



**VIA ELECTRONIC MAIL**

September 17, 2021

New York State Department of Environmental Conservation  
Division of Environmental Remediation, Region 7  
615 Erie Boulevard West  
Syracuse, New York 13204-2400  
Attn: Karen A. Cahill, Project Manager

**Subject: Former Emerson Power Transmission (EPT), Ithaca, NY Site No. 755010  
Quarterly Free Product Surveillance Report No. 027 – First and Second Quarter 2021  
620 South Aurora Street, Ithaca, New York**

Dear Karen:

On behalf of Emerson, WSP USA Inc. is submitting Quarterly Free Product Surveillance Report No. 027 for the former Emerson Power Transmission site located in Ithaca, New York. This report summarizes the semi-annual free product monitoring and recovery activities for the first and second quarter (January through June) of 2021 at groundwater wells that have free product present in them which include MW-8B, HISTWELL-1, MW-50-160D (replacement of HISTWELL-1), LBA-MW-35, and LBA-MW-39, as shown on enclosed Figure 1. The use of absorbent socks continuously collected free product throughout the quarter, and are replaced quarterly. Due to the deteriorated and unknown conditions of HISTWELL-1 and the presence of Non-Aqueous Phase Liquid (NAPL), the NYSDEC requested that the well be abandoned and replaced with a new well to monitor the presence of NAPL and chlorinated volatile organic compounds in the deep bedrock D-zone. On the week of June 14, 2021 the HISTWELL-1 was abandoned and replaced with a 160 ft. bgs. open bedrock D-zone borehole, designated MW-50-160D, adjacent to the former HISTWELL-1. MW-50-160D quarterly free product monitoring began in June 2021.

## **SUMMARY OF RELEVANT FINDINGS**

Quarterly groundwater elevation and light-phase free product monitoring and recovery were conducted on March 22, and June 21, 2021. Free product recovery is conducted using free product absorbent socks at each location and bailers, where appropriate. Following the retrieval of the free product absorbent socks, a new free product absorbent sock is deployed at each location to collect the free product.

## **MW-8B FREE PRODUCT MONITORING & RECOVERY**

No free product was detected during the March and June, 2021 event. In total, 1.12 gallons of the free product was recovered during this reporting period; a total of 17.52 gallons of the free product have been removed since recovery was initiated in August 2016 (Table 1).

WSP USA  
Suite 300  
2202 North West Shore Boulevard  
Tampa, FL 33607

Tel.: +1 813 520-4444  
Fax: +1 813 520-4290  
wsp.com



## **HISTWELL-1 FREE PRODUCT MONITORING & RECOVERY**

No free product was detected during the March, 2021 event. In total, 0.23 gallons of the free product was recovered during this reporting period; a total of 20.43 gallons of the free product have been removed since recovery was initiated in January 2016 (Table 2).

HISTWELL-1 was abandoned in June 2021 and replaced with the open bedrock monitoring well MW-50-160D. Subsequent reports will not include HISTWELL-1.

## **LBA-MW-35 FREE PRODUCT MONITORING & RECOVERY**

Free product was detected in LBA-MW-35 with an apparent thickness of 0.06-feet (March; Table 3). No free product was detected during the June event. In total, 1.49 gallons of the free product was recovered during this reporting period; a total of 10.73 gallons of the free product have been removed since recovery was initiated in October 2018 (Table 3).

## **LBA-MW-39 FREE PRODUCT MONITORING & RECOVERY**

Free product was detected in LBA-MW-39 with an apparent thickness of 0.05-feet (March; Table 4). No free product was detected during the June event. In total, 1.02 gallons of the free product was recovered during this reporting period; a total of 5.09 gallons of the free product have been removed since recovery was initiated in October 2018 (Table 4).

## **MW-50-160D FREE PRODUCT MONITORING & RECOVERY**

Free product measuring was initiated on June 21, 2021 (Table 5), no free product was detected during the June 2021 monitoring. No free product was recovered during this reporting period.

Subsequent quarterly reports will continue to provide updates on the free product monitoring and recovery at groundwater wells that have free product present. As requested by the New York State Department of Environmental Conservation, free product measurements will also be reported in the semi-annual Progress Reports.

Please do not hesitate to contact me at (724) 882-9723 with any questions or concerns.

Sincerely yours,

Jeffrey Baker  
Lead Consultant

Scott Hartz  
Vice President and Practice Lead

NTW: JRB

\\USHRN1SER01\es\Clients\Emerson\ITHACA\Product Surveillance and Recovery\2021 NYSDEC\Q1 and Q2  
Enclosures

cc/encl.: Steven Karpinski, NYSDOH  
Steve Clarke, Emerson

FIGURE



TABLES

**Table 1**

**Product Monitoring and Removal Summary - MW-8B**  
**Former Emerson Power Transmission Facility**  
**Ithaca, New York**  
**First and Second Quarter 2021 (a)**

<b>Well Identification:</b>		<b>MW-8B</b>										
<b>Casing Diameter (inches):</b>		<b>4.00</b>										
<b>Top of Casing (ft asml) (b):</b>		<b>586.08</b>										
<b>Total Depth (feet):</b>		<b>21.30</b>										
<b>Date (e)</b>	<b>Depth to Product (ft btoc)</b>	<b>Depth to Water (ft btoc, b)</b>		<b>Apparent Product Thickness (feet)</b>	<b>Apparent Product Volume (gallons)</b>	<b>Groundwater Elevation (ft asml)</b>	<b>Product Removal (gallons)</b>				<b>Water Removed (gallons)</b>	
		<b>Measured</b>	<b>Corrected</b>				<b>Bailer</b>	<b>Absorbent Sock</b>	<b>Total Quarterly</b>	<b>Total Cumulative</b>	<b>Total Quarterly</b>	<b>Total Water Bailed</b>
Previous to First and Second Quarter 2021	-	-	-	-	-	-	-	-	-	15.79	-	1.56
March 22, 2021	NM	9.79	9.79	-	-	576.85	0.00	0.63	0.63	17.03	0.06	1.69
June 21, 2021	NM	9.32	9.32	-	-	577.32	0.00	0.48	0.48	17.52	0.05	1.73

- a/ Abbreviations: NM = no measureable product; "-" = not applicable; "--" = measurement not taken; ft btoc = feet below top of casing; asml = above mean sea level; ft asml = feet asml; LNAPL = light non-aqueous phase liquid.
- b/ All depth to water measurements were corrected to account for the depression caused by the weight of the light phase free product. For correction of the depth to water, the free phase product specific gravity of 0.90 was used.
- e/ Measurements were collected monthly until September 2020 and after September 2020 measurements were collected quarterly. Free product was continuously collected using sorbent socks.

Table 2

**Product Monitoring and Removal Summary - HISTWELL-1**  
**Former Emerson Power Transmission Facility**  
**Ithaca, New York**  
**First and Second Quarter 2021 (a)(e)**

<b>Well Identification:</b>		<b>HISTWELL-1</b>										
<b>Casing Diameter (inches):</b>		<b>2.00</b>										
<b>Top of Casing (ft asml) (b):</b>		<b>586.08</b>										
<b>Total Depth (feet):</b>		<b>138.30</b>										
<b>Date (d)</b>	<b>Depth to Product (ft btoc)</b>	<b>Depth to Water (ft btoc, c)</b>		<b>Apparent Product Thickness (feet)</b>	<b>Apparent Product Volume (gallons)</b>	<b>Groundwater Elevation (ft amsl)</b>	<b>Product Removal (gallons)</b>				<b>Water Removed (gallons)</b>	
		<b>Measured</b>	<b>Corrected</b>				<b>Bailer</b>	<b>Absorbent Sock</b>	<b>Total Quarterly</b>	<b>Total Cumulative</b>	<b>Total Quarterly</b>	<b>Total Water Bailed</b>
Previous to First and Second Quarter 2021	-	-	-	-	-	-	-	-	-	20.17	-	289.30
March 22, 2021	NM	119.41	119.41	-	-	466.67	0.00	0.23	0.23	20.43	0.00	289.30

- a/ Abbreviations: NM = no measureable product; "-" = not applicable; "--" = measurement not taken; ft btoc = feet below top of casing; amsl = above mean sea level; ft amsl = feet amsl; LNAPL = light non-aqueous phase liquid.
- b/ Elevation of 8-inch steel outer casing; polyvinyl chloride casing not surveyed.
- c/ All depth to water measurements were corrected to account for the depression caused by the weight of the light phase free product. For correction of the depth to water, the free phase product specific gravity of 0.90 was used.
- d/ Measurements were collected monthly until September 2020 and after September 2020 measurements were collected quarterly. Free product was continuously collected using sorbent socks.

**Table 3**

**Product Monitoring and Removal Summary - LBA-MW-35**  
**Former Emerson Power Transmission Facility**  
**Ithaca, New York**  
**First and Second Quarter 2021 (a)**

<b>Well Identification:</b>		<b>LBA-MW-35</b>										
<b>Casing Diameter (inches):</b>		<b>2.00</b>										
<b>Top of Casing (ft asml):</b>		<b>612.59</b>										
<b>Total Depth (feet):</b>		<b>32.00</b>										
<b>Date (c)</b>	<b>Depth to Product (ft btoc)</b>	<b>Depth to Water (ft btoc, b)</b>		<b>Apparent Product Thickness (feet)</b>	<b>Apparent Product Volume (gallons)</b>	<b>Groundwater Elevation (ft amsl)</b>	<b>Product Removal (gallons)</b>				<b>Water Removed (gallons)</b>	
		<b>Measured</b>	<b>Corrected</b>				<b>Bailer</b>	<b>Absorbent Sock</b>	<b>Total Quarterly</b>	<b>Total Cumulative</b>	<b>Total Quarterly</b>	<b>Total Water Bailed</b>
Previous to First and Second Quarter 2021	-	-	-	-	-	-	-	-	-	9.24	-	0.00
March 22, 2021	4.60	4.66	4.61	0.06	0.01	607.98	0.00	0.74	0.74	9.99	0.00	0.00
June 21, 2021	NM	4.59	4.59	-	-	608.00	0.00	0.74	0.74	10.73	0.00	0.00

- a/ Abbreviations: NM = no measureable product; "-" = not applicable; "--" = measurement not taken; ft btoc = feet below top of casing; amsl = above mean sea level; ft amsl = feet amsl; LNAPL = light non-aqueous phase liquid.
- b/ All depth to water measurements were corrected to account for the depression caused by the weight of the light phase free product. For correction of the depth to water, the free phase product specific gravity of 0.90 was used.
- c/ Measurements were collected monthly until September 2020 and after September 2020 measurements were collected quarterly. Free product was continuously collected using sorbent socks.



Table 4

**Product Monitoring and Removal Summary - LBA-MW-39**  
**Former Emerson Power Transmission Facility**  
**Ithaca, New York**  
**First and Second Quarter 2021 (a)**

<b>Well Identification:</b>	<b>LBA-MW-39</b>											
<b>Casing Diameter (inches):</b>	<b>2.00</b>											
<b>Top of Casing (ft asml) (b):</b>	<b>583.06</b>											
<b>Total Depth (feet):</b>	<b>25.50</b>											
Date (c)	Depth to Product (ft btoc)	Depth to Water (ft btoc, b)		Apparent Product Thickness (feet)	Apparent Product Volume (gallons)	Groundwater Elevation (ft asml)	Product Removal (gallons)				Water Removed (gallons)	
		Measured	Corrected				Bailer	Absorbent Sock	Total Quarterly	Total Cumulative	Total Quarterly	Total Water Bailed
Previous to First and Second Quarter 2021	-	-	-	-	-	-	-	-	-	4.07	-	0.00
March 22, 2021	19.06	19.11	19.07	0.05	0.01	564.00	0.00	0.64	0.64	4.71	0.00	0.00
June 21, 2021	NM	18.96	18.96	-	-	564.10	0.00	0.38	0.38	5.09	0.00	0.00

- a/ Abbreviations: NM = no measureable product; "-" = not applicable; "--" = measurement not taken; ft btoc = feet below top of casing; asml = above mean sea level; ft asml = feet asml; LNAPL = light non-aqueous phase liquid.
- b/ All depth to water measurements were corrected to account for the depression caused by the weight of the light phase free product. For correction of the depth to water, the free phase product specific gravity of 0.90 was used.
- c/ Measurements were collected monthly until September 2020 and after September 2020 measurements were collected quarterly. Free product was continuously collected using sorbent socks.

**Table 5**  
**Product Monitoring and Removal Summary - MW-50-160D**  
**Former Emerson Power Transmission Facility**  
**Ithaca, New York**  
**Second Quarter 2021 (a)**

<b>Well Identification:</b>		<b>MW-50-160D</b>										
<b>Casing Diameter (inches):</b>		<b>4.00</b>										
<b>Top of Casing (ft amsl) (b):</b>		<b>Pending Survey</b>										
<b>Total Depth (feet):</b>		<b>163.53</b>										
Date	Depth to Product (ft btoc)	Depth to Water (ft btoc, b)		Apparent Product Thickness (feet)	Apparent Product Volume (gallons)	Groundwater Elevation (ft amsl)	Product Removal (gallons)				Water Removed (gallons)	
		Measured	Corrected				Bailer	Absorbent Sock	Total Quarterly	Total Cumulative	Total Quarterly	Total Water Bailed
Previous to First and Second Quarter 2021	-	-	-	-	-	-	-	-	-	-	-	0.00
June 21, 2021	NM	122.10	122.10	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00

a/ Abbreviations: NM = no measureable product; "-" = not applicable; "--" = measurement not taken; ft btoc = feet below top of casing; amsl = above mean sea level; ft amsl = feet amsl; LNAPL = light non-aqueous phase liquid.

b/ All depth to water measurements were corrected to account for the depression caused by the weight of the light phase free product. For correction of the depth to water, the free phase product specific gravity of 0.90 was used.