

PBW

PASTOR, BEHLING & WHEELER, LLC
ENGINEERING & ENVIRONMENTAL CONSULTING SERVICES



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HAND DELIVERED

September 29, 2017
PBW Project No. 1358

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

Subject: Post-Response Action Completion Report – Post-Hurricane Harvey Inspection
Union Pacific Railroad Houston Wood Preserving Works, Houston, Texas
4910 Liberty Road, Houston, Harris County, Texas
TCEQ SWR No. 31547; TCEQ Permit/Compliance Plan No. 50343
EPA ID No. TXD000820266
Customer No. CN600131098; Regulated Entity No. RN100674613

Dear Ms. Hatfield:

Pastor, Behling & Wheeler, LLC (PBW), on behalf of Union Pacific Railroad Company (UPRR), is pleased to provide the Post-Response Action Completion Report (PRACR) for the above referenced site your review. The attached PRACR was prepared to summarize the soil cap inspection conducted at the Site on August 31 and September 1, 2017 following the Hurricane Harvey storm event in Houston on August 25 to 29, 2017.

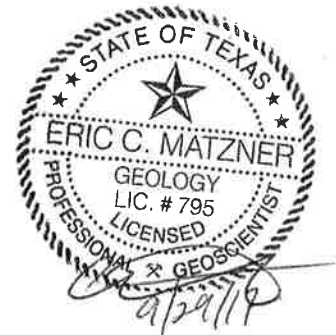
If you have any questions or need additional information, please feel free to call me at (512) 671-3434 or email ecmatzner@pbwllc.com; or Mr. Kevin Peterburs of UPRR at (414) 267-4164 and email KJPETERB@UP.COM.

Sincerely,

PASTOR, BEHLING & WHEELER, LLC

Eric C. Matzner, P.G.
Associate Hydrogeologist

cc: Waste Program Manager, TCEQ Region 12, Houston
Mr. Kevin Peterburs, P.G., UPRR – Milwaukee, WI



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY Post-Response Action Care Report (PRACR)

Cover Page

Submittal date: September 29, 2017 Regulatory ID No.: SWR 31547 TCEQ Region No.: 12

TCEQ Program (check one)

- | | |
|---|--|
| <input checked="" type="checkbox"/> Corrective Action (Mail Code 127) | <input type="checkbox"/> Superfund PRP Lead (Mail Code 143) |
| <input type="checkbox"/> Voluntary Cleanup Program (Mail Code 221) | <input type="checkbox"/> Municipal Solid Waste Permits (Mail Code 124) |
| <input type="checkbox"/> Petroleum Storage Tank Program (Mail Code 137) | |

On-Site Property Information

On-Site Property Name: Union Pacific Railroad Houston Wood Preserving Works Site
Physical Address:
Street no. 4910 Pre dir: Street name Liberty Street type: Rd Post dir:
City: Houston County: Harris County Code: 101 Zip: 77007
Nearest street intersection or location description: Site is located south of Liberty Rd. between Kashmere and Lockwood St., and north of Lee St.

Latitude: Degrees, Minutes, Seconds OR Decimal Degrees (circle one) North 29.787413
Longitude: Degrees, Minutes, Seconds OR Decimal Degrees (circle one) West 95.321062

Off-Site Affected Property Information

Off-Site Affected Property Name:
Physical Address:
Street no. Pre dir: Street name: Street type: Post dir:
City: County: County Code: Zip:

Check if no off-site properties affected

Contact Person Information and Acknowledgement

Person (or company) Name: Union Pacific Railroad
Contact Person: Kevin Peterburs Title: Manager, Site Remediation
Mailing Address: 4823 N 119th Street
City: Milwaukee State: WI Zip: 53225 E-mail address kjpeterb@up.com
Phone: 414-267-4164 Fax: 402-659-1496

By my signature below, I acknowledge the requirement of 30 TAC §350.2(a) that no person shall submit information to the executive director or to parties who are required to be provided information under this chapter which they know or reasonably should have known to be false or intentionally misleading, or fail to submit available information which is critical to the understanding of the matter at hand or to the basis of critical decisions which reasonably would have been influenced by that information. Violation of this rule may subject a person to the imposition of civil, criminal, or administrative penalties.

Signature of Person  Name, print: Kevin Peterburs Date: 9-27-17

PRACR Executive Summary	ID No: SWR No. 31547
	Report Date: September 27, 2017

Affected Property Name/Number: UPRR Houston Wood Preserving Works Site

Date of RAP approval: Not Approved, currently under TCEQ review (Rap Rev 3 – June 2017)

Date of RACR approval: Not Approved, currently under TCEQ review (Rap Rev 3 – June 2017)

Length of approved PRAC period (default 30 yrs.): Not Approved, currently under TCEQ review (Rap Rev 3 – June 2017)

Check if this is the final report

If this is the final report, provide documentation in Worksheet 4.0 that the applicable provisions of §350.33(i) have been met.

This reporting period: Start date: August 31, 2017 End date: September 1, 2017

On-site land use for basis of RACR approval Residential Commercial/industrial

Current on-site land use classification: Residential Commercial/industrial

During this reporting period, have there been any unexpected events or new conditions at the affected property that required an additional response action? Yes No

If yes, provide a brief explanation:

If physical control inspection occurred during this reporting period, what is the status of the physical control?

In response to Hurricane/Tropical Storm Harvey hitting the Houston area, Pastor, Behling & Wheeler, LLC (PBW) on behalf of UPRR conducted a post-storm inspection of the soil cap at the UPRR Houston Wood Preserving Works Site on August 31/September 1, 2017. The soil cap area did not appear to have any significant damage (a few minor erosion rills were noted) as a result of the tropical storm and associated flooding.

Have any changes occurred in the person's status during this reporting period to warrant changes in the financial assurance for this affected property? (For example, a change in "small business" status as defined in §350.33(n)(2).) Yes No

If yes, describe the changes that occurred and the changes in financial assurance that have been or will be taken.

Checklist for Report Completeness

ID No. SWR No. 31547

Report Date: September 27, 2017

Checklist for Report Completeness

Use this checklist to determine the portions of the form that must be submitted for this report. Answer all questions by checking Yes or No. If the answer is Yes include that portion of the report. If the answer is No, do not complete or submit that portion of the report. All form contents that are marked "Required" must be submitted. Form contents marked with an asterisk (*) are not included in the blank form and are to be provided by the person.

Report Contents

		Required	Cover Page	<input checked="" type="checkbox"/>
		Required	Executive Summary	<input checked="" type="checkbox"/>
		Required	Checklist for Report Completeness	<input checked="" type="checkbox"/>
No <input checked="" type="checkbox"/>	Has COC concentration monitoring been conducted?	<input type="checkbox"/> Yes	Worksheet 1.0 Monitoring Activities	<input type="checkbox"/>
			Attachment 1A* Monitoring Locations Map	<input type="checkbox"/>
No <input type="checkbox"/>	Have groundwater elevation measurements been taken?	<input type="checkbox"/> Yes	Attachment 1B* Groundwater Gradient Maps	<input type="checkbox"/>
No <input type="checkbox"/>	Is a physical control present?	<input checked="" type="checkbox"/> Yes	Worksheet 2.0 Physical Control Inspection, Operation, and Maintenance	<input type="checkbox"/>
No <input checked="" type="checkbox"/>	Is monitoring being performed?	<input type="checkbox"/> Yes	Worksheet 3.0 COC Status	<input type="checkbox"/>
			Attachment 3A* Time Series Graphs	<input type="checkbox"/>
			Attachment 3B* Concentration versus Distance Graphs	<input type="checkbox"/>
			Attachment 3C* PCLE Zone Maps and Cross Sections	<input type="checkbox"/>
			Attachment 3D* Data Summary	<input type="checkbox"/>
No <input checked="" type="checkbox"/>	Is this the final report? ¹	<input type="checkbox"/> Yes	Worksheet 4.0 Response Action Objectives	<input type="checkbox"/>
No <input checked="" type="checkbox"/>	Is monitoring being performed?	<input type="checkbox"/> Yes	Appendix 1* Analytical Data	<input type="checkbox"/>
			Appendix 2* Disposition of Derived Waste	<input type="checkbox"/>
		Required	Appendix 3* Chronology	<input checked="" type="checkbox"/>

¹ See §350.33(i) to see if conditions are met to justify termination of post-response action care.

Complete this worksheet if a physical control is used as part of the response action.

Provide a detailed description of post-response action care activities during this reporting period related to the inspection, operation, and maintenance of physical controls during this reporting period. Specifically note any differences from the plan documented in the approved RAP and the justification for the variances.

As detailed in the RAP Worksheet 5.0 (pending TCEQ approval), visual inspections will be performed on a quarterly basis and after all major storms. The inspections will focus on the following major issues:

- 1) Erosion of the cap (gullies, rills, or other erosional features on the cap surface or in drainages)
- 2) Sideslope sloughing (slippage)
- 3) Settling/subsidence
- 4) Vegetation deterioration
- 5) Damage from animals (i.e., rodents)
- 6) Groundwater monitoring equipment (wells) (semi-annual basis)

Locations where deficiencies are found shall be marked and repaired as soon as practicable.

In response to flooding from Hurricane/Tropical Storm Harvey in the Houston area from August 25 through 29, 2017, PBW conducted a post-storm inspection of the soil cap at the UPRR Houston Wood Preserving Works Site on August 31/September 1, 2017.

The soil cap area did not appear to have any significant erosion, sloughing, or subsidence as a result of the tropical storm and associated flooding. Some minor erosion rills were noted along the slopes of the soil cap and will continue to be monitored. Photographs from the soil cap inspection are provided in Attachment A.

Has the physical control proved to be effective in meeting the response objectives during this reporting period? Yes No

If yes, explain how it was determined that the physical control is effective. If no, explain the actions taken, or that will be taken, to ensure effectiveness of the physical control.

Given the area received over 30 inches of rain in less than five days, the physical control was effective against erosion during a major storm event. The minor erosion rills noted will be monitored and repaired as necessary.

Discuss any unexpected events or new conditions that developed on-site (and off-site, if applicable) during this reporting period and the resulting responses or modifications made to the monitoring plan. Indicate the date the event or condition occurred, the date discovered, the actions taken, and the dates of those actions. Include this information in the chronology in Appendix 3.

**Physical Control Inspection,
Operation, and Maintenance**

PRACR Worksheet 2.0 Page 2 of 2

ID No: SWR No. 31547

Report Date:09/27/17

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If the physical control is a containment system (e.g., hydraulic containment), what percentage of the time was the system effectively operational?

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APPENDIX 3
CHRONOLOGY

APPENDIX 3
CHRONOLOGY

Below is a summary of the site investigation and regulatory chronology at the UPRR Former Houston Wood Preserving Works facility (listed in reverse order).

Date	Description
August 2017	Pastor, Behling & Wheeler (PBW) conducts a site inspection of the soil cap following the major storm event associated with Hurricane Harvey (Aug 25 – 29, 2017).
July 2017	PBW submits to the Texas Commission on Environmental Quality (TCEQ) the Corrective Action Monitoring Report: 2017 First Semi-Annual Event dated July 12, 2017; PBW conducts 2017 second semi-annual groundwater monitoring event for the SWMU No. 1
June 2017	Union Pacific Railroad (UPRR) submits the RCRA Part A and B Permit Renewal Application (Revision No. 4) with RAP (Revision No. 3) to the TCEQ dated July 2016 in response to the Technical NOD Letter dated June 2, 2016. This includes submitting the Response Action Completion Report (RACR) (Revision No. 1).
May 2017	Meeting with UPRR, PBW, Baker-Wotring and the TCEQ (Corrective Action and Law Division) on May 31, 2017 discussing the 3 rd Technical Notice of Deficiency (NOD) Letter dated April 10, 2017 on the RCRA Part A and B Permit Renewal Application and Response Action Plan (RAP), specifically for issues regarding the restrictive covenants/deed notices for the off-site properties.
April 2017	UPRR receives the 3 rd Technical NOD Letter dated April 10, 2017 on the RCRA Part A and B Permit Renewal Application (Revision No. 3) and RAP (Revision 2) from the TCEQ.
February 2017	Meeting with UPRR, PBW, Baker-Wotring and the TCEQ (Corrective Action and Law Division) on February 16, 2017 discussing the draft comments on the RAP (Revision 2) and restrictive covenants for the off-site properties.
January 2017	PBW submits to the TCEQ the Corrective Action Monitoring Report: 2016 Second Semi-Annual Event dated January 17, 2017; PBW conducts 2017 first semi-annual groundwater monitoring event for the SWMU No. 1
July 2016	UPRR submits the RCRA Part A and B Permit Renewal Application (Revision No. 3) with RAP (Revision No. 2) to the TCEQ dated July 2016 in response to the Technical NOD Letter dated June 2, 2016. This includes submitting the Response Action Completion Report (RACR). PBW submits to the TCEQ the Corrective Action Monitoring Report: 2016 First Semi-Annual Event dated July 12, 2016; PBW conducts 2016 second semi-annual groundwater monitoring event for the SWMU No. 1
June 2016	UPRR receives Technical NOD Letter dated June 2, 2016 on the RCRA Part A and B Permit Renewal Application and Response Action Plan from the TCEQ.

APPENDIX 3
CHRONOLOGY

Date	Description
May 2016	UPRR completes the response actions authorized under the Area of Contamination to address the surface and subsurface soil Protective Concentration Level Exceedance (PCLE) Zones as detailed in the updated Response Action Plan (RAP) dated December 7, 2015.
February 2016	TCEQ approves the request to extend the termination date for the Area of Contamination from February 15, 2016 to March 7, 2016 in a letter dated February 22, 2016
January 2016	Begin response actions (excavation/placement and cap constriction) activities to address surface soil PCLE Zones. PBW conducts 2016 first semi-annual groundwater monitoring event for the Solid Waste Management Unit (SWMU) 1. PBW submits on behalf of UPRR a request to extend the termination date from February 15, 2015 to March 7, 2016 for the Area of Contamination set by the TCEQ.
December 2015	Union Pacific Railroad (UPRR) submits the RCRA Part A and B Permit Renewal Application (Revision No. 2) with Response Action Plan (RAP) (Revision No. 1) to the TCEQ dated December 7, 2015. Remediation contractor begins site preparation for response actions under the Area of Contamination.
November 2015	Union Pacific Railroad (UPRR) receives the Texas Commission on Environmental Quality (TCEQ) letter dated November 5, 2015 detailing the agency's review of the September 18, 2015 submittal titled Additional Information for Clean Closure Equivalence Demonstration. The TCEQ Industrial and Hazardous Waste (I&HW) Permits Section was unable to accept the request for discontinuing post-closure care of the former surface impoundment, Solid Waste Management Unit (SWMU) 1.
November 2015	Meeting with UPRR, Pastor, Behling & Wheeler (PBW), and the TCEQ on November 4, 2015 discussing the October 23, 2015 technical comment letter from the TCEQ.
October 2015	UPRR receives additional technical comments from the TCEQ in a letter dated October 23, 2015 on the Response Action Plan (RAP) regarding the Plume Management Zones and Technical Impracticability Demonstration provided in the Response Action Plan.
September 2015	PBW submits to the TCEQ the Additional Information for Clean Closure Equivalence Demonstration dated September 18, 2015 that included historical data and letters from 1983, 1984, and 1991 to demonstrate clean closure of the soils under the former surface impoundment (SWMU 1). The letter also included a request to cease the post-closure care for SWMU 1.
August 2015	UPRR receives Technical Notice of Deficiency (NOD) Letter dated August 5, 2015 on the RCRA Part A and B Permit Renewal Application and Response Action Plan from the TCEQ.

APPENDIX 3
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Date	Description
July 2015	PBW submits to the TCEQ the Corrective Action Monitoring Report: 2015 First Semi-Annual Event dated July 16, 2015; PBW conducts 2015 second semi-annual groundwater monitoring event for the SWMU No. 1.
April 2015	PBW submits to the TCEQ newspaper tear sheets and affidavits that public notice was published in English and Spanish in the <i>Houston Chronicle</i> on April 2 and <i>La Subasta</i> on March 31, respectively as required once the RCRA Permit Renewal/Compliance Plan with Major Amendment was administratively complete.
March 2015	TCEQ issues a letter dated March 13, 2015 declaring the RCRA Permit Renewal/Compliance Plan with Major Amendment was administratively complete on March 13, 2015.
February 2015	PBW submits a response letter to the TCEQ dated February 13, 2015 for the TCEQ Administrative NOD on the RCRA Part A and B Permit Renewal Application.
January 2015	PBW submits to the TCEQ the Corrective Action Monitoring Report: 2014 Second Semi-Annual Event dated January 15, 2015; PBW conducts 2015 first semi-annual groundwater monitoring event for the SWMU No. 1.
December 2014	UPRR submits the RCRA Part A and B Permit Renewal Application with Response Action Plan (RAP) to the TCEQ dated December 10, 2014. UPRR receives the TCEQ Administrative NOD Letter dated December 17, 2014.
November 2014	RCRA Permit Pre-Application Meeting with UPRR, PBW, and TCEQ dated November 6, 2014.
September 2014	UPRR holds public meeting with residents near the Site to detail institutional controls for off-site groundwater Plume Management Zone (PMZ).
July/August 2014	PBW conducts site-wide groundwater sampling event.
May 2014	PBW oversees installation of seven new monitoring wells (MW-51C, MW-76C, MW-77A, MW-78A, MW-79A, MW-80B, and MW-81B) in the Englewood Intermodal Yard to evaluate DNAPL extent and extent of chemicals of concern (COCs) in the B-CZ unit to the southeast, and one replacement well MW-34CR to replace MW-34C. Soil samples also collected from City of Houston right of way (ROW) along north perimeter of the Site.
January 2014	PBW conducts site-wide groundwater sampling event.
July 2013	PBW conducts site-wide groundwater sampling event.

APPENDIX 3
CHRONOLOGY

Date	Description
February/March 2013	PBW conducts cone penetrometer testing (CPT)/rapid optical screening tool (ROST) and soil investigation at the Englewood Intermodal Yard adjacent to the UPRR Houston Wood Preserving Works (HWPW) site.
January/February 2013	PBW conducts site-wide groundwater sampling event (95 wells). PBW submits Proposed DNAPL Recovery Pilot Test letter to TCEQ dated February 5, 2013, and initiates monthly DNAPL recovery from on-site and off-site wells (10-12 wells) (planned for 24 months).
November 2012	Meet with TCEQ regarding proposed CPT/ROST investigation of Englewood Intermodal Yard based on DNAPL detected from the December 2011 investigation.
July 2012	PBW conducts site-wide groundwater sampling event.
January 2012	PBW conducts site-wide groundwater sampling event.
July 2012	PBW conducts site-wide groundwater sampling event.
December 2011	PBW installs additional monitoring wells in the cohesive zone B-CZ to evaluate extent of DNAPL in the B-CZ.
July 2011	PBW conducts site-wide groundwater sampling event.
April 2011	TCEQ approves the Affected Property Assessment Report (APAR) (including updates and addendums).
March 2011	PBW submits the Revised Updated APAR Addendum to the TCEQ. UPRR repairs fence around site.
January 2011	PBW conducts site-wide groundwater sampling event.
December 2010/ January 2011	UPRR/PBW submits Off-Site Notification Letters to off-site properties indicating Notice of Information Availability for the site, as required with the submittal of the Updated APAR Addendum (Oct 2012) .
October 22, 2010	PBW submits the Updated APAR Addendum to the TCEQ.
June/July 2010	PBW conducts additional soil (along northeast portion of Site) and groundwater investigation (A-TZ, B-CZ, C-TZ and D-TZ wells); including site-wide groundwater monitoring event.
February 16, 2010	UPRR Response to TCEQ Comment Letter dated November 18, 2009.

APPENDIX 3
CHRONOLOGY

Date	Description
January 2010	PBW conducts site-wide groundwater sampling event; selected wells are analyzed for Volatile Organic Compounds (VOCs) by EPA Method 8620.
November 18, 2009	TCEQ Comment Letter on Revised APAR.
July 2009	PBW submits APAR Addendum to TCEQ.
January 2009	PBW conducts additional soil and groundwater investigation.
July 2008	PBW conducts additional CPT-ROST and groundwater investigation
January 2007	PBW conducts additional soil and groundwater investigation
August 2006	ERM-Southwest, Inc. (ERM) conducted additional soil and groundwater investigation
April 2006	ERM conducted additional soil and groundwater investigation
September 6, 2005	UPRR Response to TCEQ Response Letter dated August 1, 2005
August 2005	TCEQ Response to UPRR Response Letter dated June 9, 2005
June 9, 2005	UPRR Response to TCEQ Letter dated April 15, 2005
April 15, 2005	TCEQ Response to UPRR Response Letter dated November 19, 2004
November 19, 2004	UPRR Response to October 8, 2004 TCEQ Letter
October 8, 2004	TCEQ Comment Letter on Revised APAR
June 10, 2004	Revised APAR submitted to the TCEQ by ERM, Inc. on behalf of UPRR
November 7, 2001	Texas Natural Resources Conservation Commission (TNRCC) provides comments to July 5, 2001 response letter.
July 5, 2001	Follow-up response to November 6, 2000 TNRCC comment letter on the On-Site APAR submitted to TNRCC on behalf of UPRR.
January 9, 2001	Initial response to November 6, 2000 TNRCC comments.
November 6, 2000	TNRCC provides comments to On-Site APAR.
July 10, 2000	Affected Property Assessment Report for On-Site Property (On-Site APAR) submitted to TNRCC on behalf of UPRR by ERM.
February 20, 2000	Letter submitted to the TNRCC regarding proposed Phase 2-C investigation for further delineation of off-site areas



APPENDIX 3
CHRONOLOGY

Date	Description
September 10, 1999	Phase 2-B RFI/EOC Investigation Report submitted to TNRCC on behalf of UPRR by ERM
April 27, 1998	Interim Stabilization Measures Report – Southern Drainage Ditch, submitted to TNRCC on behalf of UPRR by ERM.
February 13, 1998	Phase 2-A RFI/EOC Investigation Report submitted to TNRCC on behalf of UPRR by ERM.
January 13, 1997	RFI portion of the Phase 1 RFI/EOC Investigation Report approved by TNRCC
November 26, 1996	EOC portion of the Phase 1 RFI/EOC Investigation Report approved by TNRCC
May 23, 1996	Phase 1 RFI/EOC Report submitted on behalf of Southern Pacific Transportation Company (SPTCo) by Terranext
October 16, 1995	RFI Work Plan approved by TNRCC
September 29, 1995	EOC Work Plan approved by TNRCC
January 10, 1995	Operation and Maintenance Plan approved by TNRCC
November 3, 1994	Revised Compliance Schedule approved by TNRCC
October 14, 1994	RCRA Facility Investigation (RFI) Work Plan submitted on behalf of SPTCo
September 16, 1994	Extent of Contamination (EOC) Work Plan submitted on behalf of SPTCo
September 7, 1994	Revised Compliance Schedule submitted on behalf of SPTCo
August 19, 1994	Operation and Maintenance Plan and Compliance Schedule submitted on behalf of SPTCo
June 20, 1994	Permit No. HW-50343-000 and Compliance Plan CP-50343-000 issued by TNRCC.
October 1993	RCRA Facility Assessment completed on behalf of U.S. EPA by PRC Environmental Management, Inc.
May 13, 1991	RCRA Permit Application submitted by SPTCo



Note: Not all groundwater sampling events are listed in the chronology

ATTACHMENT A
POST-HARVEY SOIL CAP INSPECTION PHOTOLOG



ATTACHMENT A - POST-HURRICANE HARVEY INSPECTION

<h1>PBW</h1>		<h2>PHOTOGRAPHIC LOG</h2>	
Client Name: Union Pacific Railroad		Site Location: Houston Wood Preserving Works, 4910 Liberty Road, Houston, Texas	Project No.: 1358-603
Photo No. 1	Date: 8/31/17		
Description: Bare patch in vegetation in the Northeastern soil cap area.			
Photo No. 2	Date: 8/31/17		
Description: Healthy vegetation cover on soil cap, looking north-northeast toward Lockwood Bridge.			



ATTACHMENT A - POST-HURRICANE HARVEY INSPECTION

<h1>PBW</h1>		<h2>PHOTOGRAPHIC LOG</h2>	
Client Name: Union Pacific Railroad		Site Location: Houston Wood Preserving Works, 4910 Liberty Road, Houston, Texas	Project No. 1358-603
Photo No. 3	Date: 8/31/17		
Description: Healthy vegetation cover on soil cap looking north-northwest. Some overgrown vegetation along northern fence.			
Photo No. 4	Date: 8/31/17		
Description: Overgrown vegetation along 80 linear feet of the northern fence line approximately 100 feet from the main HWPW entrance.			

ATTACHMENT A - POST-HURRICANE HARVEY INSPECTION

<h1>PBW</h1>		<h2>PHOTOGRAPHIC LOG</h2>
Client Name: Union Pacific Railroad		Site Location: Houston Wood Preserving Works, 4910 Liberty Road, Houston, Texas
		Project No. 1358-603
Photo No. 5	Date: 8/31/17	
Description: Heavy vegetation along northern fence.		
Photo No. 6	Date: 8/31/17	
Description: Rut along northern fence line (outside of capped area) caused by a mower. Facing east toward Lockwood bridge.		



ATTACHMENT A - POST-HURRICANE HARVEY INSPECTION

<h1>PBW</h1>		<h2>PHOTOGRAPHIC LOG</h2>	
Client Name: Union Pacific Railroad		Site Location: Houston Wood Preserving Works, 4910 Liberty Road, Houston, Texas	
Project No.: 1358-603			
Photo No. 7	Date: 8/31/17		
Description: Small rill and bare patch with very minor amounts of erosion in north-northeastern area of soil cap. Looking south toward the Englewood Yard shop.			
Photo No. 8	Date: 8/31/17		
Description: Loose silt fence on northern fence along Liberty Road.			



ATTACHMENT A - POST-HURRICANE HARVEY INSPECTION

<h1>PBW</h1>		<h2>PHOTOGRAPHIC LOG</h2>	
Client Name: Union Pacific Railroad		Site Location: Houston Wood Preserving Works, 4910 Liberty Road, Houston, Texas	Project No.: 1358-603
Photo No. 9	Date: 8/31/17		
Description: Silt fence around storm water drain, Liberty Road in the background			
Photo No. 10	Date: 8/31/17		
Description: Grass cut too short along southern concrete barrier causing the vegetation to die. Facing east toward Lockwood Bridge.			

ATTACHMENT A - POST-HURRICANE HARVEY INSPECTION

<h1>PBW</h1>		<h2>PHOTOGRAPHIC LOG</h2>	
Client Name: Union Pacific Railroad		Site Location: Houston Wood Preserving Works, 4910 Liberty Road, Houston, Texas	Project No.: 1358-640
Photo No. 11	Date: 8/31/17		
Description: View of railroad ballast, in good shape.			
Photo No. 12	Date: 8/31/17		
Description: Minor amounts of debris and water in ballast cap, facing west.			

ATTACHMENT A - POST-HURRICANE HARVEY INSPECTION

<h1>PBW</h1>		<h2>PHOTOGRAPHIC LOG</h2>
Client Name: Union Pacific Railroad		Site Location: Houston Wood Preserving Works, 4910 Liberty Road, Houston, Texas
		Project No. 1358-603
Photo No. 13	Date: 8/31/17	
Description: Damaged sign along southwestern area of asphalt road.		
Photo No. 14	Date: 8/31/17	
Description: Furniture dumped on HWPW driveway.		

ATTACHMENT A - POST-HURRICANE HARVEY INSPECTION

PBW

PHOTOGRAPHIC LOG

Client Name:
Union Pacific Railroad

Site Location:
Houston Wood Preserving Works, 4910 Liberty Road,
Houston, Texas

Project No.
1358-603

Photo No.
15

Date:
9/1/2017

Description:

Container storage area with minor amounts of algae inside.



Photo No.
16

Date:
9/1/17

Description:

Concrete sidewalk in good shape, south side of Liberty Road facing west.

