

IMMEDIATE RESPONSE ACTION STATUS REPORT

**20 KRASEMAN STREET
DARTMOUTH, MASSACHUSETTS 02748
RTN 4-27576**

Prepared for:

**ROCKWOOD PROPERTIES, LLC
286 UNION STREET
NEW BEDFORD, MA 02740**

Prepared by:

**OHI ENGINEERING, INC.
44 WOOD AVENUE
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OHI PROJECT # 19-1925

Report Date:

MARCH 15, 2019

March 15, 2019

MassDEP – BWSC
Attention Andrew Jones
20 Riverside Drive
Lakeville, MA 02347

Re: Immediate Response Action (IRA) Status Report
20 Kraseman Street
Dartmouth, MA 02748
RTN 4-27576

Dear Mr. Jones:

On behalf of Rockwood Properties LLC. (Rockwood), the property owner, OHI Engineering, Inc. (OHI) is forwarding the enclosed IRA Plan for detected concentrations of polychlorinated biphenyls (PCBs) that are present in surface soil and an Imminent Hazard (IH) tracked under Release Tracking Number (RTN) 4-27576 at the property known as 20 Kraseman Street, in Dartmouth, Massachusetts.

This document has been prepared as a voluntary measure by Rockwood to assist and support the efforts of the Massachusetts Department of Environmental Protection (MassDEP) and the Dartmouth Board of Health (BOH) with their investigations of fill material in the residential neighborhoods in the Site vicinity, known as Bliss Corner.

Sincerely,

OHI ENGINEERING, INC.



Brian G. Snow, P.G., LSP, LEP
Senior Project Manager



James R. Borrebach, P.E., L.S.P.
Principal

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1.0 SUMMARY

1.1 Purpose

In accordance with the requirements of 310 CMR 40.0425 of the Massachusetts Contingency Plan (MCP) Rockwood Properties, LLC (Rockwood) and OHI Engineering, Inc. (OHI) are submitting this Immediate Response Action (IRA) Status Report for detected concentrations of polychlorinated biphenyls (PCBs) that are present in surface soil and pose an Imminent Hazard (IH) tracked under Release Tracking Number (RTN) 4-27576 at the property known as 20 Kraseman Street, in Dartmouth, Massachusetts 02748 (the “Site”), see **Figure 1 – Site Locus**. The release is located at 41° 37’ 00.120” North and 70° 56’ 25.198” West or UTM coordinates 4609047 mN and 338126 mE.

At approximately 3:34 PM on December 3, 2018, the Massachusetts Department of Environmental Protection (MassDEP) was orally notified of a detection of PCBs in Site soil, which could pose an IH condition, and represented a 2-hour reporting condition. MassDEP issued Release Tracking Number (RTN) 4-27576. On January 18, 2019, OHI, on behalf of Rockwood, submitted an IRA Plan to meet MassDEP’s Interim Deadline for the submission of the IRA Plan. OHI has been in contact with MassDEP on several occasions by email and telephone to discuss ongoing response actions.

The Immediate Response Action Transmittal Form (BWSC-105) is being submitted concurrently with this report electronically via eDEP.

1.2 Reason for Immediate Response Action

The IRA is being conducted to address detected concentrations of PCBs, metals and Polycyclic Aromatic Hydrocarbons (PAHs) and Metals in Urban Ash Fill observed at the Site to depths of approximately 4.5 feet. This IRA Plan has been prepared to: (1) document activities performed to date; and, (2) describe additional IRA activities to be conducted.

1.3 Background

Based on discussions with representatives of Rockwood Properties, LLC (Rockwood) in late 2018, MassDEP and the Dartmouth Board of Health (BOH) were walking the neighborhood during a Site visit of another property in the vicinity. BOH and MassDEP were investigating fill material consistent with urban ash fill material including drums at 85 McCabe Street (RTN 4-27363) discovered during the demolition and earthwork for the replacement of a single-family residence. Rockwood is not, nor has ever been an owner or operator of the 85 McCabe property. MassDEP was concerned that the surrounding area may have once been used as a landfill. MassDEP observed urban ash fill materials on 20 Kraseman owned by Rockwood, and 21 Kraseman and 31 McCabe Street, owned by Mason Realty & Development, LLC (Mason). MassDEP informally requested that Rockwood and Mason test the observed fill materials. Rockwood and Mason contracted East Coast Engineering, Inc. (East Coast) to characterize the urban ash fill soil.

Based on available draft information compiled by East Coast soil samples were collected as follows:

20 Kraseman Street:

- Soil Sample S-1 (0-3 ft) 11/19/2018
 - Volatile Organic Compounds (VOCs)
 - Semi-Volatile Organic Compounds (SVOCs)
 - RCRA-8 Metals
 - Toxicity Characteristic Leaching Procedure (TCLP) lead
 - Polychlorinated biphenyls (PCBs)
- Soil Sample S-1 (3-4 ft) 11/19/2018
 - RCRA-8 Metals
- Soil Sample S-2 (0-3 ft) 11/19/2018
 - VOCs
 - SVOCs
 - RCRA-8 Metals
 - TCLP lead
 - PCBs
- Soil Sample Composite S1 (0-3 ft)/S2 (0-3 ft) 11/19/2018
 - PCBs
 - Total Petroleum Hydrocarbons (TPH)

Reported detections of PCBs are above MassDEP Reportable Concentrations. The detection of PCBs at concentrations greater than 10 milligrams per kilogram (mg/kg) within 12 inches of the surface may represent a two-hour reporting condition to MassDEP as a potential Imminent Hazard (IH). MassDEP was notified by East Coast on December 3, 2018. MassDEP imposed an interim deadline of January 18, 2019 for the receipt of an Immediate Response Action (IRA) Plan and requested the lot be fenced. The lot was fenced by the owner in December 2018. The sampling procedures used do not differentiate concentrations of contaminants in the top 12 inches and therefore samples collected from 0-3 feet were used by East Coast to trigger the reporting requirement. The Laboratory Reports were included in the IRA Plan and are summarized in **Table 1**.

Based on OHI's preliminary review of the data, the urban ash fill is characterized by metals concentrations consistent with published background values for Urban Ash Fill. The majority of detected metals concentrations suggest metals and polycyclic aromatic hydrocarbons (PAHs) are likely exempt from reporting as due to the presence of coal, coal ash and/or wood ash. Further evaluation of existing and new site data is necessary to determine the applicability of potential exemptions and local background conditions.

OHI visited the Site with Rockwood on January 10, 2019. Based on observations of surrounding properties and neighborhood, the geomorphology of the area suggests a former wetland area was historically filled to create the neighborhoods along and around McCabe and Kraseman Streets. West of the Site and west of Grant Street, Kraseman Street terminates and restarts several times

as one progresses west to Rockdale Heights and Buttonwood Brook to the west. At each of these breaks in the street, a wooded strip with characteristics of a wetland exists.

Fill material observed by OHI is typical of Urban Ash fill material. Ash, slag, brick, and glass bottles were observed in the fill material. According to Rockwood, the Urban Ash fill material extends to a depth of approximately 4.5 feet in the Site vicinity. Based on observations of surrounding properties, Urban Ash Fill material may extend throughout the surrounding area and properties.

During OHI's visit to the Site, 20 Kraseman was fenced. Based on discussions with Mr. Medeiros, MassDEP has inspected the fence and indicated it was sufficient to mitigate the potential IH condition.

OHI contacted Andrew Jones at MassDEP on January 14, 2019 for a summary of events that lead to the sampling and reporting. Mr. Jones indicated MassDEP was contacted by the BOH to review Site conditions at 85 McCabe (now RTN 4-27363) as a result of buried waste including drums discovered in the summer of 2018. BOH also noted uncovering several newspaper (Standard Times) articles from 1939 noting dumping in the McCabe Street area. Copies of these articles were included in the IRA Plan. MassDEP walked the surrounding neighborhoods and observed site preparation activities at the subject parcels. MassDEP requested sampling of soil at the subject parcels.

OHI conducted preliminary research of the Registry of Deeds Bristol South electronic records. Based on OHI's experience with other Sites in the New Bedford area, these records are useful to document the timeframe of subdivisions and developments in the area. Historic filling activities similar to these normally precede and/or coincide with subdivisions and/or development. Based on plans available from the Registry of Deeds, house lots were divided for 20 and 21 Kraseman Street and the Rockdale Avenue end of Kraseman were laid out in a Plan of Land, December 7, 1922. A Plan and Profile for Sewer McCabe Street from Rockdale Ave. Westerly 475', 1923 was also available. Additional plans show sidewalks added to McCabe Street in or around 1955. These maps suggest filling of the subject properties occurred before or in the period around the 1920s assuming (consistent with practices of the time) sidewalks were added when established houses were already present. A plan from August 8, 1955 shows residential structures on lots on Kraseman Street. The Laurel Park Plan House Lots from August 1909 shows lot layouts west of Grant Street. Copies of several of these maps were included in the IRA Plan. While not the focus of this assessment, similar development maps were viewed on line at the Registry of Deeds for the neighborhoods to the west.

1.4 Site Address

The Site address is:

20 Kraseman Street
Dartmouth, MA 02748

The Site location is illustrated on **Figure 1 – Site Locus Map**.

1.5 Contact Information

The entity conducting the IRA is:

Rockwood Properties , LLC
Mr. Kevin Medeiros, Managing Member
286 Union Street
New Bedford, MA 02740
(508) 294-3472

The Licensed Site Professional is:

Brian G. Snow, P.G., LSP, LEP
OHI Engineering, Inc.
44 Wood Avenue
Mansfield, MA 02048
(508) 339-3929

2.0 RELEASE DESCRIPTION & PROPERTY CHARACTERISTICS

2.1 Release Description

On December 3, 2018, soil sampling data collected by East Coast at the Site was received and reviewed. The detections of PCBs which may be in surface soil constituted a potential IH condition. Christine LeBlanc of East Coast, verbally notified the MassDEP of a potential IH condition at the Site. The nature of the PCBs at the Site appears to be related to Urban Ash Fill identified at the Site and surrounding neighborhoods.

PCBs identified as Aroclor 1254 was detected in soil sample S1 (0-3ft.) at 25.9 Milligrams per Kilogram (mg/kg), in soil sample S2 (0-3ft.) at 40.7 mg/kg. PAHs and lead were also detected in excess of their respective RCS-1 Reportable Concentrations. Given the nature of the Urban Ash Fill in the Site vicinity, these detections may be exempt from reporting and/or may represent regional background concentrations.

2.2 Property Characteristics

2.2.1 Property Description

Parcel identification from the City of Dartmouth Assessor was not immediately identifiable for the property and data is not current. The lot is currently owned by Rockwood.

The Site property consists of approximately 8,300 square feet in one parcel located in a predominantly residential area of Dartmouth and is surrounded by residential properties. The Site is located on the South side of Kraseman Street. The Property is zoned as GR (residential) in Dartmouth, Massachusetts. A USGS topographical site locus is provided as **Figure 1**. A Site Plan is include as **Figure 2**. A MassDEP Phase I Site Assessment Map is provided as **Figure 3**.

2.2.2 Current Uses of the Property

The construction of a single-family home is nearing completion. The Site is currently not occupied and is surrounded by fencing.

2.2.3 Owners and Occupants of the Property

The property is currently owned by the Rockwood. The property was purchased on January 10, 2018 from Robert A. Ramos. The property was reconstructed with a new single family residence by Rockwood in 2018. With the exception of the construction crews for the new residence, the property has been vacant in 2018 to present. Construction activities have ceased at the property and it is currently unoccupied. Rockwood had no ownership interest in nor operated at the parcel prior to 2018, and did not cause or contribute to the detected release in historical urban ash fill at the Site. Rockwood is an Eligible Person as outlined in MGL 21E.

2.2.4 *Current Status of Property Vicinity*

Properties in the immediate vicinity of the Site were visually examined from curbside and are all residential. The Site is surrounded as follows:

North – Kraseman Street and residential properties. Urban Ash Fill was observed in surface soil at in the Right of Way of Kraseman Street adjacent to the Site and at 23 Kraseman Street across the Street from the Site.

South – Urban Ash fill was observed at 21 and 31 McCabe Street properties. Urban Ash Fill was observed in the gardens of other residential properties on McCabe Street south of the Site. Based on conversations with MassDEP, private drinking water wells are located southwest of the Site on East Wordell Street. According to telephone conversations with MassDEP on January 23, 2019, water supply wells are located at #12, #17, # 21 and #144 East Wordell Street. MassDEP sampled groundwater from water supply wells along East Wordell Street and no contaminants were identified. These wells are approximately 500 feet or more from the Site. The exact location of these wells or which properties were sampled were not disclosed by MassDEP.

East – Single-family residences along Kraseman Street and Rockdale Avenue further east.

West – Single-family residences. Residential properties continue to the west and Grant Street beyond.

2.2.5 *Soil and Groundwater Categories*

2.2.5.1 Soil Categories

Currently the Site is under construction and fenced. Residential lots abut the Site and residential use is expected to return. Soil within three feet of the surface at the Site meets the criteria established for Soil Category S-1 as outlined in 310 CMR 40.0933 and as shown on Table 40.0933(9). RCS-1 applies to the Site.

2.2.5.2 Groundwater Categories

Groundwater is encountered in shallow excavations at the Site and is anticipated to be less than five feet from surface grade. GW-2 applies to the Site. Groundwater at the Property meets the criteria for categorization as GW-3. There are no private wells at the Site. GW-1 may apply to the Site. According to telephone conversations with MassDEP on January 23, 2019, water supply wells are located at #12, #17, # 21 and #144 East Wordell Street. The closest of these to the Site is #12 Wordell Street. This property is approximately 500 feet from the Site. MassDEP sampled groundwater from several of these drinking water wells and did not identify any contaminants. According to the DEP GIS map, drinking water supply wells are not located in the vicinity.

3.0 STATUS OF IMMEDIATE RESPONSE ACTIONS

An assessment only IRA Plan was initiated in December 2019 by East Coast. The data is discussed above. Rockwood fenced the property in December 2018. MassDEP inspected the fencing and accepted the fencing as a means for restricting access to the Site with respect to the potential IH condition. OHI also inspected the fence on January 10, 2019 and it remains in good condition. According to telephone conversations with MassDEP on March 8, 2019, the orange construction fence was in place during their visit the previous week. Rockwood is adding polyethylene sheeting to the stockpiled soil and is in the process of upgrading the fencing.

On February 5, 2019, OHI completed a series of shallow test pits at the Site to characterize the soil and fill material at the Site to depths of approximately five feet. Soil samples were collected from surface grade to one foot in depth in each test pit. Soil samples were also collected at various other depths ranging from two to four feet to characterize soil at depth. Soil samples were collected for analysis of PCBs by EPA Method 8082. Select soil samples were collected for analysis of RCRA-8 Metals, total lead, and or Extractable Petroleum Hydrocarbons (EPH).

The test pits and soil sampling locations are shown in **Figures 2**. Test Pit logs are shown in **Appendix A** and select photographs are shown in **Appendix B**. OHI conducted internet research of bottles identified during testing. Select Photographs of the bottles are included in **Appendix C**. Approximate dates on bottle production/use are shown in **Appendix C**. Laboratory results are summarized in **Table 1** and Laboratory Reports are included as **Appendix D**. Microscopy laboratory reports are included in **Appendix E**.

Four test pits (TP-12 through TP-15) were advanced at 20 Krasemen Street. The test pits were characterized by various amounts of urban ash fill material. Two soil samples (20-S-1 and 20-S-2) in the vicinity of soil samples collected by East Coast to determine concentrations in soil at depths to one foot. Groundwater was encountered at a depth of approximately four feet. Based on saturated soil from the bottom of the test pits, fill material ends at depths of approximately four to five feet.

Concentrations of PCBs identified as Aroclor 1254 were detected in soil samples from 0-1 foot at concentrations of 0.361 mg/kg to 960 mg/kg. Concentrations of PCBs in the samples collected at depths of 2-4 feet identified concentrations of PCBs below 1 mg/kg. Based on the sampling conducted to date, PCB impacts above RCS-1 and Method 1 S-1 Standards were detected in surface soil and are not detected at depth.

Based on the detection of PCBs in surface soil at the Site (up to 960 mg/kg) the soil is defined as PCB remediation waste by 40 CFR 761.3. These detections fall under the jurisdiction of the United States Environmental Protection Agency (EPA) under the Toxic Substance Control Act (TSCA). The remediation of this material will require notification/approvals from EPA as well as MassDEP under the MCP.

Lead was identified at concentrations up to 566 mg/kg, below MassDEP's published background

levels of lead in urban ash fill material. Based on sample from East Coast, the lead does not classify the soil as hazardous waste (for lead) as the Toxicity Characteristic Leaching Procedure (TCLP) was below 5 mg/L. Elevated concentrations of other metals were not detected. Extractable Petroleum Hydrocarbons (EPH) was not detected in excess of RCS-1 Standards.

Investigation proposed in the IRA Plan has been completed. As a result of the PCB impacts in surface soil, the property is to be remediated under the MCP and/or TSCA. The estimated cost of reporting, sampling, removing and disposing of surface soil (0-1 foot) impacted with PCBs in accordance with TSCA at the Site is expected to reach or exceed \$150,000. Rockwood does not have the financial resources to remediate this parcel. Rockwood is submitting a Notice of Financial Inability in accordance with 310 CMR 40.0172. Actions in the immediate future will be limited to maintaining the stockpile covering and the fence.

Fill material is prevalent throughout the Bliss Corner area, which was deposited well before Rockwood took ownership of 20 Kraseman Street. Rockwood cooperated with an informal request from MassDEP to sample urban ash fill observed on the property. Rockwood did not cause or contribute to the release, is an Eligible Person, and is not responsible for fill material or contaminants outside the property boundary. Rockwood has also been in regular contact with MassDEP and is voluntarily providing this Status Report with current data well before the required reporting deadline in order to assist MassDEP and BOH with their investigation.

MassDEP is working with BOH to develop a neighborhood sampling program. According to MassDEP, a public meeting with MassDEP and BOH is scheduled for Thursday March 1, 2019 at 6:00 PM at Dartmouth High School to discuss MassDEP and BOH's preliminary investigations in the neighborhood. Data from MassDEP's pending investigations will be reviewed to determine appropriate next actions at the Site.

4.0 EVALUATION OF POTENTIAL SRM/CEP/IH CONDITIONS

Based on the detected concentrations of PCBs, an IH condition exists at the Site in the absence of fencing. The Site has been fenced with construction fencing and the soil stockpile has been covered with polyethylene sheeting. In accordance with 310 CMR 40.0321 (2)(b), the IH has been mitigated with the fence. Rockwood is in the process of upgrading the orange construction fencing on the north (Kraseman Street) and west (adjacent to 21 Kraseman Street) property lines. Fencing is already in place by abutters on the south and east property borders. VOCs were not detected and the nature of Urban Ash Fill at the site suggest migration and/or groundwater impacts are not anticipated. Therefore, by definition under the MCP, a condition of SRM does not exist at the Site.

According to telephone conversations with MassDEP on January 23, 2019, water supply wells are located at #12, #17, # 21 and #144 East Wordell Street. MassDEP sampled groundwater from several of these drinking water wells and did not identify any contaminants. The well locations were not released publicly. Ingestion, dermal absorption, or inhalation from drinking water do not appear to be potential CEPs at this time.

5.0 REMEDIAL WASTE

No remedial waste has been generated at the Site to date. A soil stockpile exists at the Site from the foundation excavation prior to knowledge of any release.

6.0 ENVIRONMENTAL MONITORING PLAN, REQUIRED PERMITS & NOTICES

No other permits or notices are required.