

LETTER OF TRANSMITTAL

RECIPIENT: Ms. Tara Blum

NYSDEC Region 7

Division of Environmental Remediation

615 Erie Blvd. West

Syracuse, New York 13204-2400

DATE: 3/27/2014

PROJECT: Carrier Corporation

Thompson Road Facility

Syracuse, New York

Corrective Action Order - Index No.

CO 7-20051118-4

Site Registry No.: 734043

TRANSMITTED VIA: ☐ U.S. MAIL ☒ FED EX ☐ UPS ☐ FAX ☐ HAND DELIVERED ☒ OTHER Email

WE ARE SENDING YOU:

DOC. NO.	DATE	NO. OF COPIES	DOCUMENT DESCRIPTION
1	3/27/14	1	Manhole (MH) 3 Oil Source Investigation Work Plan Addendum to the 2013 Parking Lot R Investigation

THESE ARE TRANSMITTED as checked below:

☒ For your record ☒ For review and comment ☒ For approval ☐ As requested
☐ Other _____

REMARKS:

DOCUMENTS WERE COPIED TO:

Mark Sergott

Krista Anders

FROM: May Heflin

SIGNED: May M. Heflin

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March 27, 2014

Submitted via e-mail on March 27, 2014

Tara M. Blum, PE
Environmental Engineer
NYSDEC Region 7
Division of Environmental Remediation
615 Erie Boulevard West
Syracuse, New York 13204-2400

Re: Carrier Corporation, Thompson Road Facility, Syracuse, New York
Corrective Action Order — Index CO 7-20051118-4
Manhole (MH) 3 Oil Source Investigation Work Plan Addendum to the 2013 Parking Lot
R Investigation, March 2014
NYSDEC Site Registry Number: 734043

Dear Ms. Blum:

In accordance with the referenced order, Carrier Corporation is providing one hard copy and one electronic copy (PDF via email) of the Manhole (MH) 3 Oil Source Investigation Work Plan Addendum to the 2013 Parking Lot R Investigation.

Please call me at (615) 255-9300 if you have any questions.

Sincerely,

EnSafe Inc.

By: May Mishu Heflin, PE

Enclosure: Manhole (MH) 3 Oil Source Investigation Work Plan Addendum to the 2013
Parking Lot R Investigation, March 2014

cc: Mr. Mark Sergott — NYSDOH
Ms. Krista Anders — NYSDOH
Mr. John Wolski — UTC
Mr. Joe Basile — Carrier Corporation
Ms. Kathleen McFadden — UTC

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**MANHOLE (MH) 3 OIL SOURCE INVESTIGATION
WORK PLAN
ADDENDUM TO THE
2013 PARKING LOT R INVESTIGATION**

**CARRIER THOMPSON ROAD FACILITY
CARRIER PARKWAY
SYRACUSE, NEW YORK**

**EnSafe Project Number
0888814333**

Revision: 0

**Corrective Action Order — Index CO 7-20051118-4
NYSDEC Site Registry No.: 734043**

Prepared for:



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March 2014

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1.0 INTRODUCTION

Carrier Corporation, a wholly owned subsidiary of United Technologies Corporation, has prepared this work plan for proposed supplemental subsurface investigation activities with regard to the *Parking Lot R Work Plan* submitted to the New York Department of Environmental Conservation Division of Remediation (NYSDEC-DER) on August 9, 2013 and approved in a conference call on October 8, 2013. In 2013, as part of routine operations and maintenance (O&M) activities associated with the Site's storm water treatment system, Carrier discovered an accumulation of oil in manhole PS-MH3, which is down stream of storm water lines beneath the western two-thirds of Parking Lot R (PLR).

- An oil sample was collected on June 26, 2013, and analyzed for polychlorinated bi-phenyls (PCBs) using U.S. EPA Method 8082; the oil sample yielded an Aroclor 1254 concentration of 230 micrograms per kilogram ($\mu\text{g}/\text{kg}$).
- An oil/water emulsion sample was also collected on June 26, 2013, and submitted for PCB analysis; however, no PCBs were detected. On January 8, 2014, the oil was sampled again with Aroclor 1254 detected at an estimated concentration of 2,600 $\mu\text{g}/\text{kg}$.

The source of the oil observed in manhole MH3 has not been identified. Figure 1 depicts the general Parking Lot R area in relation to the rest of the site. Figure 2 depicts MH3 and proposed soil borings, monitoring wells, and piezometers detailed in Section 2.0. Both figures are included in Appendix A.

2.0 INVESTIGATION STRATEGY

The objective for supplemental investigation activities is to determine the source of oil observed in manhole MH3. The proposed investigation sample locations (soil borings, monitoring wells, and piezometers) are depicted on Figure 2. The strategies for source determination are described below.

2.1 Storm Water Treatment Building Sub-Slab Investigation

Two (2) soil borings will be advanced using direct-push technology (or hand auger if the boring location is inaccessible via drilling rig) in the proximity of manhole MH3, which is located inside the southwest portion the Storm Water Treatment Building (SWTB). Placement of soil borings is constrained to accessible areas between equipment and/or tanks inside the building.

- One soil boring will be advanced in the tank pit floor along the west wall of the SWTB, which houses floc tanks associated with PCB treatment system. The estimated depth of the tank pit floor is approximately 7 feet below ground surface (bgs), and based on potentiometric data from proximal monitoring wells, the estimated depth to groundwater is 10.5 feet bgs.
- A second soil boring will be advanced through the floor of the SWTB, in the area northeast of manhole MH3 – close to the MH3 storm water influent pipe and MH3. The objective of this boring is to determine if there is a source of beneath the SWTB slab infiltrating the pipe.

Proposed locations are depicted on Figure 2 and Figure 3 — Record Drawing M-101 (Appendix A). These locations were chosen:

- because this area was historically used for oil filtration processes; and,
- because the area is proximal to manhole MH3. .

Hand augering is proposed as a backup advancement method to a direct-push rig due to limited accessibility and mobility within the SWTB. At each location, a minimum 2-inch diameter groundwater monitoring well will be installed.

2.2 Storm Water Treatment Building Perimeter Investigation — West and South Walls

A former transfer line, or “T-Line,” was located along the north wall of former Building TR-3 and west of the current SWTB (see inset below). The former T-Line was comprised of 58 machining stations each of which utilized a lubricant oil bath during operations. Located adjacent to the T-Line was a “large tank” (estimated at a capacity of 500-gallons) that supplied, filtered, and delivered oil to the machining