**) depicting observations of fill, petroleum staining/odors, and black carbon material during the test pit excavations. This sketch is provided as some of these observations are used to justify a few of the deviations proposed below.

The following proposed deviations to the RI Work Plan are presented for the New York State Department of Environmental Conservation's (NYSDEC's) review and comment:

Sample Locations

- OBG Proposes to add two soil borings in the vicinity of TP-116 and two soil borings in the vicinity of TP-151 to further evaluate the extent of petroleum observed in these two test pits.
- OBG proposes to add one soil boring between TP-129 and SB-136 to further evaluate the presence and extent of material with a solvent-like odor that was observed in TP-129.
- GW-106, GW-107, and GW-108. GW-107 is grab sample is situated approximately 45 feet west from the proposed overburden groundwater monitoring well OVR-129. Proposed groundwater grab GW-108 is also located approximately 100 feet west of GW-107. GW-106 is situated approximately 15 feet north of the proposed monitoring well OVR-129. Test pits TP-100 and TP-101 located in this general area contained similar material and did not contain any obvious impacts. The proposed monitoring well OVR-129 is anticipated to accomplish the same objective as the grab samples for evaluating groundwater quality in this area of the Site. OBG proposes to remove GW-107 and GW-108 from the field program.
- SB-113. This proposed soil boring is in close proximity to monitoring well OVR-123 (approximately 28 feet apart). This proposed soil boring is one of the five locations to re-validate historic analytical data (to be sampled from 0-2 feet [ft] below ground surface [bgs]). Moving OVR-123 should not impact subsurface observation as TP-109 was excavated in that area. OBG proposes to combine SB-113 and OVR-123, keeping the monitoring well, but moving the location to SB-113.

- OVR-123. See SB-113 above.
- TP-111. As previously mentioned in OBG's January 27, 2016 email (and NYSDEC's approval email on January 28, 2016), the slope of this location is too steep for an excavator or other alternate piece of equipment such as a drill rig or power auger to access and would result in an unsafe condition. We propose to attempt a hand auger at this location in the spring to evaluate the shallow subsurface. It should be noted that reaching groundwater is beyond the capabilities of hand auger equipment. However, a grab groundwater sample, GW-102, is located downgradient of this location.
- GW-100. This proposed groundwater grab sample is situated along slope, and is too steep for a drill rig to access and would result in an unsafe condition. Based on the topography of this location (approximately 50 feet in elevation above the eastern portion of the Site), groundwater is not anticipated to be observed at a reasonable depth, and both GW-102 and OVR-123 located downgradient of this location will accomplish the objective of evaluating groundwater quality in this area as it is assumed from previous investigations that groundwater flows east toward the Genesee River. It is proposed to remove GW-100 from the field program.
- SB-121. This proposed soil boring is one of the five locations to re-validate historic analytical data (to be sampled from 2-4 ft bgs). Based on its proximity to the existing active Monroe County Pure Waters (MCPW) sewer, as a safety concern we propose to end the soil boring at 4 ft bgs.
- SB-127. This proposed soil boring is in close proximity to monitoring well OVR-108 (approximately 10 feet apart). OBG proposes to combine SB-127 and OVR-108 (the soil in this proposed monitoring well was to be sampled) by installing the well within SB-127 at the soil boring location. This proposed soil boring is one of the five locations to re-validate historic analytical data (to be collected from 10-12 ft bgs).
- OVR-108. See SB-127 above.
- SB-130. This proposed soil boring is in close proximity to monitoring well OVR-101/BED1-101 (approximately 8 feet apart). OBG proposes to combine SB-130 and OVR-101/BED1-101, keeping the monitoring well location.
- OVR-101/BED1-101. See SB-130 above.
- SB-148. This proposed soil boring is in close proximity to monitoring well OVR-119 (approximately 20 feet apart). OBG proposes to combine SB-148 and OVR-119, keeping the monitoring well location.
- OVR-119. See SB-148 above.
- SB-147. This proposed soil boring is in close proximity to monitoring well OVR-104/BED1-104 (approximately 15 feet apart). OBG proposes to combine SB-147 and OVR-104/BED1-104, keeping the soil boring location.
- OVR-104/BED1-104. See SB-147 above.
- OVR-105. OBG proposes to offset this monitoring well approximately 60 ft to the south to avoid Monroe County Water Authority (MCWA) blue paint markings on the nearby bike path. Based on a walk of the area with the geophysical survey personnel on January 11-12, 2016, this proposed monitoring well should be moved for safety purposes to avoid potential utilities in the area. Movement of this monitoring well should not alter the objective of evaluating groundwater migrating off-site near the northeastern corner of the Site. Furthermore, this movement will place the well in a more central location downgradient of the building at 5 Flint Street to identify whether constituents are migrating off-site from this parcel.
- TP-139. As previously mentioned in OBG's January 27, 2016 email (and NYSDEC's approval email on January 28, 2016), this test pit was proposed to be converted to a soil boring due to its proximity to the existing bike

path. Sample ID will be "SB-TP-139…." so that we identify that it was originally a TP location, but converted to a soil boring.

- SB-149. This proposed soil boring is in close proximity to monitoring well OVR-120 (approximately 20 feet apart). OBG proposes to combine SB-149 and OVR-120, with the well to be installed in SB-149 at the soil boring location. This proposed soil boring is one of the five locations to re-validate historic analytical data (to be sampled from 4-4.5 ft bgs).
- OVR-120. See SB-149 above.
- OVR-115. This proposed monitoring well is approximately 75 feet apart from proposed monitoring well OVR-116. Both of these are to be situated along the eastern property line near the Genesee River, and the soil at OVR-116 is one of the monitoring wells to have soil sampled during installation. OBG proposes to combine these two locations into a single point (at the approximate halfway point linearly between them). There are not historic operations in this area and a single point will provide representative groundwater quality information for this area and achieve the objective of evaluating groundwater quality on the eastern property line of the Site.
- OVR-116. See OVR-115 above.
- TP-144. As previously mentioned in OBG's January 27, 2016 email (and NYSDEC's approval email on January 28, 2016), this test pit was proposed to be converted to a soil boring due to its proximity to the existing bike path. Sample ID will be "SB-TP-144…." so that we identify that it was originally a TP location, but converted to a soil boring.
- TP-147, SB-155, SB-156, OVR-126. This area near the southern end of the Site is in the vicinity, and portions underneath, overhead powerlines. If the driller, OBG, or the City observe that working in this area poses a safety concern (OBG's safe working distance from lines is at least 20 ft), an alternate method of evaluating the subsurface and/or installing the overburden monitoring well will be proposed. As previously mentioned in OBG's January 27, 2016 email (and NYSDEC's approval email on January 28, 2016), TP-147 was proposed to be converted to a soil boring. Sample ID will be "SB-TP-147…." so that we identify that it was originally a TP location, but converted to a soil boring.
- TP-131/TP-132. As indicated on OBG's January 27, 2016 email, these two test pits were to be combined. NYSDEC's response on January 28, 2016 indicated this was approved provided we treated them as two locations and collected two samples. However, this location had been excavated prior to receipt of NYSDEC's response, and only one sample was collected. The materials observed in the general area in nearby test pits (TP-130, TP-132, and TP-133) were similar in composition and contained petroleum odors and staining. Therefore, samples collected for analysis from TP-130, TP-132 and TP-133 will provide representative characterization of the materials present.

Community Air Monitoring Program

Currently the Work Plan requires we have one upwind, one downwind, and one work zone station. During the most intrusive portion of the field program, test pit excavation, there were no exceedances of either particulates or VOCs noted. Per the NYSDEC and NYSDOH approved modification communicated to OBG via a February 9, 2016 email, the work zone will remain as-is, the upwind location will only be checked in the morning before start of work (or a shift in wind direction) (using the work zone or downwind station apparatus), and the downwind station can be modified to data log and provide audible alarm.

If you have any questions regarding the proposed deviations above, please give me a call at your convenience.

If there are additional proposed deviations to the field program, those deviations will be requested in a separate email at a later date.

Also – We are tentatively scheduled to begin the soil boring program on Tuesday February 16, 2016. Per our telephone conversation last week, we plan on beginning this first week with an ATV track Geoprobe rig rather than a hollow stem auger rig along the eastern/southern area of the Site where less fill may be encountered.

Very truly yours,
O'BRIEN & GERE ENGINEERS, INC.

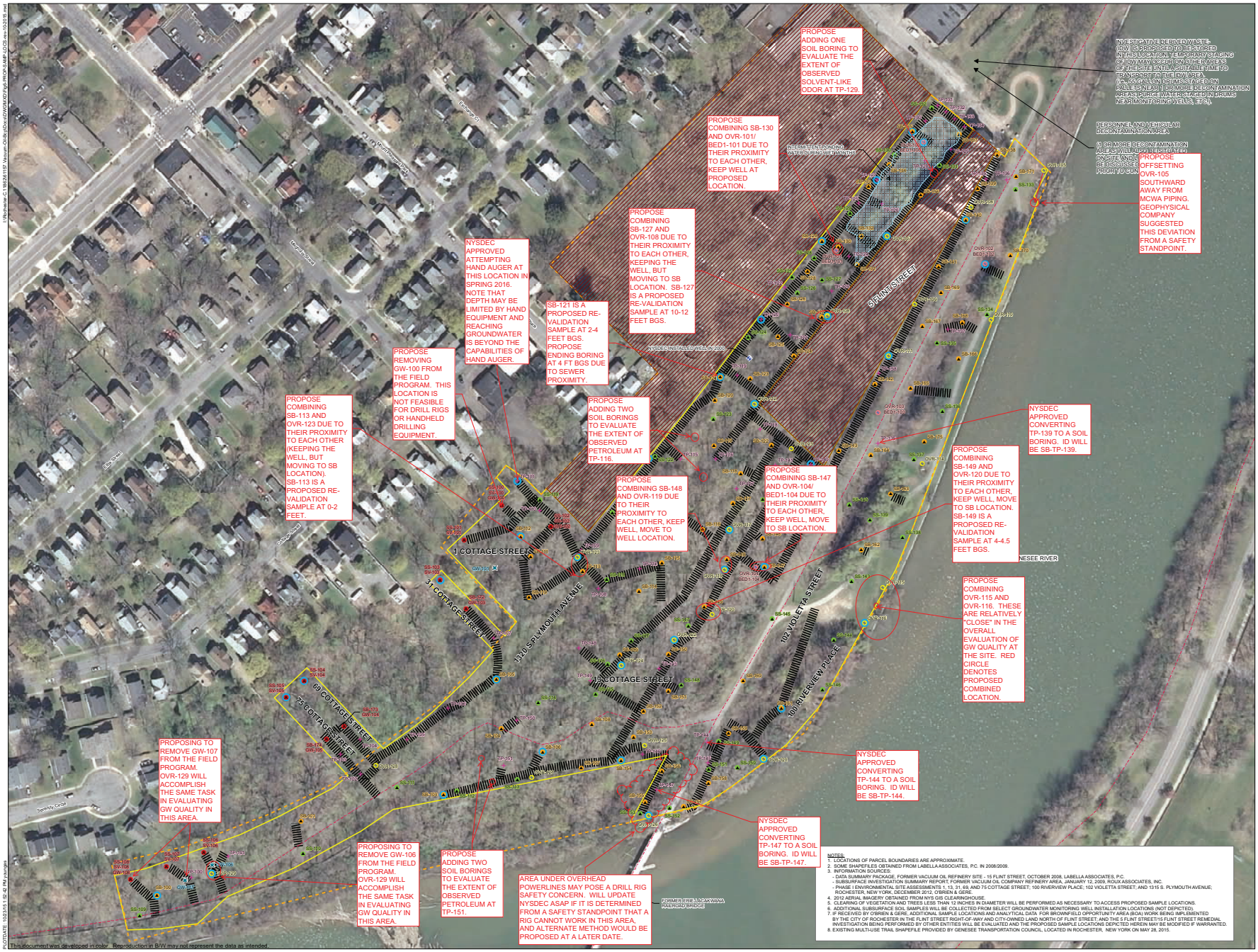
Anthony M. DiNardo

Anthony M. DiNardo, P.E.
Senior Project Engineer

Attachment 1 – Map Depicting Proposed Deviations to Soil Boring/Monitoring Well Field Program
Attachment 2 – Hand Sketch Depicting Test Pit Observations

cc: Joseph Biondolillo, City of Rochester
Deb Wright, CPG, OBG

I:\Rochester-C.11862\61157.Vacuum-Oil-Bcp\Corres\to_NYSDEC_2016\PROPOSED_Soil_Boring_Deviations.docx



ATTACHMENT 1

LEGEND

PROP_SAMP_LOCS-2015-rev10-...

- SB-100 / SS-100 / SV-100 / GW-100 — PROPOSED COMBINED SAMPLE LOCATION (SS, GW, SB AND/OR SV)
- GW-101 — PROPOSED GROUNDWATER SAMPLE LOCATION
- OVR-131/ BED1-105 — PROPOSED NESTED BEDROCK INTERFACE MONITORING WELL - 5
- OVR-106 — PROPOSED OVERBURDEN MONITORING WELL - 25
- SB-129 — PROPOSED SOIL BORING - 76
- SB-114 — PROPOSED SURFACE SOIL SAMPLE - 54
- TP-149 — PROPOSED TEST PIT - 52
- PROPOSED INITIAL SURVEY POINT (CITY LAND SURVEY DEPARTMENT)
- EXISTING MULTI-USE TRAILS
- BROWNFIELD CLEANUP PROGRAM SITE LIMITS (APPROXIMATELY 15.4 ACRES)
- FORMER VACUUM OIL REFINERY SITE (APPROXIMATE)
- PROPOSED PATHS/LANES TO BE CLEARED TO FACILITATE ADVANCEMENT OF SOIL BORINGS, EXCAVATION OF TEST PITS, AND INSTALLATION OF GROUNDWATER MONITORING WELLS (APPROXIMATELY 3 ACRES, 15' WIDE/ 15' TALL)
- NOT PART OF CITY OF ROCHESTER BROWNFIELD CLEANUP PROGRAM SITE; HOWEVER, THESE PARCELS ARE BEING INVESTIGATED BY OTHER ENTITIES.

CITY OF ROCHESTER
BROWNFIELD CLEANUP PROGRAM
REMEDIAL INVESTIGATION
WORK PLAN
PORTION OF FORMER VACUUM OIL REFINERY

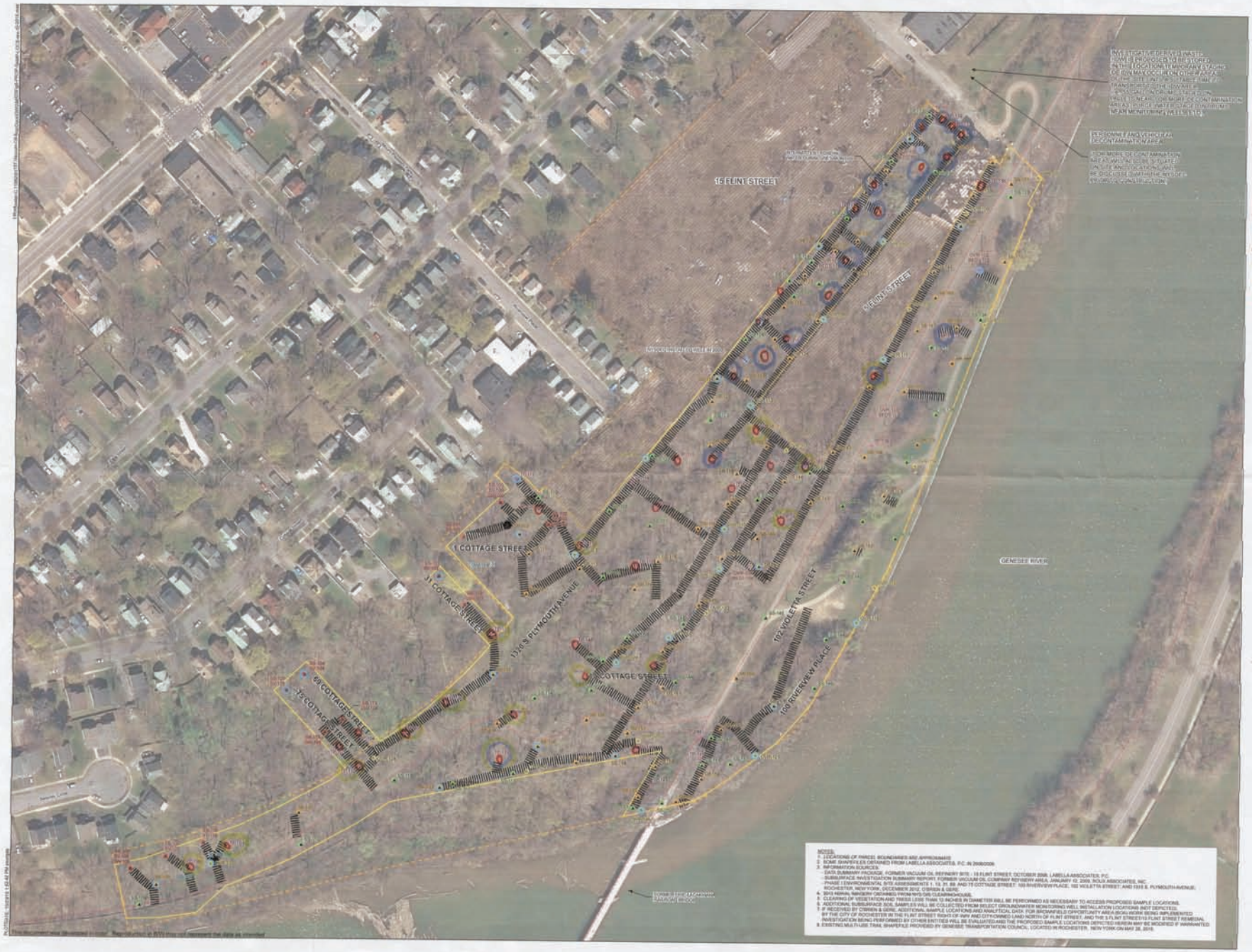
1, 13, 31, 69, AND 75 COTTAGE STREET;
100 RIVERVIEW PLACE;
102 VIOLETTA STREET; AND PORTION OF
1320 S. PLYMOUTH AVENUE
ROCHESTER, NEW YORK

MAP DEPICTING PROPOSED DEVIATIONS TO SOIL BORING/MONITORING WELL FIELD PROGRAM

OCTOBER 2015
11862.61157

O'BRIEN & GERE

ATTACHMENT 2



CITY OF ROCHESTER
BROWNFIELD CLEANUP PROGRAM
REMEDIAL INVESTIGATION
WORK PLAN
PORTION OF FORMER VACUUM OIL REFINERY

1, 13, 31, 69, AND 75 COTTAGE STREET;
100 RIVERVIEW PLACE;
102 VIOLETTA STREET; AND PORTION OF
1320 S. PLYMOUTH AVENUE
ROCHESTER, NEW YORK

HAND SKETCH DEPICTING TEST PIT OBSERVATIONS

0 37.5 75 150
Feet

OCTOBER 2015
11962.81157

O'BRIEN & GERE

February 24, 2016

Mr. Frank Sowers
Environmental Engineer 2
NYSDEC
Division of Environmental Remediation
6274 East Avon-Lima Road
Avon, NY

RE: City of Rochester, Former Vacuum Oil Refinery, BCP Site No. C828190
Response to February 17, 2016 Conference Call Regarding Proposed Deviations to Soil Boring/Monitoring Well Field Program

FILE: 11862/61157

Frank:

This response to the February 17, 2016 conference call between the City of Rochester (City), New York State Department of Environmental Conservation (NYSDEC), and O'Brien & Gere Engineers, Inc. (OBG) summarizes our understanding of the proposed deviations to the Soil Boring/Monitoring Well Field Program.

The following proposed deviations to the RI Work Plan were discussed and OBG's understanding is depicted in **Blue Font**.

Sample Locations

- OBG proposes to add two soil borings in the vicinity of TP-116 and two soil borings in the vicinity of TP-151 to further evaluate the extent of petroleum observed in these two test pits. **This proposed deviation was accepted.**
- OBG proposes to add one soil boring between TP-129 and SB-136 to further evaluate the presence and extent of material with a solvent-like odor that was observed in TP-129. **This proposed deviation was accepted.**
- GW-106, GW-107, and GW-108. GW-107 is grab sample is situated approximately 45 feet west from the proposed overburden groundwater monitoring well OVR-129. Proposed groundwater grab GW-108 is also located approximately 100 feet west of GW-107. GW-106 is situated approximately 15 feet north of the proposed monitoring well OVR-129. Test pits TP-100 and TP-101 located in this general area contained similar material and did not contain any obvious impacts. The proposed monitoring well OVR-129 is anticipated to accomplish the same objective as the grab samples for evaluating groundwater quality in this area of the Site. OBG proposes to remove GW-107 and GW-108 from the field program. **The removal of GW-106 was accepted, and the removal of GW-107/GW-108 will be revisited after the installation of OVR-129.**

- SB-113/OVR-123. This proposed soil boring is in close proximity to monitoring well OVR-123 (approximately 28 feet apart). This proposed soil boring is one of the five locations to re-validate historic analytical data (to be sampled from 0-2 feet [ft] below ground surface [bgs]). Moving OVR-123 should not impact subsurface observation as TP-109 was excavated in that area. OBG proposes to combine SB-113 and OVR-123, keeping the monitoring well, but moving the location to SB-113. **This proposed deviation was not accepted.**

- TP-111. As previously mentioned in OBG's January 27, 2016 email (and NYSDEC's approval email on January 28, 2016), the slope of this location is too steep for an excavator or other alternate piece of equipment such as a drill rig or power auger to access and would result in an unsafe condition. We propose to attempt a hand auger at this location in the spring to evaluate the shallow subsurface. It should be noted that reaching groundwater is beyond the capabilities of hand auger equipment. However, a grab groundwater sample, GW-102, is located downgradient of this location. **I do not believe we finished the conversation for this proposed location. Concerns regarding access for drilling equipment are the same as listed below for GW-100. As previously mentioned, a shallow hand auger could be attempted at TP-111 in the spring.**

- GW-100. This proposed groundwater grab sample is situated along slope, and is too steep for a drill rig to access and would result in an unsafe condition. Based on the topography of this location (approximately 50 feet in elevation above the eastern portion of the Site), groundwater is not anticipated to be observed at a reasonable depth, and both GW-102 and OVR-123 located downgradient of this location will accomplish the objective of evaluating groundwater quality in this area as it is assumed from previous investigations that groundwater flows east toward the Genesee River. It is proposed to remove GW-100 from the field program. **At the time of laying out the proposed sample locations, it was assumed that access to this location could be obtained from the western adjoining residential or commercial property along Magnolia Street. After the field program began, observations of the residential property indicated the homeowner had paved the right of way into a driveway/parking lot and fenced the area off, preventing access without inconveniencing the homeowner and/or tenant. The other potential access point through the commercial property was evaluated; however, this location would require extensive clearing to allow access for drilling equipment to enter the Site. The steep slope leading up to this proposed sample location from within the Site is not accessible by drilling equipment, and would result in an unsafe condition traversing the terrain. As such, it is proposed to remove GW-100 from the field program.**

- SB-121. This proposed soil boring is one of the five locations to re-validate historic analytical data (to be sampled from 2-4 ft bgs). Based on its proximity to the existing active Monroe County Pure Waters (MCPW) sewer, as a safety concern we propose to end the soil boring at 4 ft bgs. **This proposed deviation was not discussed during the conference call, but OBG assumes it is accepted based on safety concerns.**

- SB-127/OVR-108. This proposed soil boring is in close proximity to monitoring well OVR-108 (approximately 10 feet apart). OBG proposes to combine SB-127 and OVR-108 (the soil in this proposed monitoring well was to be sampled) by installing the well within SB-127 at the soil boring location. This proposed soil boring is one of the five locations to re-validate historic analytical data (to be collected from 10-12 ft bgs). **This proposed deviation was not accepted; however, the proposed combination of these locations may be revisited at a later date.**

- SB-130/OVR-101/BED1-101. This proposed soil boring is in close proximity to monitoring well OVR-101/BED1-101 (approximately 8 feet apart). OBG proposes to combine SB-130 and OVR-101/BED1-101, keeping the monitoring well location. **This proposed deviation was accepted. No soil samples were proposed for OVR-101/BED1-101 in the RI Work Plan, and only 1 soil sample is anticipated from this combined location.**

- SB-148/OVR-119. This proposed soil boring is in close proximity to monitoring well OVR-119 (approximately 20 feet apart). OBG proposes to combine SB-148 and OVR-119, keeping the monitoring well location. **This proposed deviation was accepted. No soil samples were proposed for OVR-119 in the RI Work Plan, and only 1 soil sample is anticipated from this combined location.**

- SB-147/OVR-104/BED1-104. This proposed soil boring is in close proximity to monitoring well OVR-104/BED1-104 (approximately 15 feet apart). OBG proposes to combine SB-147 and OVR-104/BED1-104, keeping the soil boring location. **This proposed deviation was accepted. No soil samples were proposed for OVR-104/BED1-104 in the RI Work Plan, and only 1 soil sample is anticipated from this combined location.**

- OVR-105. OBG proposes to offset this monitoring well approximately 60 ft to the south to avoid Monroe County Water Authority (MCWA) blue paint markings on the nearby bike path. Based on a walk of the area with the geophysical survey personnel on January 11-12, 2016, this proposed monitoring well should be moved for safety purposes to avoid potential utilities in the area. Movement of this monitoring well should not alter the objective of evaluating groundwater migrating off-site near the northeastern corner of the Site. Furthermore, this movement will place the well in a more central location downgradient of the building at 5 Flint Street to identify whether constituents are migrating off-site from this parcel. **This proposed deviation was accepted to offset the original proposed location a safe working distance from existing active utilities.**

- TP-139. As previously mentioned in OBG's January 27, 2016 email (and NYSDEC's approval email on January 28, 2016), this test pit was proposed to be converted to a soil boring due to its proximity to the existing bike path. Sample ID will be "SB-TP-139…." so that we identify that it was originally a TP location, but converted to a soil boring. **This proposed deviation was accepted.**

- SB-149/OVR-120. This proposed soil boring is in close proximity to monitoring well OVR-120 (approximately 20 feet apart). OBG proposes to combine SB-149 and OVR-120, with the well to be installed in SB-149 at the soil boring location. This proposed soil boring is one of the five locations to re-validate historic analytical data (to be sampled from 4-4.5 ft bgs). **This proposed deviation was accepted, and it was noted that a second soil sample will be collected from an interval other than the re-validation interval.**

- OVR-115/OVR-116. This proposed monitoring well is approximately 75 feet apart from proposed monitoring well OVR-116. Both of these are to be situated along the eastern property line near the Genesee River, and the soil at OVR-116 is one of the monitoring wells to have soil sampled during installation. OBG proposes to combine these two locations into a single point (at the approximate halfway point linearly between them). There are not historic operations in this area and a single point will provide representative groundwater quality information for this area and achieve the objective of evaluating groundwater quality on the eastern property line of the Site. **This proposed deviation was <u>not</u> accepted. Rather, OVR-115 is proposed to be installed centered between OVR-114 and OVR-116, and OVR-116 will be installed as originally proposed.**

- TP-144. As previously mentioned in OBG's January 27, 2016 email (and NYSDEC's approval email on January 28, 2016), this test pit was proposed to be converted to a soil boring due to its proximity to the existing bike path. Sample ID will be "SB-TP-144…." so that we identify that it was originally a TP location, but converted to a soil boring. **This proposed deviation was accepted.**

- TP-147, SB-155, SB-156, OVR-126. This area near the southern end of the Site is in the vicinity, and portions underneath, overhead powerlines. If the driller, OBG, or the City observe that working in this area poses a safety concern (OBG's safe working distance from lines is at least 20 ft), an alternate method of evaluating the subsurface and/or installing the overburden monitoring well will be proposed. As previously mentioned in OBG's January 27, 2016 email (and NYSDEC's approval email on January 28, 2016), TP-147 was proposed to be converted to a soil boring. Sample ID will be "SB-TP-147…." so that we identify that it was originally a TP location, but converted to a soil boring. **Other than the TP-147 approval, this area will be visited with the driller and further discussion with the NYSDEC will occur, as indicated during the conference call.**
- TP-131/TP-132. **A new soil boring will be advanced near the previously proposed TP-131.**

Community Air Monitoring Program

It is our understanding that the proposed deviation to the Community Air Monitoring Program (CAMP) was approved by the NYSDEC and the New York State Department of Health (NYSDOH). The revised CAMP will keep the work zone station as-is, the upwind location will only be checked in the morning before start of work (or a shift in wind direction) (using the work zone or downwind station apparatus), and the downwind station can be modified to data log and provide audible alarm.

Drilling

During the course of the soil boring program, and when a hollow stem auger drill rig is being utilized on Site, overburden monitoring wells will be installed during the soil boring advancement when it is efficient to do so and the drill rig is in the vicinity of a proposed monitoring well, to avoid unnecessary tracking around the Site later on.

General Statement Regarding the Combination of Proposed Sample Locations

Several soil borings and overburden monitoring wells are proposed to be combined into one location as summarized herein. During the initial layout of proposed sample locations during RI Work Plan preparation, each media was viewed separately when evaluating spatial coverage. During implementation of the test pit field program and planning for the subsequent soil boring/monitoring well field program, it was apparent that several proposed sample locations were in close proximity to each other, and as such, are proposed to be combined as stated above.

VOC Sampling Methods

OBG acknowledges the NYSDEC's email dated February 22, 2016 regarding VOC sampling methods and will provide response via email for that matter.

If you have any questions regarding our understanding of acceptance of the proposed deviations indicated above, please give me a call at your convenience.

If there are additional proposed deviations to the field program, those deviations will be requested in a separate email at a later date.

Also – We are tentatively scheduled to begin the soil boring program on Monday February 29, 2016. Per our telephone conversation last week, we plan on beginning this first week with an ATV track Geoprobe rig rather than a hollow stem auger rig along the eastern/southern area of the Site where less fill may be encountered.

Very truly yours,
O'BRIEN & GERE ENGINEERS, INC.

Anthony M. DiNardo, P.E.
Senior Project Engineer

cc: Bridget Boyd, New York State Department of Health
Joseph Biondolillo, City of Rochester
Deb Wright, CPG, OBG

I:\Rochester-C.11862\61157.Vacuum-Oil-Bcp\Corres\to_NYSDEC_2016\Response_to_Feb_17_2016_Conference_Call.docx

Sowers, Frank (DEC)

From: Anthony DiNardo <Anthony.DiNardo@obg.com>
Sent: Friday, March 11, 2016 1:21 PM
To: Sowers, Frank (DEC)
Subject: RE: Vacuum Oil Deviations Response
Attachments: Draft_modificationresponse_rev.docx

Hi Frank,

See attached for our response to your draft summary. Note, we have added a few additional items for your review. These additions are based on our review of the draft RI Report for the 5/15 Flint Street property. If you would like to discuss, I will be back in the office on Monday.

I am also in the process of preparing the Progress Report for FedEx so you should be receiving that Monday as intended.

Tony

Anthony M. DiNardo, P.E.
OBG | Senior Project Engineer
400 Andrews Street, Suite 710
Rochester, New York 14604
585-295-7707 | Anthony.DiNardo@obg.com
www.obg.com

Like Us | Connect with Us | Follow Us

From: Sowers, Frank (DEC) [mailto:frank.sowers@dec.ny.gov]
Sent: Thursday, March 03, 2016 3:43 PM
To: Anthony DiNardo <Anthony.DiNardo@obg.com>
Subject: RE: Vacuum Oil Deviations Response

Tony,

Attached is a draft table summarizing the Department's response to the requested RI Work Plan modifications. The table does not include modifications previously approved in my email of January 29, 2016.

Please let me know if this is consistent with your understanding and I will put text around it and make it final.

Frank Sowers, P.E.
Environmental Engineer 2, Division of Environmental Remediation

New York State Department of Environmental Conservation
6274 East Avon-Lima Rd, Avon, NY 14414
P: (585) 226-5357 | F: (585) 226-8139 | frank.sowers@dec.ny.gov

www.dec.ny.gov |

From: Sowers, Frank (DEC)
Sent: Wednesday, March 02, 2016 10:28 AM
To: 'Anthony DiNardo'
Subject: RE: Vacuum Oil Deviations Response

Thanks for the offer, but I think I think it will be easier for me to draft a response and send it to you to look at before sending a final signed version.

Frank Sowers, P.E.
Environmental Engineer 2, Division of Environmental Remediation

New York State Department of Environmental Conservation
6274 East Avon-Lima Rd, Avon, NY 14414
P: (585) 226-5357 | F: (585) 226-8139 | frank.sowers@dec.ny.gov

www.dec.ny.gov |

From: Anthony DiNardo [mailto:Anthony.DiNardo@obg.com]
Sent: Wednesday, March 02, 2016 10:18 AM
To: Sowers, Frank (DEC)
Subject: Vacuum Oil Deviations Response

Hi Frank,

Would you like me to revise my latest Deviation Understanding letter based on our conversation yesterday and send that back to you, before you respond to the one from the other day?

Tony

Anthony M. DiNardo, P.E.
OBG | Senior Project Engineer
400 Andrews Street, Suite 710
Rochester, New York 14604

585-295-7707 | Anthony.DiNardo@obg.com
www.obg.com

Like Us | Connect with Us | Follow Us

_____ This email, including any attachment(s) to it, is confidential and intended solely for the use of the individual or entity to which it is addressed. If you have received this email in error, please notify the sender. Note that any views or opinions presented in this email are solely those of the author and do not represent those of O'Brien & Gere. O'Brien & Gere does not accept liability for any damage caused by any virus transmitted by this email. The recipient should check this email and any attachments for the presence of viruses.
_____

Only new modifications identified below.

REQUESTED MODIFICATION TO RIWP	STATUS
Add 2 soil borings near TP-116	Approved
Add 2 soil borings near TP-151	Approved
Combine GW-6 and OVR-129	Disapproved. GW-6 and OVR-129 are further apart than indicated in OBG's request.
Delete GW-107 and GW-108	No decision at this time.
Combine SB-113 and OVR-123	Request withdrawn.
Remove grab sample GW-100	Approved
End boring SB-121 at a depth of 4 ft.	Approved
Combine SB-127 and OVR-108	Request withdrawn for now.
Combine SB-130 and OVR-101/BED1-101	Approved
Combine SB-148 and OVR-119	Approved
Combine SB-147 and OVR-104/BED1-104	Approved
Move OVR-105 to avoid utilities	Approved
Combine SB-149 and OVR-120	Approved, but a second soil sample will be collected from an interval other than the re-validation interval.
Combine OVR-115 and OVR-116	Disapproved.
Move OVR-115 to a location about halfway between OVR-114 and OVR-116	Approved
SB-155, SB-156 and OVR-126 to be revised as needed.	A specific modification was not requested. No changes approved at this time.
Add a soil boring near TP-131 to collect soil sample that was not collected from TP-131.	Approved
Advance soil borings using direct push equipment instead of augers.	Approved on the condition that the direct push unit can advance soil borings to the top of bedrock.

OBG and the City agree to the above understanding. Several other locations to be added to this deviation request include the following:

SB-112. The terrain has been viewed several times now that the snow has melted. A drill rig will not be able to safely reach this location. OBG proposes to hand auger. This location is here for a fuel oil AST observed during the Phase I ESA, and assume a hand auger and observing shallow soils will achieve our objective here as loss of material from this tank would have discharged to the surface.

SB-133, SB-135, and SB-176 (SB-176 is one of the new borings approved above along the 5 Flint Street boundary south of TP-129). OBG proposes to convert these three soil borings to overburden groundwater monitoring wells (and collect soil samples) based on our review of the draft Remedial Investigation (RI) Report for 5/15 Flint Street. Only VOCs and

SVOCs are proposed to be collected from these three overburden groundwater wells (IDs to be determined at time of installation).

OVR-103/BED1-103. Based on our review of the draft RI Report for 5/15 Flint Street, OBG proposes to offset this nested well south/southwest approximately 50 feet southwest for better distribution for evaluation of Site conditions and, in particular, what may be migrating from 5 Flint Street.

Surface Soil Sample Locations. We are currently evaluating the draft RI Report for 5/15 Flint Street with respect to surface soil contamination (lead and arsenic) and will propose a redistribution of surface soil sample locations at a later date.

From:	Anthony DiNardo
To:	Sowers, Frank (DEC)
Subject:	City of Rochester - Vacuum Oil Site - Use of Geoprobe
Date:	Friday, February 26, 2016 3:40:27 PM
Attachments:	image001.png

Frank,

Per our telephone discussion today regarding the use of Geoprobe, we anticipate using the track-mounted Geoprobe rig in as many areas as we can at the Site, provided that the rig can reach the depths necessary to investigate the Site (*i.e.,* bedrock). It is OBG's understanding that this is acceptable with the NYSDEC.

We currently are anticipating using the Geoprobe for the entire week of February 29 and will continue to use it the following week(s). For locations where overburden and bedrock wells are to be installed, an LC55 or similar hollow stem auger drill rig will be used.

The use of the Geoprobe will also help us limit the amount of soil cuttings to be backfilled (or drummed following DER-10 protocols).

Also, regarding your other voicemail today about the 1 inch temporary wells, we do anticipate installing those with a Geoprobe; however, those may be installed as a separate mobilization, closer to when we actually sample the soil vapor points.

Tony

Anthony M. DiNardo, P.E.
OBG | Senior Project Engineer
400 Andrews Street, Suite 710
Rochester, New York 14604
585-295-7707 | Anthony.DiNardo@obg.com
www.obg.com

Like Us | Connect with Us | Follow Us