REMEDIAL ENGINEERING, P.C.
ENVIRONMENTAL ENGINEERS

209 SHAFTER STREET
ISLANDIA, NEW YORK 11749
TEL: 631-232-2600
FAX: 631 232-9898

November 19, 2012

Chad Staniszewski, P.E.
Project Manager
NYSDEC, Region 9
270 Michigan Avenue
Buffalo, New York 14203-2915

Re: Work Plan for Investigation of the Northeast Portion of OU-3
Former Buffalo Terminal Site #C915201
ExxonMobil Oil Corporation

Dear Mr. Staniszewski:

On behalf of ExxonMobil Oil Corporation (ExxonMobil), enclosed please find the Work Plan for Investigation of the Northeast Portion of OU-3 dated November 19, 2012. The work described is scheduled to occur during the week of December 10, 2012.

Sincerely,

REMEDIAL ENGINEERING, P.C.

Noelle M. Clarke, P.E.
Principal Engineer

Attachment

cc: Joseph A. Abel, ExxonMobil

ENVIRONMENTAL CONSULTING & MANAGEMENT
ROUX ASSOCIATES INC
209 SHAFTER STREET
ISLANDIA, NEW YORK 11749 TEL 631-232-2600 FAX 631-232-9898

November 19, 2012

Mr. Joseph Abel
ExxonMobil Corporation
East Providence Terminal
1001 Wampanoag Trail
Riverside, Road Island 02915

Re: Work Plan for Investigation of the Northeast Portion of OU-3
Former Buffalo Terminal, ExxonMobil Oil Corporation

Dear Mr. Abel:

Roux Associates, Inc. (Roux Associates) has prepared the following Work Plan to conduct additional investigation in response to the New York State Department of Environmental Conservation (NYSDEC) comments on the Draft Alternative Analysis Report (AAR) for Operable Unit 3 (OU-3) dated May 27, 2009. A comment letter from the NYSDEC regarding the AAR for OU-3 was dated October 19, 2009. Our response to this letter was dated May 11, 2012.

The objective of this Work Plan is to characterize subsurface soils at the northeast portion of OU-3 that had not been included within the low permeability cap or slurry wall in the proposed remedy presented in the Draft AAR. The investigation data will be summarized in the Final AAR for OU-3 and, as applicable, used to adjust the extent of the low permeability cap or slurry wall.

Soil Boring Installation/Soil Sampling

Three soil borings (designated SB-OU3-13, SB-OU3-14, and SB-OU3-15) will be advanced in the locations shown on Figure 1.

In accordance with ExxonMobil ground disturbance protocols, each location will be cleared to a depth of five feet below land surface (bls) using an ExxonMobil approved method (i.e., hand auger, air knife, or vactron unit). The soil borings will be drilled using a Geoprobe direct push rig. Continuous macrocore sampling will be performed from five feet bls to approximately 10 feet below the water table. Soil samples will be field-screened for volatile organic compounds (VOCs) using a portable photoionization detector

(PID) and logged for lithology according to the Unified Soil Classification System (USCS).

It is anticipated that up to three soil samples will be collected for laboratory analysis from each of the three soil boring locations. The samples will be collected from:

- The top one foot of the boring;
- The interval with the highest PID reading and or visual/olfactory impacts observed above the water table. If no impacts are observed, the sample will be collected from the two feet interval immediately above the water table; and
- The interval with the highest PID reading and or visual/olfactory impacts observed below the water table. If no impacts are observed, this sample will not be collected.

The samples will be submitted for laboratory analysis for the full list of parameters presented in Table 6.8(b) of Title 6 of the New York Code of Rule and Regulations (6 NYCRR) Part 375 (Part 375) dated December 14, 2006:

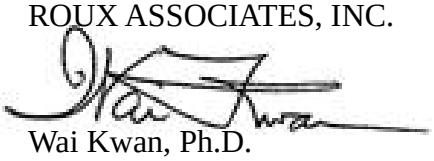
- Herbicides by United States Environmental Protection Agency (USEPA) method SW-846-8151A.
- Pesticides and polychlorinated biphenyls (PCBs) by USEPA methods SW-846-8081A/8082.
- Volatile organic compounds (VOCs) by USEPA method SW-846-8260.
- Semivolatile organic compounds (SVOCs) by USEPA method SW-846-8270.
- Arsenic, barium, beryllium, cadmium, copper, lead, manganese, nickel, selenium, silver, and zinc by USEPA method SW-846-6010B.
- Total mercury by USEPA method SW-846-7471.
- Cyanide by USEPA method SW-846-9012.
- Total chromium, hexavalent chromium, and trivalent chromium by USEPA method SW-846-7196A.

The soil boring locations and land surface elevations will be recorded with a global positioning system (GPS) unit. The work is scheduled to be conducted during the week of December 10, 2012.

If you have any questions, please do not hesitate to contact us.

Sincerely,

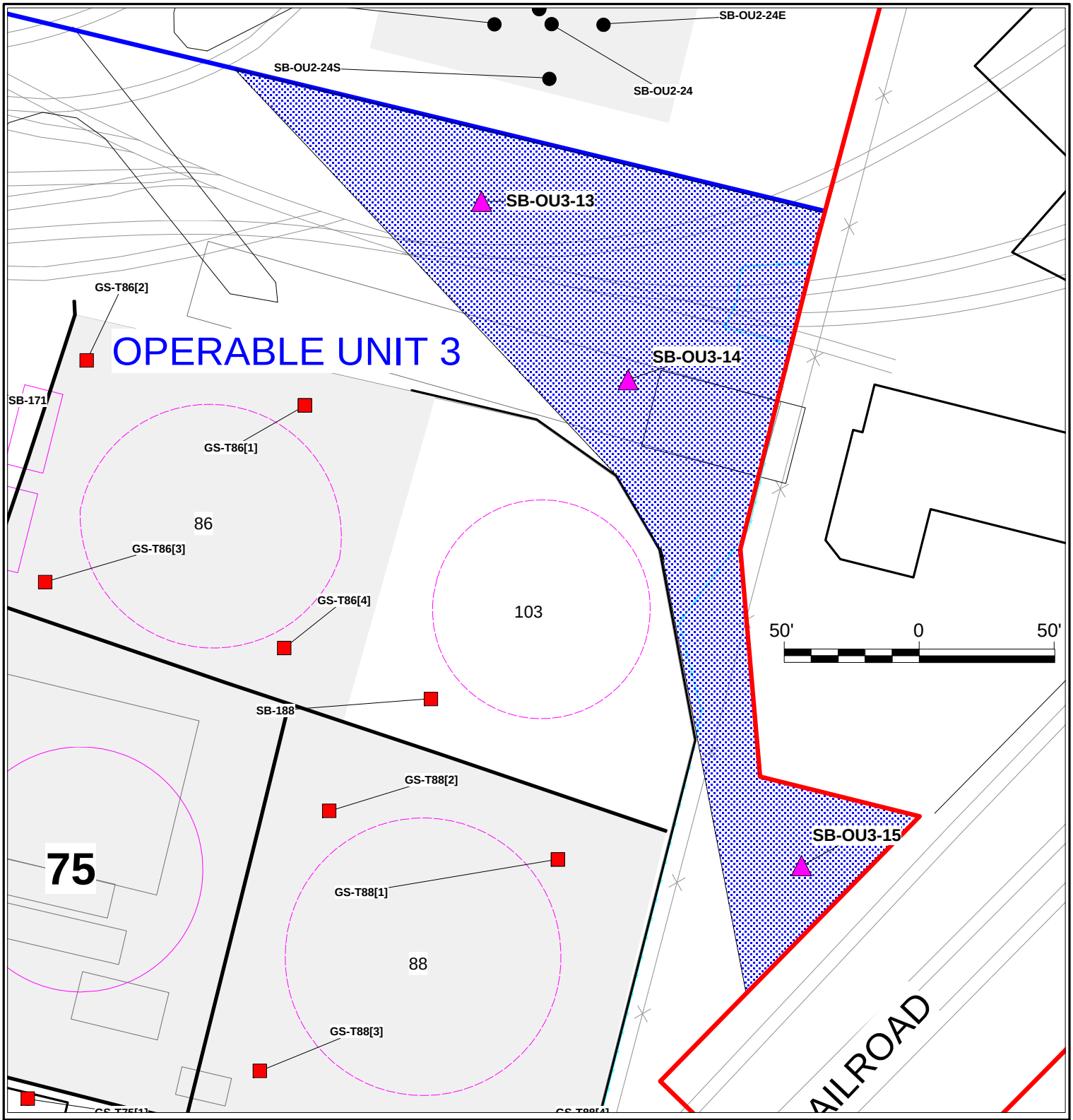
ROUX ASSOCIATES, INC.



Wai Kwan, Ph.D.
Senior Engineer

Noelle Clarke
Principal Engineer

Attachment



- EXISTING SOIL BORING IN OU-3
- EXISTING SOIL BORING IN OU-2
- PROPOSED SOIL BORING IN OU-3

AREA NOT DESIGNATED TO BE CAPPED OR INSIDE SLURRY WALL IN DRAFT ALTERNATIVES ANALYSIS REPORT (MAY 27, 2009)

N

Title:

PROPOSED SOIL BORING LOCATIONS IN AREA NOT DESIGNATED TO BE CAPPED OR INSIDE SLURRY WALL IN DRAFT AAR FOR OU-3

Former Buffalo Terminal, Buffalo, New York

Prepared For:

EXXONMOBIL OIL CORPORATION

ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: NC	Date: November 19, 2012	FIGURE
Prepared by: NC	Scale: AS SHOWN	1
Project Mgr: NC	Office: NY	
File No: 0172.0052Y44301.WOR	Project: 0172.0052Y015	