



November 19, 2020

Project No. 19119232

**Ms. Maureen Hatfield**

Texas Commission on Environmental Quality  
MC-127  
VCP-CA Section, Team 1, Remediation Division  
P.O. Box 13087  
Austin, Texas 78711-3087

**RE: MONTHLY STATUS UPDATE – ENGLEWOOD INTERMODAL YARD – NAPL COLLECTION SYSTEM/CONCRETE CAP REPAIRS  
UNION PACIFIC RAILROAD HOUSTON WOOD PRESERVING WORKS FACILITY  
4910 LIBERTY ROAD FACILITY, HOUSTON, TEXAS  
POST-CLOSURE CARE PERMIT NO. HW-50343; INDUSTRIAL SWR NO. 31547**

Dear Ms. Hatfield:

Golder Associates, Inc. (Golder), on behalf of Union Pacific Railroad Company (UPRR), is pleased to provide this monthly status update for October 2020 for the implementation of the cap repairs identified in the Updated Post-Response Action Care Report (PRACR) dated January 16, 2018 for the UPRR Houston Wood Preserving Works Facility (the Site). Monthly status updates were requested by the Texas Commission on Environmental Quality (TCEQ) in a letter dated March 20, 2018.

The non-aqueous phase liquid (NAPL) Collection System was installed in the Englewood Intermodal Yard to address the tar-like substance seeps within parking slots B100 to B109 (for container trailers). The following is a summary of the observations from the weekly inspections of the NAPL Collection System and Englewood Intermodal Yard concrete pavement near the collection system for October 2020 (photographs from the weekly inspections are provided in Attachment A):

- Less than 0.1 gallons of dense NAPL (DNAPL) were recovered from NAPL Collection Sump 3 (B107/B108 slots) during the month of October. No significant amount of NAPL has been visually observed or recovered from Sump 1 (B099/B100 slots) or Sump 2 (B103/B104 slots). Water continues to accumulate in the NAPL collection sumps.
- Water continues to collect more rapidly in Sump 1 compared to Sumps 2 or 3 following pump down events. All three Sumps were pumped down on September 1, 2020. Water pumped from the sumps was transferred into the on-site frac tank near slot B109. After pumping, the water level in Sump 1 returned to the surface by the September 15<sup>th</sup> weekly inspection and has remained at the top of the sump through October 28, 2020. In contrast the water levels in Sumps 2 and 3 have recovered to 10 inches and 9 inches below the top of the sumps, respectively, by the September 30<sup>th</sup> weekly inspection and have

fluctuated but remained within two inches of that level through October 2020. The water in Sumps 1, 2, and 3 was observed as being brown in color. No sheen or odor was reported during the inspections in the month of October.

- A small amount of tar-like NAPL was observed at a concrete/asphalt surface joint located immediately adjacent to the NAPL Collection System in slot B103 on October 15, 2020 (see photolog, Photo No. 13). No other seeps were observed within the NAPL Collection System area. For areas outside the NAPL Collection System, very small amounts of tar-like material were noted on the concrete surface in stalls A022, B057, B101, B102, and B105 where previous seeps have been observed. The overall amount of material recovered during October 2020 was similar to September 2020 with a total of less than 1 gallon of the tar-like material recovered.
- No wide-spread seep water was observed during the October 2020 inspections. UPRR will continue to have USES pressure wash the areas where the brown staining and seeps are observed as needed.
- During the week of July 13, 2020, Golder, on behalf of UPRR, coordinated with USES to excavate seven test pits in areas where historical NAPL seeps (Slots A010, A021, A098, B013, B057, B096, and B108) had been observed in the Englewood Intermodal Yard. During the October 2020 weekly inspections, no NAPL seeps have been observed at the test pit locations. The NAPL noted at Slot B057 is outside of the test pit area conducted in Slot B057. The test pit locations will continue to be inspected on a weekly basis and Golder, on behalf of UPRR, will prepare a summary report of the test pit findings including weekly inspections for submittal to the TCEQ.

Weekly site inspections of the NAPL Collection System and Englewood Intermodal Yard concrete pavement near the collection system will continue to be conducted. In response to the TCEQ letter dated August 9, 2019, a notation on the presence of NAPL in each sump, tabulation of depth and thickness of NAPL if detected, and a tabulation of total mass of NAPL recovered from each sump is provided on the enclosed Table 1. Through October 2020, no measurable NAPL has been detected in the sumps using the interface probe.

If you have any questions or need additional information, please feel free to call us at (512) 671-3434 or Mr. Kevin Peterburs of UPRR at (414) 267-4164.

Sincerely,

**Golder Associates Inc.**



Eric C. Matzner, P.G.  
Principal / Program Leader



Eric Pastor, P.E.  
Principal / Program Leader

CC: Mr. Kevin Peterburs, UPRR – Milwaukee, WI  
Ms. Alma Jefferson, Waste Section Manager, TCEQ Region 12, Houston

Attachment Table 1 – NAPL Measurements – NAPL Collection System Sumps  
Weekly Inspection Photolog

**TABLE**

**TABLE 1**  
**NAPL Measurements - NAPL Collection System - Englewood Intermodal Yard**  
**UPRR Houston, tx - Wood Preserving Works**

Measured Date	Sump 1 (B099/B100) Freeboard (in)	Sump 2 (B103/B104) Freeboard (in)	Sump 3 (B107/B108) Freeboard (in)	Depth to DNAPL (in)	Comments
8/14/2019	2.5	28	29	Not measurable	
8/21/2019	0	27.5	26.5	Not measurable	
8/28/2019	44.5	47.9	45	Not measurable	Water from sumps pumped out
9/4/2019	19	42	41.5	Not measurable	
9/13/2019	0	39.5	38	Not measurable	
9/20/2019	0	3	2.5	Not measurable	
9/25/2019	0	42	42.5	Not measurable	Water from sumps pumped out
10/2/2019	2.5	42.5	42	Not measurable	Sheen visible in B107/B108 sump, less than 0.1 gal of DNAPL recovered
10/9/2019	3	42	41.5	Not measurable	Sheen visible in B107/B108 sump, less than 0.1 gal of DNAPL recovered
10/16/2019	0	39.5	39	Not measurable	Less than 0.1 gal of DNAPL recovered from B107/B108 Sump
10/24/2019	3	35	25	Not measurable	Less than 0.1 gal of DNAPL recovered from B107/B108 Sump
10/29/2019	0	24	23	Not measurable	Water from sumps pumped out
10/30/2019	0	40	39	Not measurable	Slight sheen visible in B107/B108 sump
11/6/2019	9	39	38.5	Not measurable	
11/13/2019	7	30	29	Not measurable	Less than 0.1 gal of DNAPL recovered from B107/B108 Sump
11/19/2019	4	26	25.5	Not measurable	
11/27/2019	0	25	23	Not measurable	
12/3/2019	2	25.5	25	Not measurable	Less than 0.1 gal of DNAPL recovered from B107/B108 Sump
12/11/2019	1.5	17	16.54	Not measurable	Less than 0.1 gal of DNAPL recovered from B107/B108 Sump
12/17/2019	5	19.5	17.5	Not measurable	
12/23/2019	10	21	20.5	Not measurable	
1/7/2020	9	13	12.5	Not measurable	
1/8/2020	9	13	12.5	Not measurable	Water from sumps pumped out
1/17/2020	0	32	31.5	Not measurable	
1/21/2020	2.5	26.5	26	Not measurable	
1/28/2020	0	0	0	Not measurable	
2/4/2020	2	11	10.5	Not measurable	
2/12/2020	0	0	0	Not measurable	
2/18/2020	1.5	11.5	10.25	Not measurable	Water from sumps pumped out on 2/20/2020
2/27/2020	2	42	36	Not measurable	
3/6/2020	1	36	36	Not measurable	
3/11/2020	2	36	35.5	Not measurable	
3/18/2020	0	35.5	35	Not measurable	
3/27/2020	0	29	28	Not measurable	
4/3/2020	1.5	29	28.5	Not measurable	
4/8/2020	0	23	22	Not measurable	
4/15/2020	0.5	23	22	Not measurable	
4/21/2020	0	21	21	Not measurable	
4/28/2020	0	23	22	Not measurable	
5/4/2020	-	-	-	Not Measured	Measurements were not taken; the inspector was unable to open the sumps
5/12/2020	0	20	19	Not measurable	
5/19/2020	0	15.75	14.25	Not measurable	Sump 1 pumped down (May 22nd)
5/27/2020	0	14	13	Not measurable	
6/1/2020	0	7	5	Not measurable	
6/10/2020	0	10	9	Not measurable	
6/17/2020	1	12	11	Not measurable	
6/25/2020	0	0	0	Not measurable	
6/30/2020	0	0	0	Not measured	
7/1/2020	48	46	47	Not measurable	Sumps 1, 2, & 3 pumped down
7/8/2020	34	24.5	24	Not measurable	Less than 0.1 gal of DNAPL recovered from B107/B108 Sump
7/15/2020	32	29.5	29	Not measurable	Sheen visible in B99/B100 sump & B107/B108 sump, less than 0.1 gal of DNAPL recovered B107/B108 sump
7/23/2020	0	23	22.5	Not measured	Less than 0.1 gal of DNAPL recovered from B107/B108 Sump
7/31/2020	0	11	10	Not measurable	
8/5/2020	0	7	5	Not measurable	
8/13/2020	1	11	10	Not measurable	
8/19/2020	0	7	6	Not measurable	
8/26/2020	0	10	9	Not measurable	
9/2/2020	43	37	38	Not measurable	Sumps 1, 2, & 3 pumped down (September 1); Sheen visible in B99/B100 sump & B107/B108 sump
9/9/2020	28	37	36	Not measurable	Sheen visible in B107/B108 sump
9/15/2020	1	35	33	Not measurable	
9/23/2020	0	0	0	Not measurable	
9/30/2020	1	10	9	Not measurable	
10/8/2020	4	12	11.5	Not measurable	
10/15/2020	0	11	10.5	Not measurable	Less than 0.1 gal of DNAPL recovered B107/B108 sump
10/21/2020	1	10.5	9.25	Not measurable	
10/28/2020	0	11	10	Not measurable	

Note:  
Freeboard in sumps is measured as depth to water from top rim of sump, measured in inches

**ATTACHMENT A**

## Weekly Inspection Photolog



# PHOTOGRAPHIC LOG

<b>Client Name:</b> Union Pacific Railroad	<b>Site Location:</b> Englewood Houston, Texas	<b>Project No.:</b> 19119232
---	---	---------------------------------

<b>Photo No.</b> 1	<b>Date:</b> 10/08/2020
<b>Description:</b>  Frac tank for storage of pumped down water from NAPL Collection Sumps (in Slot B110) and tote for storage of recovered pressure wash water/brown water, looking northwest.  Lat: 29.7841028 Long: - 95.3209833	



<b>Photo No.</b> 2	<b>Date:</b> 10/08/2020
-----------------------	----------------------------

<b>Description:</b>  Slot A021, no tar-like material seeps observed where test pit (July 2020) conducted, looking south.  Lat: 29.785392, Long: -95.318655	
---	--





# PHOTOGRAPHIC LOG

**Client Name:**  
**Union Pacific Railroad**

**Site Location:**  
Englewood Houston, Texas

**Project No.**  
19119232

**Photo No.**  
**3**

**Date:**  
10/08/2020

**Description:**

Slot B057, no tar-like material seeps observed where test pit (July 2020) conducted, looking north.

Lat: 29.7847472  
Long: - 95.3195417



**Photo No.**  
**4**

**Date:**  
10/08/2020

**Description:**

Slot B101, small amount of tar-like material seeping at asphalt crack, material was removed.

Lat: 29.784275  
Long: - 95.320813





# PHOTOGRAPHIC LOG

<b>Client Name:</b> Union Pacific Railroad	<b>Site Location:</b> Englewood Houston, Texas	<b>Project No.:</b> 19119232
---	---	---------------------------------

<b>Photo No.</b> 5	<b>Date:</b> 10/08/2020
<b>Description:</b>  Slot B102, very small amount of tar-like material seeping at asphalt crack, material was removed.  Lat: 29.7842203 Long: - 95.320827	



<b>Photo No.</b> 6	<b>Date:</b> 10/08/2020
<b>Description:</b>  Slot B102, small amount of tar-like material seeping at joint, material was removed.  Lat: 29.7842203 Long: - 95.320827	







# PHOTOGRAPHIC LOG

<b>Client Name:</b> Union Pacific Railroad	<b>Site Location:</b> Englewood Houston, Texas	<b>Project No.:</b> 19119232
---	---	---------------------------------

<b>Photo No.:</b> 7	<b>Date:</b> 10/08/2020
------------------------	----------------------------

**Description:**

Slot B108, view of NAPL Collection System (Sump B107/B108 and test pit in background). No tar-like material seeps observed, looking north.

Lat: 29.784125  
Long: - 95.320989



<b>Photo No.:</b> 8	<b>Date:</b> 10/08/2020
------------------------	----------------------------

**Description:**

Sump 3 (B107/B108), 11.5 inches of freeboard in sump. Sheen visible on water, no odor or tar-like material observed.

Lat: 29.7842861  
Long: - 95.3208611





**Client Name:**  
**Union Pacific Railroad**

**Site Location:**  
Englewood Houston, Texas

**Project No.**  
19119232

**Photo No.**  
**9**

**Date:**  
10/15/2020

**Description:**

Slot A022, small amount of tar-like material seeping at joint, material was removed.

Lat: 29.785392,  
Long: -95.318655



**Photo No.**  
**10**

**Date:**  
10/15/2020

**Description:**

Slot B096, no tar-like material seeps observed where test pit (July 2020) conducted, looking north.

Lat: 29.7842528  
Long: - 95.3206250





# PHOTOGRAPHIC LOG

<b>Client Name:</b> Union Pacific Railroad	<b>Site Location:</b> Englewood Houston, Texas	<b>Project No.:</b> 19119232
---	---	---------------------------------

<b>Photo No.:</b> 11	<b>Date:</b> 10/15/2020
-------------------------	----------------------------

**Description:**

Slots B096-B110, NAPL collection system visible in background, residual brown staining observed along the crack in the asphalt, looking southwest.

Lat: 29.784236  
Long: -95.320642



<b>Photo No.:</b> 12	<b>Date:</b> 10/15/2020
-------------------------	----------------------------

**Description:**

Slot B102, small amount of tar-like material seeping at joint, material was removed.

Lat: 29.7842203  
Long: - 95.320827





# PHOTOGRAPHIC LOG

<b>Client Name:</b> Union Pacific Railroad	<b>Site Location:</b> Englewood Houston, Texas	<b>Project No.:</b> 19119232
---	---	---------------------------------

<b>Photo No.</b> <b>13</b>	<b>Date:</b> 10/15/2020
-------------------------------	----------------------------

**Description:**

Slot B103, view of NAPL Collection System (Sump 103/104 on left). Very small amount of tar-like material seeping at the joint adjacent to the sump, looking north.

Lat: 29.7841639  
Long: - 95.3208694



<b>Photo No.</b> <b>14</b>	<b>Date:</b> 10/15/2020
-------------------------------	----------------------------

**Description:**

Sump 2 (B103/B104), 11 inches of freeboard in sump, no sheen or odors noted.

Lat: 29.7842861  
Long: - 95.3208611





# PHOTOGRAPHIC LOG

<b>Client Name:</b> Union Pacific Railroad	<b>Site Location:</b> Englewood Houston, Texas	<b>Project No.:</b> 19119232
---	---	---------------------------------

<b>Photo No.</b> <b>15</b>	<b>Date:</b> 10/15/2020
<b>Description:</b>  Slot B105, small amount of tar-like material seeping at asphalt crack, material was removed.  Lat: 29.7841472 Long: - 95.3208777	



<b>Photo No.</b> <b>16</b>	<b>Date:</b> 10/15/2020
<b>Description:</b>  Sump 3 (B107/B108), approximately 3.5 oz of tar-like material recovered from the sump. No sheen visible on water and no odor observed.  Lat: 29.7842861 Long: - 95.3208611	





**Client Name:**  
**Union Pacific Railroad**

**Site Location:**  
Englewood Houston, Texas

**Project No.**  
19119232

**Photo No.**  
**17**

**Date:**  
10/21/2020

**Description:**

Slot A010, no tar-like material seeps observed where test pit (July 2020) conducted, looking south.

Lat: 29.7855833,  
Long: -95.318375



**Photo No.**  
**18**

**Date:**  
10/21/2020

**Description:**

Slot B057, small amount of tar-like material seeping at asphalt crack (not near July 2020 test pit), material was removed.

Lat: 29.7847472  
Long: - 95.3195417





# PHOTOGRAPHIC LOG

<b>Client Name:</b> Union Pacific Railroad	<b>Site Location:</b> Englewood Houston, Texas	<b>Project No.:</b> 19119232
---	---	---------------------------------

<b>Photo No.</b> <b>19</b>	<b>Date:</b> 10/21/2020
<b>Description:</b>  Slot B101, small amount of tar-like material seeping at asphalt crack. Material was removed.  Lat: 29.784275 Long: - 95.320813	



<b>Photo No.</b> <b>20</b>	<b>Date:</b> 10/21/2020
<b>Description:</b>  Slot B103, view of NAPL Collection System (Sump 2, B103/B104). No tar-like material seeps observed, looking north.  Lat: 29.7841639 Long: - 95.3208694	





# PHOTOGRAPHIC LOG

<b>Client Name:</b> Union Pacific Railroad	<b>Site Location:</b> Englewood Houston, Texas	<b>Project No.:</b> 19119232
---	---	---------------------------------

<b>Photo No.</b> <b>21</b>	<b>Date:</b> 10/21/2020
<b>Description:</b>  Sump 1 (B099/B100), 1 inch of freeboard in sump, no sheen or odor noted.  Lat: 29.7844000 Long: - 95.3205861	



<b>Photo No.</b> <b>22</b>	<b>Date:</b> 10/21/2020
-------------------------------	----------------------------

<b>Description:</b>  Slot B105, no tar-like material seeps observed, looking north.  Lat: 29.7841472 Long: - 95.3208777	
--	--







# PHOTOGRAPHIC LOG

<b>Client Name:</b> Union Pacific Railroad	<b>Site Location:</b> Englewood Houston, Texas	<b>Project No.:</b> 19119232
---	---	---------------------------------

<b>Photo No.</b> <b>23</b>	<b>Date:</b> 10/21/2020
<b>Description:</b>  Slot B108, view of NAPL Collection System (Sump 3 (B107B/108) and test pit in background). No tar-like material seeps observed, looking north.  Lat: 29.784125 Long: - 95.320989	



<b>Photo No.</b> <b>24</b>	<b>Date:</b> 10/21/2020
<b>Description:</b>  Slots B109-B097, NAPL collection system visible in background, residual brown staining observed along the crack in the asphalt, looking northeast.  Lat: 29.784116 Long: -95.321022	





# PHOTOGRAPHIC LOG

<b>Client Name:</b> Union Pacific Railroad	<b>Site Location:</b> Englewood Houston, Texas	<b>Project No.:</b> 19119232
---	---	---------------------------------

<b>Photo No.</b> <b>25</b>	<b>Date:</b> 10/28/2020
<b>Description</b>  Slot A022, small amount of tar-like material seeping at joint, material was removed.  Lat: 29.785392, Long: -95.318655	



<b>Photo No.</b> <b>26</b>	<b>Date:</b> 10/28/2020
<b>Description:</b>  Slot B013, no tar-like material seeps observed where test pit (July 2020) conducted, water on pavement from recent rain event, looking north.  Lat: 29.785217 Long: - 95.318261	





# PHOTOGRAPHIC LOG

<b>Client Name:</b> Union Pacific Railroad	<b>Site Location:</b> Englewood Houston, Texas	<b>Project No.:</b> 19119232
---	---	---------------------------------

<b>Photo No.:</b> 27	<b>Date:</b> 10/28/2020
-------------------------	----------------------------

**Description:**

Slot B100, view of NAPL Collection System (Sump 099/100 in background). Water on pavement from recent rainfall event. No tar-like material seeps observed, looking north.

Lat: 29.7842472  
Long: - 95.3206944



<b>Photo No.:</b> 28	<b>Date:</b> 10/28/2020
-------------------------	----------------------------

**Description:**

Slot B057, small amount of tar-like material seeping at asphalt crack (not near July 2020 test pit), material was removed.

Lat: 29.7847472  
Long: - 95.3195417





# PHOTOGRAPHIC LOG

<b>Client Name:</b> Union Pacific Railroad	<b>Site Location:</b> Englewood Houston, Texas	<b>Project No.:</b> 19119232
---	---	---------------------------------

<b>Photo No.</b> <b>29</b>	<b>Date:</b> 10/28/2020
-------------------------------	----------------------------

**Description:**

Slot B101, no tar-like material seeps observed, water on pavement from recent rain event, looking north.

Lat: 29.784275  
Long: - 95.320813



<b>Photo No.</b> <b>30</b>	<b>Date:</b> 10/28/2020
-------------------------------	----------------------------

**Description:**

Slot B102, no tar-like material seeps observed, water on pavement from recent rain event, looking north.

Lat: 29.7842203  
Long: - 95.320827





# PHOTOGRAPHIC LOG

<b>Client Name:</b> Union Pacific Railroad	<b>Site Location:</b> Englewood Houston, Texas	<b>Project No.:</b> 19119232
---	---	---------------------------------

<b>Photo No.</b> <b>31</b>	<b>Date:</b> 10/28/2020
<b>Description:</b>  Slot B105, no tar-like material seeps observed, water on pavement from recent rain event, looking north.  Lat: 29.7841472 Long: - 95.3208777	



<b>Photo No.</b> <b>32</b>	<b>Date:</b> 10/28/2020
-------------------------------	----------------------------

<b>Description:</b>  Sump 3 (B107/B108), 10 inches of freeboard in sump. No sheen, odor, or tar-like material observed.  Lat: 29.7842861 Long: - 95.3208611	
--	--

