



December 15, 2022

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 USA Inc., a member of WSP (WSP Golder), on behalf of Union Pacific Railroad Company (UPRR), is pleased to provide this monthly status update for November 2022 for inspections conducted at the Englewood Intermodal Yard concrete cap area within 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.

A non-aqueous phase liquid (NAPL) Collection System was installed in the Englewood Intermodal Yard in January 2019 to address the tar-like substance seeps within parking stalls 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 November 2022 (photographs from the weekly inspections are provided in Attachment A):

- Water levels in NAPL Collection System Sump 1 (B099/B100 stalls), Sump 2 (B103/B104 stalls), and Sump 3 (B107/B108 stalls) were measured at 4 inches, 19 inches and 19 inches, respectively during the inspection on November 2, 2022. Water levels remained near those levels until the inspections on November 22, 2022, when all three sumps were observed to be full following a rain event (Photo Nos. 29-31). By the November 30, 2022 inspection, the water levels in Sump 1, 2, and 3 had decreased to 3 inches, 10 inches and 9 inches, respectively, (Photo Nos. 35-37) from the top of the sumps. The water in the sumps was observed as being brown in color. A very slight sheen was observed in Sumps 1, 2, and 3 on November 30, 2022 (Photo Nos. 35-37). No odors were reported during the November inspections. The final waste manifests from the sump pump down conducted on October 19, 2022 is included in Attachment B. Approximately 4,700 gallons of water was taken for disposal at Delta Water Processing in Houston, TX.

- The NAPL Collection System sumps (Sumps 1, 2, and 3) have continued to be checked weekly for DNAPL using an interface probe. No measurable NAPL has been detected within the sumps using the interface probe through November 2022. Even though no measurable DNAPL was noted, a dipper tool has continued to be used to further evaluate the presence of and recover DNAPL, if present, from the bottom of each of the sumps during the weekly inspections. Less than 0.2 gallons (approx.) of a rubbery tar-like material was recovered from Sump 3 using the dipper tool during the weekly inspection on November 30, 2022 (Photo No. 38). 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.

An accumulation of NAPL on the bottom of the inflow protector in Sump 1 was observed during the inspection on September 14, 2022. The material was removed, and the inflow protector was monitoring during subsequent inspections for additional NAPL accumulation. No additional accumulation was observed through November 30, 2022.

- A small tar-like material seep was observed on the southern edge of the NAPL Collection System in cracks in the cement along the joint of Stall B107 during the July 6, 2022 weekly inspection, no new tar-like material was observed at this seep location in November 2022.
- As detailed in the July 2022 Monthly Status Update, a tar-like material seep was observed next to Track 802 that is located approximately 280 feet northwest of the NAPL Collection System. The tar-like material seep is located along on the northern side of the track at the edge of the railroad ballast (Photo No. 5). Small amounts of seeped material were observed at this location during two of the five inspections in November (November 2nd and 9th). During the September 28, 2022 inspection, an additional tar-like material seep was observed within the concrete road area (RD-14) about 45 feet north of Track 802 and east of the existing Track 802 seep location. A small amount of tar-like material was observed at RD-14 in one of the five inspections in November (November 9th) (Photo No. 16).
- For areas outside the NAPL Collection System, a small amount of tar-like material was observed on the concrete or asphalt surface at the following locations during the November 2022 weekly inspections:

Seep Observations Outside the NAPL Collection System Area	
Stall Number	Observation Date(s)
A011	November 9 th and 16 th (Photo Nos. 9 and 17)
A022	November 16 th (Photo No. 10)
B056	November 9 th (Photo No. 11)
B057	November 9 th (Photo No. 12)
B096	November 2 nd , 9 th , and 16 th (Photo Nos. 2, 13, and 18)
B101	November 9 th (Photo No. 14)

Seep Observations Outside the NAPL Collection System Area	
Stall Number	Observation Date(s)
B102 (Joint)	November 9 th (Photo No. 15)
Track 802	November 9 th and 16 th (Photo No. 5)
RD-14 (road north of Track 802)	November 9 th (Photo No. 16)

- Tar-like material observed during the weekly inspection events was removed and recovered using a hand tool to scrape up the material. During November, the number of tar-like material seeps observed and total amount of material removed during the weekly inspections decreased compared to the October 2022 weekly inspections. No tar-like material seeps were observed during the final two inspections of the month (November 22nd and 30th). Less than 0.5 gallons of tar-like material was recovered for the month and placed in a drum for disposal. The drum is staged at the Container Storage Area (CSA).

During September 2021, track marks from a container transport vehicle running over the seep in stall B102 were observed and barricades were set up surrounding the seep location to prevent further tracking. The barricades are checked and reset, as needed, during the weekly inspections. UPRR remediation contractor US Ecology pressure washed the tar-like material tracking in October 2021. No new track marks were observed around stall B102 during the November 2022 weekly inspections.

- After the pressure washing event conducted on June 28, 2022, no new brown staining/residue or seep water was observed during the weekly inspections through November 2022. UPRR will continue to have a remediation contractor pressure wash and/or collect the water in the areas where the brown staining and seeps are observed, as needed.
- Golder, on behalf of UPRR, submitted to the TCEQ the Englewood IM Yard Test Pit Evaluation Report dated June 2, 2021 summarizing the findings from the test pits installed in July 2020, including weekly inspections since the installation. As discussed in the Test Pit Report, the test pit inspections were to continue through the warmer months (through September 2021). UPRR will prepare a Test Pit Evaluation Report Addendum summarizing the test pit inspections from June through November 2021. During inspections in June and July 2021 the concrete patches covering test pits in stalls A010, A021, B013, B057, B096, and B108 were observed to be damaged. UPRR contractor US Ecology removed the damaged test pit concrete on October 22, 2021 and completed installation of new rebar and concrete on October 25, 2021. The new concrete patches continue to be monitored during the weekly inspections.

During the inspection on September 28, 2022, a small amount of tar like material was observed in stall B096 adjacent to the test pit patch for the first time since the test pit installation. Tar like material was recovered from B096 near the historical seep location, along the concrete joint at the front of the stall during three of the five inspections in November (Photo Nos. 2, 13, and 18). Through November 2022, no NAPL seeps have been observed at the six other test pit locations (stalls A010, A021, A098, B013, B057, and B108). The seep observed in stalls B057 (Photo No. 12) during the November 9, 2022 inspection is located in cracks in the asphalt pavement and not at the test pit location.

- A follow-up video camera survey of the stormwater sewer lines in the central area of the Englewood IM Yard was conducted on August 26, 2021 to evaluate the stormwater line near the test pit locations. Details of the follow-up video survey will be provided in the Test Pit Evaluation Report Addendum.
- The TCEQ issued a comment letter dated January 26, 2022 titled "*Comments on Interim Groundwater Monitoring Report (July 2020), dated April 30, 2021 Englewood Intermodal Yard (EIY) Test Pit Evaluation Report, dated June 2, 2021, Corrective Action Monitoring Report, 2021 First Semi-Annual Event, dated July 9, 2021*". In the comment letter, the TCEQ requested UPRR prepare an Interim Measures Work Plan (Work Plan) to address the NAPL seeps in the Englewood Intermodal Yard. The TCEQ requested that the Work Plan include a schedule and plan for implementation of additional interim measures to permanently address the NAPL seeps in the Englewood Intermodal Yard. UPRR is in the process of preparing the requested Work Plan.

Weekly site inspections of the NAPL Collection System and Englewood Intermodal Yard concrete pavement near the collection system will continue to be conducted.

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 USA Inc.



Sarah Balke, G.I.T
Consultant, Geologist



Eric C. Matzner, P.G.
Director, Hydrogeologist

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
Attachment A – Weekly Inspection Photolog
Attachment B – Waste Disposal Manifests

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	

TABLE 1
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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
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	
11/4/2020	9	13	12	Not measurable	
11/11/2020	0.5	12	11	Not measurable	
11/18/2020	3.5	13	12	Not measurable	
11/24/2020	7	14	13.5	Not measurable	
11/30/2020	2	7	6	Not measurable	
12/10/2020	5	10.5	10	Not measurable	
12/18/2020	4	10	9	Not measurable	
12/23/2020	1	9	7.5	Not measurable	
12/31/2020	0	4	3.5	Not measurable	
1/6/2021	4	10.5	9	Not measurable	
1/15/2021	43	39	37.5	Not measurable	Sumps 1, 2, & 3 pumped down
1/22/2021	0	34	33	Not measurable	Sheen visible in B107/B108 sump
1/29/2021	2	31	30	Not measurable	Sheen visible in B107/B108 sump
2/4/2021	4	30	29.5	Not measurable	Sheen visible in B099/B100 sump
2/10/2021	0	27	25.5	Not measurable	
2/17/2021	0	0	0	Not measurable	
2/24/2021	2	10	9.5	Not measurable	
3/2/2021	0	0	0	Not measurable	
3/10/2021	0	10	9.75	Not measurable	
3/17/2021	0	2	1	Not measurable	
3/24/2021	0	3.5	2	Not measurable	
3/31/2021	0	6.5	7	Not measurable	
4/8/2021	0	7.5	7	Not measurable	
4/14/2021	0	6.5	6	Not measurable	Less than 0.1 gal of DNAPL recovered B107/B108 sump; Sheen visible in B103/104 and B107/B108 sumps
4/21/2021	0.5	9	8.5	Not measurable	
4/28/2021	0	8.5	8	Not measurable	
5/5/2021	0	7.5	7	Not measurable	
5/12/2021	0	8	7.5	Not measurable	
5/19/2021	0	0	0	Not measurable	
5/26/2021	0	2	0.5	Not measurable	
5/27/2021	41	32	26	Not measurable	Sumps 1,2, & 3 pumped down
6/2/2021	0	40	38	Not measurable	Sheen visible in B107/108 sump
6/9/2021	0	30	28.5	Not measurable	
6/16/2021	0	24	25	Not measurable	
6/23/2021	0	12	13	Not measurable	
6/30/2021	0	3	1	Not measurable	
7/7/2021	0	0	0	Not measurable	
7/14/2021	0	0	0	Not measurable	Sumps 1,2, & 3 pumped down (July 15)
7/21/2021	0	39	37	Not measurable	
7/29/2021	0	37	35.5	Not measurable	
8/4/2021	0	36	34	Not measurable	Sheen visible in B103/104 and B107/B108 sumps
8/11/2021	0	33	32	Not Measured	Depth to DNAPL measurements were not taken; the interface probe was not functioning properly
8/18/2021	0	25	23	Not measurable	
8/25/2021	0	20	22	Not measurable	
9/1/2021	0	20	17	Not measurable	
9/8/2021	3	14	11	Not measurable	
9/15/2021	0	3	4	Not measurable	Sumps 1,2, & 3 pumped down (September 17)
9/22/2021	31.5	46	46	Not measurable	Sheen visible in B107/B108 sump
9/29/2021	0	29	30.75	Not measurable	Sheen visible in B103/104 and B107/B108 sumps
10/7/2021	6	18	17.5	Not measurable	
10/13/2021	3.6	10.56	9.72	Not measurable	Sheen visible in B103/104 and B107/B108 sumps; brown discoloration and slight odor noted B099/B100 sump
10/20/2021	0	13.94	12.6	Not measurable	Sumps 1,2, & 3 pumped down (October 21)
10/27/2021	0	22	21	Not measurable	Sheen visible in B099/B100 sump
11/3/2021	10	20	21	Not measurable	
11/10/2021	12	16	15	Not measurable	
11/17/2021	8	16	15	Not measurable	
11/24/2021	7	14	13	Not measurable	
12/1/2021	7	15	14	Not measurable	
12/8/2021	6	12.5	12	Not measurable	
12/15/2021	7	15	15	Not measurable	

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
12/22/2021	-	-	-	Not Measured	Partial site inspection conducted 12/22/21; Sump measurements were not taken
12/29/2021	0	11.5	11	Not measurable	
1/5/2022	8.75	13.5	12.25	Not measurable	
1/12/2022	6	12	12	Not measurable	
1/19/2022	13.5	17	16	Not measurable	Sheen visible in B099/B100 sump
1/27/2022	3	9	9	Not measurable	
2/2/2022	-	-	-	Not Measured	Measurements were not taken; the inspector was unable to open the sumps
2/9/2022	9	15	15	Not measurable	
2/16/2022	8.5	17	16	Not measurable	
2/23/2022	5.5	14	13.5	Not measurable	
3/2/2022	5.5	15	14	Not measurable	
3/9/2022	4.5	7	6	Not measurable	
3/16/2022	48	36	45	Not measurable	Sumps 1,2, & 3 pumped down during inspection; less than 0.5 gal of DNAPL recovered B107/B108 sump
3/23/2022	6	29	28	Not measurable	
3/30/2022	5.5	28	28	Not measurable	
4/6/2022	3.5	19	18	Not measurable	
4/13/2022	4.5	18	15	Not measurable	Sheen visible in B099/B100 sump
4/20/2022	5	18	18	Not measurable	Sheen visible in B099/B100 sump
4/27/2022	4.5	12	8.5	Not measurable	
5/4/2022	48	42	45	Not measurable	Sumps 1,2, & 3 pumped down during inspection; Sheen visible in B099/B100 sump
5/11/2022	16	44.5	44	Not measurable	Sheen visible in B099/B100, B103/104, and B107/B108 sumps
5/18/2022	6.5	45	45	Not measurable	
5/25/2022	0	25	24	Not measurable	
6/1/2022	5.5	24	24	Not measurable	
6/8/2022	5	22	22	Not measurable	Sheen visible in B099/B100 and B103/104 sumps
6/15/2022	5	25	24	Not measurable	
6/22/2022	4.5	24	21	Not measurable	
6/29/2022	6	21	21	Not measurable	
7/6/2022	5.5	13	13	Not measurable	
7/13/2022	5	15	14	Not measurable	Sheen visible in B099/B100 sump
7/20/2022	51.5	38	43.5	Not measurable	Sumps 1,2, & 3 pumped down during inspection; less than 0.1 gal of DNAPL recovered B099/B100 sump
7/27/2022	4	42	40	Not measurable	
8/3/2022	5	39	39	Not measurable	
8/10/2022	5.5	38	38	Not measurable	Sheen visible in B107/B108 sump
8/17/2022	5.5	25.5	25	Not measurable	
8/24/2022	0	0.5	0	Not measurable	Inspector unable to open B099/B100 and B107/B108 sumps as there was standing water on top of the sumps due to ongoing rain event
8/31/2022	52	52	48	Not measurable	Sumps 1,2, & 3 pumped down during inspection; sheen visible in B103/B104 sump
9/7/2022	3	37	37	Not measurable	
9/14/2022	1	34	31	Not measurable	Sheen visible in B099/B100 sump
9/21/2022	2.2	31.5	27.5	Not measurable	Sheen visible in B107/B108 sump
9/28/2022	3	30	31	Not measurable	Sheen visible in B099/B100 and B107/B108 sumps
10/5/2022	8	33	33	Not measurable	Sheen visible in B099/B100 and B107/B108 sumps
10/12/2022	7	32	32	Not measurable	Sheen visible in B099/B100 and B107/B108 sumps
10/19/2022	48	48	48	Not measurable	Sumps 1,2, & 3 pumped down during inspection; less than 0.1 gal of DNAPL recovered from B107/108 sump; small amount of DNAPL visible but not recoverable in B099/B100 sump; sheen visible in B099/B100 and B103/B104 sumps on recharge water after pumpdown
10/26/2022	6	46	45	Not measurable	Sheen visible in B107/B108 sump
11/2/2022	4	19	19	Not measurable	
11/9/2022	6	14	13	Not measurable	
11/16/2022	8	14	12	Not measurable	
11/22/2022	0	0	0	Not measurable	
11/30/2022	3	10	9	Not measurable	Very slight sheen visible in Sumps 1, 2, and 3; less than 0.2 gal of DNAPL recovered from B107/108 sump

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



ATTACHMENT A

Weekly Inspection Photolog

Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

Project No.
19119232

Photo No.
1

Inspection Date:
11/02/2022

Description:

Stalls A010 and A011, no new tar-like material observed, looking southeast.

Lat: 29.785392,
Long: -95.318655



Photo No.
2

Inspection Date:
11/02/2022

Description:

Stall B096, very small amount of tar-like material observed near historical seep location along concrete joint adjacent to July 2020 test pit.

Lat: 29.7842528
Long: - 95.3206250



Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

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Photo No.
3

Inspection Date:
11/02/2022

Description:

Stalls B099-B110, view of NAPL collection system, standing water from recent rain event, looking west.

Lat: 29.784275
Long: - 95.320813



Photo No.
4

Inspection Date:
11/02/2022

Description:

Stall B107, no new tar-like material observed at seep location on concrete joint along the southern edge of the excavated area, looking northwest.

Lat: 29.784156
Long: -95.320953



Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

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Photo No.
5

Inspection Date:
11/02/2022

Description:

North side of Track 802 where a small amount of tar-like material seep was observed near track, material was removed.

Lat: 29.784947

Long: -95.321214



Photo No.
6

Inspection Date:
11/02/2022

Description:

Sump 1 (B099/B100), 4 inches of freeboard in sump, no sheen or odor noted, no new NAPL accumulation on inflow protector.

Lat: 29.7844000

Long: - 95.3205861



Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

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Photo No.
7

Inspection Date:
11/02/2022

Description:

Sump 2 (B103/B104), 19 inches of freeboard. No sheen or odor noted.

Lat: 29.7842861
Long: - 95.3208611



Photo No.
8



Inspection Date:
11/02/2022



Description:

Sump 3 (B107/B108), 19 inches of freeboard in sump, no sheen or odor noted.

Lat: 29.784172
Long: -95.320998



Client Name: Union Pacific Railroad		Site Location: Englewood Intermodal Yard, Houston, Texas	Project No. 19119232
Photo No. 9	Inspection Date: 11/09/2022		
Description: Stall A011, a small amount of tar-like material at a crack in the asphalt pavement, material was removed. Lat: 29.785392, Long: -95.318655			
Photo No. 10	Inspection Date: 11/09/2022		
Description: Stall A022, a small amount of tar-like material at a crack in the asphalt pavement, material was removed. Lat: 29.785392, Long: -95.318655			

Client Name: Union Pacific Railroad		Site Location: Englewood Intermodal Yard, Houston, Texas	Project No. 19119232
Photo No. 11	Inspection Date: 11/09/2022		
Description: Stall B056, a very small amount of tar-like material at a crack in the asphalt pavement, material was removed, looking southeast Lat: 29.7847472 Long: - 95.3195417			
Photo No. 12	Inspection Date: 11/09/2022		
Description: Stall B057, small amount of tar-like material at historical seep location in asphalt cracks, no seeps observed where nearby test pit was conducted (July 2020), material was removed, looking southeast. Lat: 29.7847472 Long: - 95.3195417			

Client Name: Union Pacific Railroad	Site Location: Englewood Intermodal Yard, Houston, Texas	Project No. 19119232
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Photo No. 13	Inspection Date: 11/09/2022
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Description:

Stall B096, very small amount of tar-like material observed near historical seep location along concrete joint adjacent to July 2020 test pit.

Lat: 29.7842528
Long: - 95.3206250





Photo No. 14	Inspection Date: 11/09/2022
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Description:

Stall B101, very small amount of tar-like material at a crack in the asphalt pavement along B100-B101 stall boundary, material was removed, looking southeast.

Lat: 29.784275
Long: - 95.320813



Client Name: Union Pacific Railroad		Site Location: Englewood Intermodal Yard, Houston, Texas	Project No. 19119232
Photo No. 15	Inspection Date: 11/09/2022		
Description: Stall B102, small amount of tar-like material observed within concrete joint, residual staining on concrete surface noted. Lat: 29.7842203 Long: - 95.320827			
Photo No. 16	Inspection Date: 11/09/2022		
Description: Seep location observed within the concrete road area (RD-14) north of Track 802 (East of existing Track 802 seep location), very small amount of tar-like material observed along a concrete joint, material was removed. Lat: 29.78505 Long: -95.32124			

Client Name: Union Pacific Railroad		Site Location: Englewood Intermodal Yard, Houston, Texas	Project No. 19119232
Photo No. 17	Inspection Date: 11/16/2022		
Description: Stall A011, a small amount of tar-like material at a crack in the asphalt pavement, material was removed. Lat: 29.785392, Long: -95.318655			
Photo No. 18	Inspection Date: 11/16/2022		
Description: Stall B096, very small amount of tar-like material observed near historical seep location along concrete joint adjacent to July 2020 test pit. Lat: 29.7842528 Long: - 95.3206250			

Client Name: Union Pacific Railroad	Site Location: Englewood Intermodal Yard, Houston, Texas	Project No. 19119232
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Photo No. 19	Inspection Date: 11/16/2022
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Description:

Stall B105, no tar-like material observed, looking northwest.

Lat: 29.784236,
Long: -95.320939



Photo No. 20	Inspection Date: 11/16/2022
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Description:

Sump 1 (B099/B100), 8 inches of freeboard in sump, no sheen or odor noted, no new NAPL accumulation on the inflow protector.

Lat: 29.7844000
Long: - 95.3205861



Client Name: Union Pacific Railroad		Site Location: Englewood Intermodal Yard, Houston, Texas	Project No. 19119232
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Photo No. 21	Inspection Date: 11/16/2022
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Description:

Sump 2 (B103/B104), 14 inches of freeboard in sump, no sheen or odor noted.

Lat: 29.7842861
 Long: - 95.3208611





Photo No. 22	Inspection Date: 11/16/2022
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Description:

Sump 3 (B107/B108), 12 inches of freeboard in sump, no sheen or odor noted.

Lat: 29.784172
 Long: -95.320998



Client Name: Union Pacific Railroad		Site Location: Englewood Intermodal Yard, Houston, Texas	Project No. 19119232
Photo No. 23	Inspection Date: 11/16/2022		
Description: North side of Track 802 no new tar-like material observed at the seep location along the edge of the ballast, looking east. Lat: 29.784947 Long: -95.321214			
Photo No. 24	Inspection Date: 11/16/2022		
Description: Seep location observed within the concrete road area (RD-14) north of Track 802 (East of existing Track 802 seep location), no new tar-like material observed along a concrete joint, looking east. Lat: 29.78505 Long: -95.32124			

Client Name: Union Pacific Railroad		Site Location: Englewood Intermodal Yard, Houston, Texas	Project No. 19119232
Photo No. 25	Inspection Date: 11/22/2022		
Description: Eastern end of A and B rows, no new tar-like material observed, standing water from recent rain event, looking west. Lat: 29.785392, Long: -95.318655			
Photo No. 26	Inspection Date: 11/22/2022		
Description: Stall B056-B058, no tar-like material at historical seep locations in B046 or B057, no seeps observed where nearby test pit was conducted (July 2020), standing water from recent rain event, looking northwest. Lat: 29.7847472 Long: - 95.3195417			

Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

Project No.
19119232

Photo No.
27

Inspection Date:
11/22/2022

Description:

Stalls B099-B110, NAPL collection system area, no new tar-like material observed, standing water from recent rain event, looking northwest.

Lat: 29.7842528
Long: - 95.3206250



Photo No.
28

Inspection Date:
11/22/2022

Description:

Stall B102, no tar-like material seep observed within joint, residual staining on concrete surface noted, standing water from recent rain event, looking northwest.

Lat: 29.7842203
Long: - 95.320827



Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

Project No.
19119232

Photo No.
29

Inspection Date:
11/22/2022

Description:

Sump 1 (B099/B100), 0 inches of freeboard in sump, inflow protector was not removable due to the high water level in the sump, no sheen or odor noted.

Lat: 29.7844000
Long: - 95.3205861



Photo No.
30

Inspection Date:
11/22/2022

Description:

Sump 2 (B103/B104), 0 inches of freeboard. No sheen or odor noted.

Lat: 29.7842861
Long: - 95.3208611



Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

Project No.
19119232

Photo No.
31

Inspection Date:
11/22/2022

Description:

Sump 3 (B107/B108), 0 inches of freeboard in sump, inflow protector was not removable due to the high water level in the sump, no sheen or odor noted.

Lat: 29.784172
Long: -95.320998



Photo No.
32

Inspection Date:
11/22/2022

Description:

Stall B109, western end of NAPI Collection system, no tar-like material observed, water on pavement from recent rain event, looking northwest.

Lat: 29.784119
Long: -95.321007



Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

Project No.
19119232

Photo No.
33

Inspection Date:
11/30/2022

Description:

Stall A010, view of eastern end of A row. No tar-like material seeps observed, looking west.

Lat: 29.785392,
Long: -95.318655

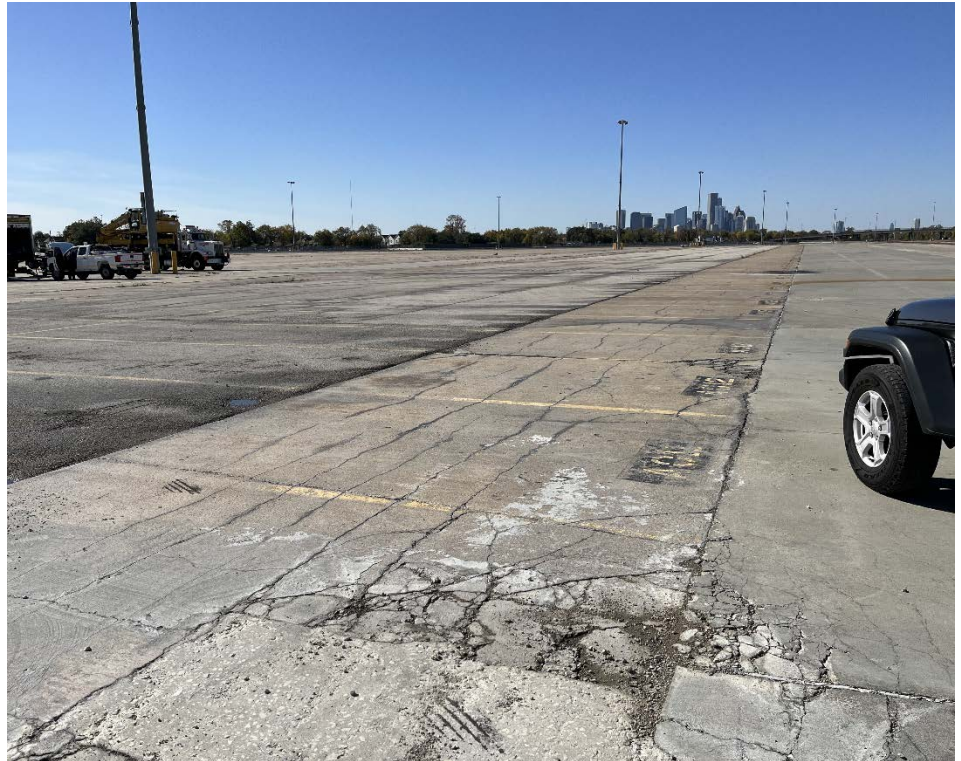


Photo No.
34

Inspection Date:
11/30/2022

Description:

Stall B109, view of NAPI Collection system, no tar-like material seeps observed, looking northeast.

Lat: 29.784119
Long: -95.321007



Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

Project No.
19119232

Photo No.
35

Inspection Date:
11/30/2022

Description:

Sump 1 (B099/B100), 3 inches of freeboard in sump, very slight sheen observed, no odor noted. No new NAPL accumulation on inflow protector.

Lat: 29.7844000
Long: - 95.3205861



Photo No.
36

Inspection Date:
11/30/2022

Description:

Sump 2 (B103/B104), 10 inches of freeboard, very slight sheen observed, no odor noted.

Lat: 29.7842861
Long: - 95.3208611



Client Name:
Union Pacific Railroad

Site Location:
Englewood Intermodal Yard, Houston, Texas

Project No.
19119232

Photo No.
37

Inspection Date:
11/30/2022

Description:

Sump 3 (B107/B108), 9 inches of freeboard in sump, very slight sheen observed, no odor noted.

Lat: 29.784172
Long: -95.320998



Photo No.
38

Inspection Date:
11/30/2022

Description:

Sump 3 (B107/B108), small amount of rubbery tar-like material (approx. 0.2 gal) recovered from sump.

Lat: 29.784172
Long: -95.320998





ATTACHMENT B

Waste Disposal Manifests

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of 1	3. Emergency Response Phone 888-877-7267	4. Waste Tracking Number WR008122-10-19-1			
	5. Generator's Name and Mailing Address Union Pacific Railroad (UPRR) C/O BMD Servs 6520 Corporate Drive Indianapolis, IN 46278 Generator's Phone: 400-923-5848		Generator's Site Address (if different than mailing address) UPRR 5500 Wallisville Rd Houston TX 77020				
6. Transporter 1 Company Name OMF		1-800-645-6671		U.S. EPA ID Number LAD 9808 70018			
7. Transporter 2 Company Name				U.S. EPA ID Number			
8. Designated Facility Name and Site Address Delta Water Processing, LLC 18511 Beaman Hwy Houston TX 77049 Facility's Phone: 281-404-4423				U.S. EPA ID Number TX 97222			
GENERATOR	9. Waste Shipping Name and Description		10. Containers		11. Total Quantity	12. Unit Wt./Vol.	
			No.	Type			
	1. Non Regulated Non Hazardous Hydrocarbon Water		001	TT	3500	Gal	
	2.						
	3.						
4.							
13. Special Handling Instructions and Additional Information 1.) WR# 008122 / LECAD0103 P P-# 2201130							
14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Generator's/Owner's Printed/Typed Name Stephanie Wood		Signature <i>[Signature]</i>		Month 10	Day 19	Year 22	
INT'L	15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:				
	Transporter Signature (for exports only):						
TRANSPORTER	16. Transporter Acknowledgment of Receipt of Materials		Signature <i>[Signature]</i>		Month 10	Day 19	Year 22
	Transporter 1 Printed/Typed Name Kahlil Mason		Signature <i>[Signature]</i>		Month 10	Day 19	Year 22
Transporter 2 Printed/Typed Name		Signature		Month	Day	Year	
DESIGNATED FACILITY	17. Discrepancy						
	17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection		Manifest Reference Number:				
	17b. Alternate Facility (or Generator)		U.S. EPA ID Number				
	Facility's Phone:		Month Day Year				
	17c. Signature of Alternate Facility (or Generator)		Month Day Year				
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a							
Printed/Typed Name <i>[Signature]</i>		Signature <i>[Signature]</i>		Month 10	Day 19	Year 22	

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number	2. Page 1 of 1	3. Emergency Response Phone 888-877-7267	4. Waste Tracking Number WR008122-10-19-1
5. Generator's Name and Mailing Address Union Pacific Railroad (UPRR) 6500 Corporate Drive Indianapolis, IN 46228 Generator's Phone: 400-923-5848			Generator's Site Address (if different than mailing address) 5500 Wallisville Rd Houston TX 77020		
6. Transporter 1 Company Name OMI			U.S. EPA ID Number LAD 980870018		
7. Transporter 2 Company Name			U.S. EPA ID Number		
8. Designated Facility Name and Site Address Delta Water Processing LLC 18511 Beumann Hwy Houston TX 77049 Facility's Phone: 281-404-4423			U.S. EPA ID Number TX 97222		
9. Waste Shipping Name and Description		10. Containers		11. Total Quantity	12. Unit Wt/Vol.
		No.	Type		
1. Non Regulated Non Hazardous Hydrocarbon Water		001	TT	1200	Gal
2.					
3.					
4.					
13. Special Handling Instructions and Additional Information WR# 008122/LEGA 0103 P Po # 2201130					
14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Generator's/Officer's Printed/Typed Name Stephanie Wood		Signature Stephanie Wood		Month 10	Day 19
15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:		Year 22	
16. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name Albert Espinoza		Signature Albert Espinoza		Month 10	Day 19
Transporter 2 Printed/Typed Name		Signature		Year 22	
17. Discrepancy					
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection		Manifest Reference Number:			
17b. Alternate Facility (or Generator)		U.S. EPA ID Number			
Facility's Phone:		Month Day Year			
17c. Signature of Alternate Facility (or Generator)		Month Day Year			
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a					
Printed/Typed Name Daniel H		Signature Daniel H		Month 10	Day 19
				Year 22	

GENERATOR
INT'L
TRANSPORTER
DESIGNATED FACILITY