



February 28, 2022

19119232

Ms. Sarah Schreier

Texas Commission on Environmental Quality
Industrial and Hazardous Waste Permits Section
MC-130
PO Box 13087
Austin, Texas 78711-3087

SUBJECT: 2021 BIENNIAL REPORT - UNION PACIFIC RAILROAD - HOUSTON WOOD PRESERVING WORKS HOUSTON, TEXAS TCEQ SWR NO. 31547; HAZARDOUS SOLID WASTE PERMIT NO. 50343

Dear Ms. Schreier,

Please find enclosed with this letter two copies of the 2021 Biennial Report for the Union Pacific Railroad Houston Wood Preserving Works (TCEQ Hazardous Solid Waste Permit No. 50343). The report was prepared in accordance with Provision II.B.7 of the Post-Closure Care Permit No. HW-50343, dated June 10, 2005.

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

Sincerely,

Golder Associates Inc.

A handwritten signature in black ink, appearing to read 'Michelle Hermiston'.

Michelle Hermiston
Senior Project Hydrogeologist

A handwritten signature in black ink, appearing to read 'Eric Matzner'.

Eric Matzner
Principal/Practice Leader

CC: Waste Program Manager, TCEQ Region 12, Houston
Mr. Kevin Peterburs, UPRR, Milwaukee, WI

Attachments: 2021 Biennial Report



REPORT

2021 Biennial Report

*Former Houston Wood Preserving Works
4910 Liberty Road
Houston, Texas
Permit No. HW-50343*

Submitted to:

Union Pacific Railroad

4823 N. 119th Street
Milwaukee, WI 53225

Submitted by:

Golder Associates Inc.

2201 Double Creek Dr, Suite 4004, Round Rock, Texas, USA 78664

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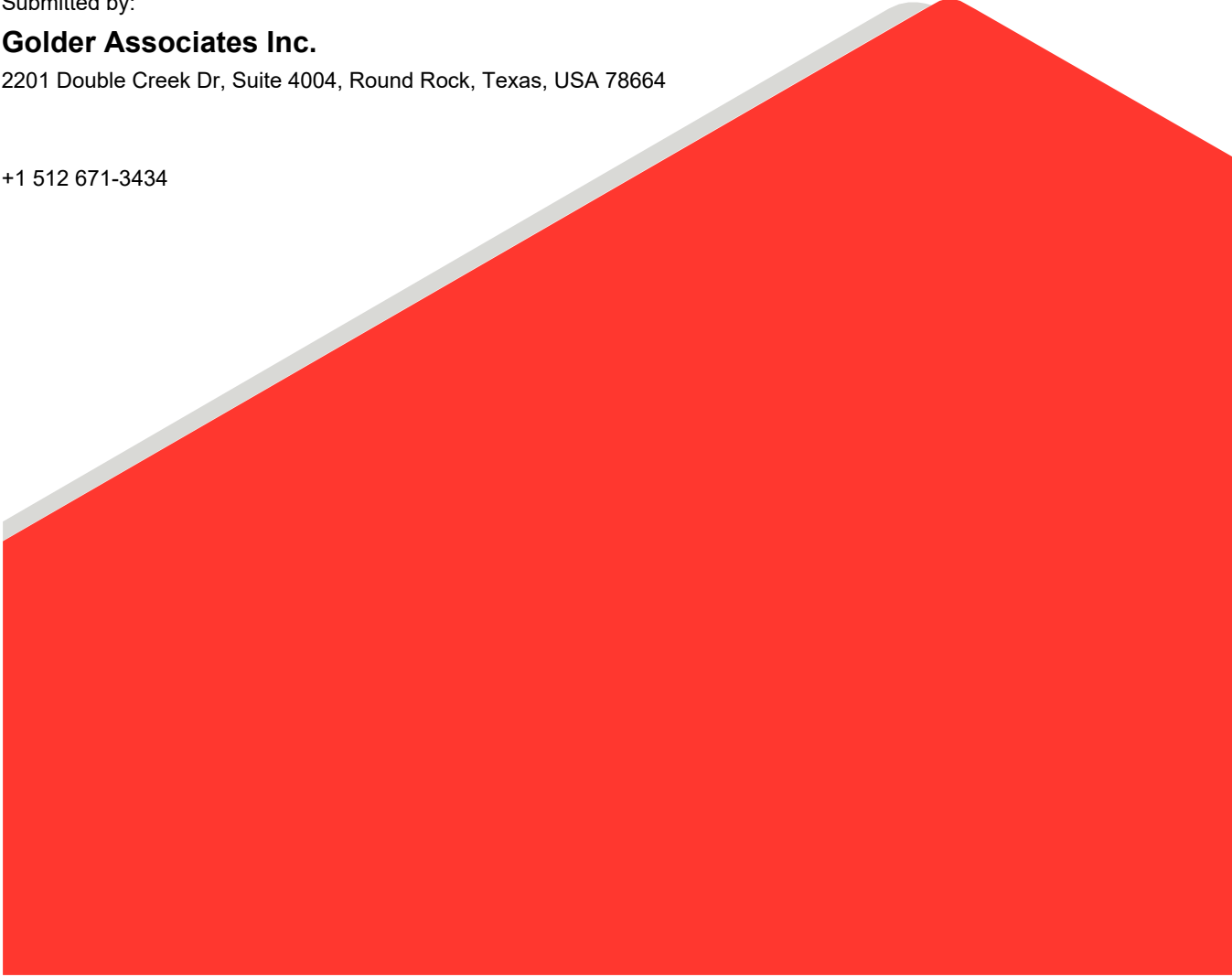
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1.0 INTRODUCTION

On June 10, 2005, the Texas Commission on Environmental Quality (TCEQ) re-issued Hazardous Waste Permit Number HW-50343-000 (the Permit) and TCEQ Compliance Plan number CP-50343 to Union Pacific Railroad (UPRR) for the Houston Wood Preserving Works (formerly Houston Tie Plant) located at 4910 Liberty Road, Houston, Texas (the Facility) (Figure 1). The permit was originally issued on June 20, 1994. The Permit authorizes post-closure care for one former surface impoundment (TCEQ Permit Unit No. 1), Solid Waste Management Unit No. 1 (SWMU No. 1) located at the Facility (Figure 2). This Biennial Report for 2021 was prepared by Golder Associates USA Inc. (Golder) on behalf of UPRR in accordance with the requirements of Provisions II.B.7 and VII.B.4 of the Permit.

1.1 Permit Requirements

Provision II.B.7 of the Permit requires that a Biennial Report meet the following requirements of 40 Code of Federal Regulations (CFR) §264.75 (sections of the report where responses are located):

- (a) U.S. EPA identification number, name, and address of the facility (Section 2.1);
- (b) Calendar year covered by the report (Section 2.2);
- (c) For off-site facilities, the EPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the year; for imported shipments, the report must give the name and address of the foreign generator (not applicable to this Facility);
- (d) TCEQ hazardous waste code and quantity of each hazardous waste received by the facility during the year (Section 2.3);
- (e) Method of storage, processing, or disposal of each hazardous waste (Section 2.4);
- (f) *[Reserved]*
- (g) Most recent closure cost estimate under the regulations contained in 40 CFR §264.142 and 30 TAC §335.178 and, for disposal facilities, the most recent post-closure care estimate under 40 CFR §264.144 (Section 2.5, Appendix A);
- (h) For generators who treat, store, or dispose of hazardous waste on site, a description of efforts undertaken to reduce the volume and toxicity of waste generated (Section 2.6);
- (i) For generators who treat, store, or dispose of hazardous waste on site, a description of changes in volume and toxicity of waste actually achieved in comparison with previous years (Section 2.7); and
- (j) Certification signed by owner or operator of the facility or authorized representative (Section 2.8, Appendix B).

As provided in Provision II.B, the Permit authorizes and requires the permittee to perform post-closure care for a closed landfill consisting of one former surface impoundment, Notice of Registration (NOR) Facility No. 1 (SWMU No. 1 – Figure 2). This impoundment has a total surface area of 0.5923 acres and a total capacity of 5,065 cubic yards. The waste was removed from the impoundment in 1984. Because this facility is closed, hazardous and toxic waste is not received or disposed at the Facility.

The Facility is no longer in operation. The only wastes being generated at the Facility include Investigation-Derived Wastes (IDW) associated with the periodic monitoring of Point of Compliance (POC) and Corrective Action Observation (CAO) wells, interim remedial activities, and implementation of investigation and remediation work plans approved under the Permit and Compliance Plan. A recovery system has not been installed for this facility; therefore, wastes listed above are addressed as they relate to soil investigations, groundwater monitoring, and dense non-aqueous phase liquid (DNAPL) recovery from recovery wells.

2.0 REPORT ITEMS

This section includes the information as required by 40 CFR §264.75 including facility identification, period covered, hazardous waste codes, waste storage information, post-closure care cost estimate revisions, waste minimization, and certification.

2.1 Facility Identification

This facility is identified by the following information:

EPA identification number: TXD000820266
Facility name: Union Pacific Railroad Houston Wood Preserving Works
Facility address:
Union Pacific Railroad
4910 Liberty Road
Houston, Texas 77026

2.2 Calendar Year Covered by this Report

The activity period covered by this report is designated in Provision II.B.7 of the Permit and encompasses January 1 through December 31, 2021.

2.3 Hazardous Waste Codes and Quantities Received

Based on a review of the NOR for the facility and waste generation activities for the facility during 2021, the following hazardous waste codes and quantities were generated at the facility in 2021 and disposed of off-site:

<i>TCEQ Waste Code</i>	<i>NOR Waste Description</i>	<i>Annual Quantity Generated in 2021 (pounds)</i>
0904101H	Groundwater generated from purging of various monitor wells for investigative purposes. Produced on an intermittent basis.	1,284
0909101H	Aqueous waste with low surfactants. Groundwater generated from drilling activities for investigative purposes. Produced on an intermittent basis	125,100
0915301H	Soil derived from environmental investigation or remediation activities at the Site. Produced on intermittent basis.	162,500
0917406H	Plastic and used Personal Protective Equipment generated as a result of monitor well and/or soil sampling.	147
0918219H	Recovered creosote non-aqueous phase liquids from groundwater monitoring/recovery wells, may be mixed/emulsion with groundwater, generated as part of corrective action work performed at the site. Generated on intermittent basis.	2,246

2.4 Method of Storage, Process, or Disposal of Hazardous Wastes

The hazardous waste generated at the facility during the 2021 reporting period was identified in Section 2.3. These wastes were stored temporarily in or near the Container Storage Area (NOR Unit No. 007 and Unit No. 008) pending off-site disposal. For 2021, the Container Storage Area was a less than 90-day storage facility for hazardous waste and also used for storage of other non-hazardous wastes.

Waste streams listed under Section 2.3 were disposed of at the Clean Harbors Deer Park Facility in La Porte, Texas (U.S. EPA ID Number: TXD055141378) and the US Ecology Robstown Facility in Robstown, Texas (U.S. EPA ID Number: TXD069452340). Wastes were shipped under Hazardous Waste Management Method Code H132 (TCEQ waste codes 0904101H and 0915301H), H039 (TCEQ waste code 0917406H), and H141 (0918219H). TCEQ waste code 0909101H was generated at the end of the year in 2021 and is still awaiting disposal.

2.5 Post-Closure Care Cost Estimate

The regulated unit was closed in 1984, with the post-closure care period beginning in 1994. A revised post-closure care cost estimate for 2021 was prepared in accordance with 40 CFR §264.144. The total estimated cost for post-closure care for 2021 is \$22,473, as summarized in Appendix A.

2.6 Reduction of Volume and Toxicity of Waste Generated

Waste minimization typically applies to operating facilities. As stated above, the only wastes generated at this facility are a result of the specific investigation, interim action, or post-closure care activities directed by the TCEQ under the Permit and Compliance Plan. These IDW are related to the scope of the RCRA Facility Investigation (RFI), Extent of Contamination (EOC) activities, and pre-design activities as part of the Response Action Plan (RAP), as approved by the TCEQ under the Permit and Compliance Plan.

No hazardous wastes were treated or disposed on site during 2021. The only hazardous waste stored on site consisted of IDW including used personal protective equipment, soil cuttings, decon water, water from hydrovac activities, groundwater generated from purging various monitor wells for investigative purposes, and recovered creosote non-aqueous phase liquids (NAPL) where creosote NAPL is pumped from groundwater wells on a twice per week basis as part of the remedial action at the Site. Investigative techniques such as low-flow ground water sampling and direct-push technologies or sonic drilling techniques for soil sampling are utilized when possible, during installation and sampling of soil borings, monitoring wells and piezometers in order to reduce the volume of soil cuttings and purge water generated for off-site disposal.

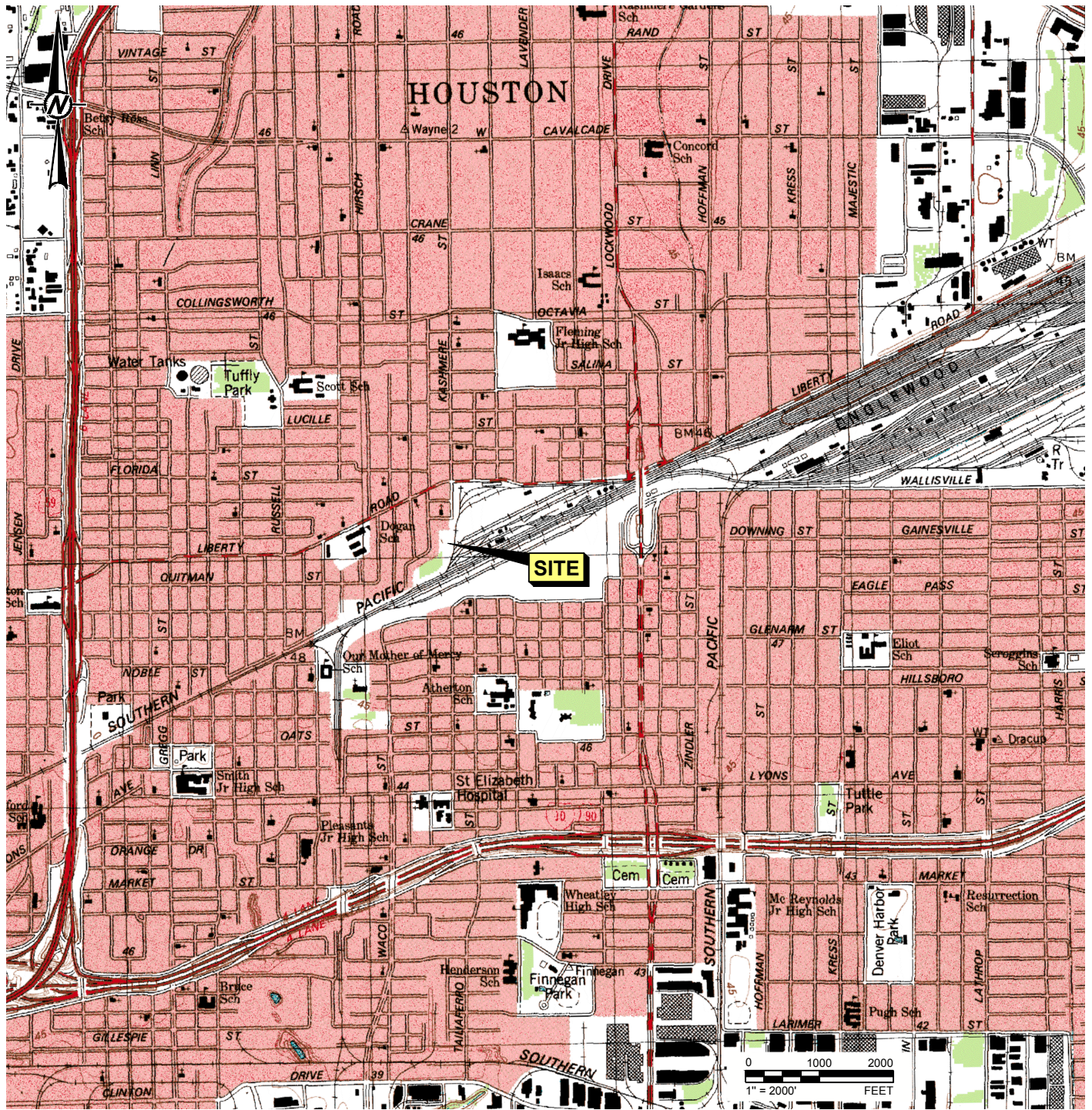
2.7 Description of the Change in Volume and Toxicity Achieved

This requirement is not applicable to the facility because the waste generated is related to the implementation of the RFI and EOC Work Plan.

2.8 Certification

A certification signed by the owner or operator of the facility or his authorized representative, as required, is included as Appendix B.

FIGURES



REFERENCE(S)

BASE MAP TAKEN FROM USGS 7.5 MIN. QUADRANGLE, SETTEGAST, TX, 1982.

CLIENT

UNION PACIFIC RAILROAD CO.

PROJECT

HOUSTON WOOD PRESERVING WORKS

TITLE

SITE LOCATION MAP

CONSULTANT

wsp **GOLDER**

YYYY-MM-DD

2020-02-18

DESIGNED

AJD

PREPARED

AJD

REVIEWED

ECM

APPROVED

ECM

PROJECT NO.

19119232

REV.

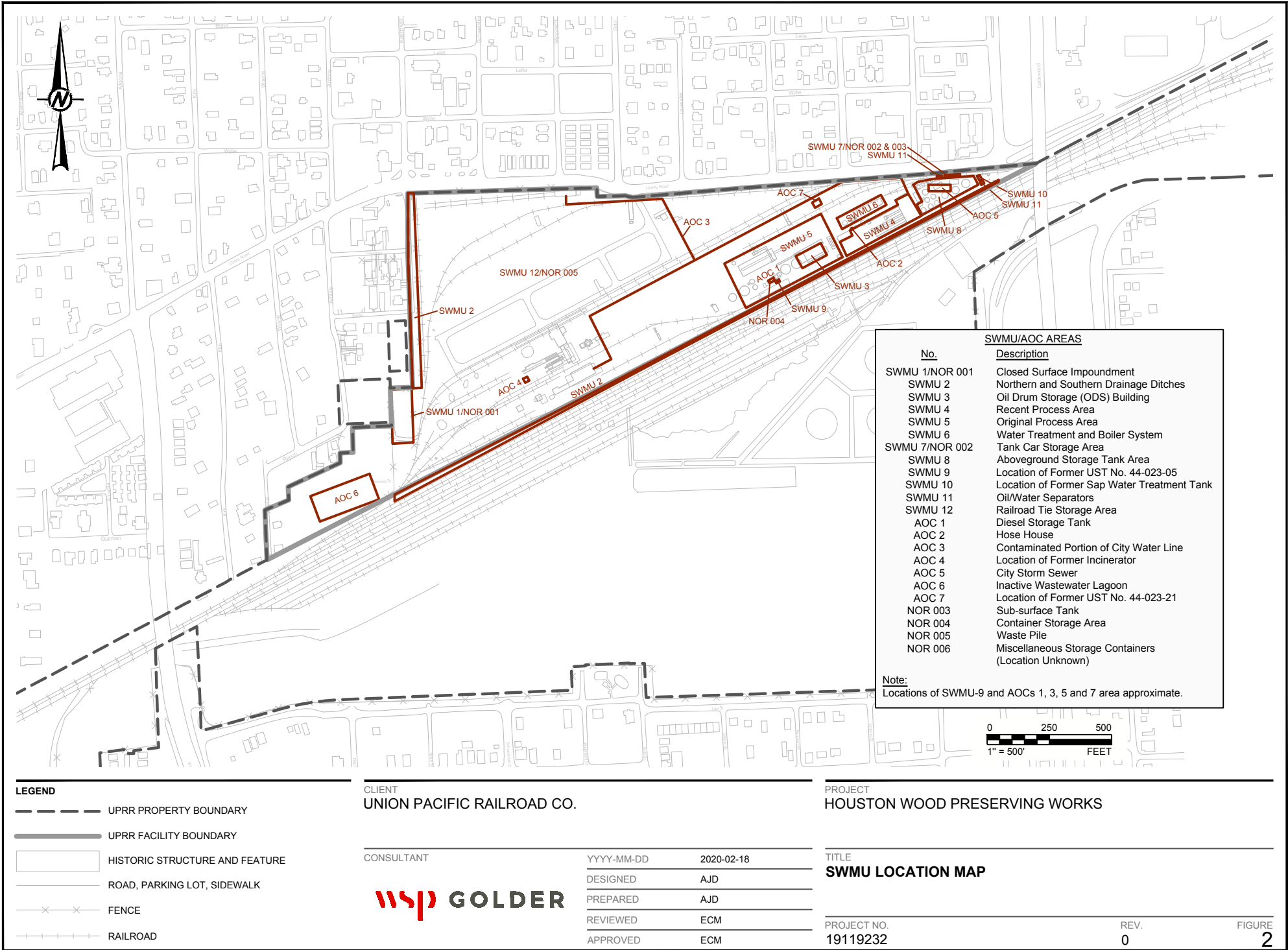
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FIGURE

1



QUADRANGLE LOCATION



IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI A

APPENDIX A

Post-Closure Care Cost Calculation

Post-Closure Care Cost Calculation
Former Houston Wood Preserving Works
4910 Liberty Road, Houston, Texas

Surface Impoundment (NOR Unit No. 1)
Post-Closure Care Permit HW-50343-000
Industrial Solid Waste Registration No. 31547

Ground Water Monitoring

10 existing wells/piezometers sampled semiannually at a cost of \$514 each	\$10,280
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Inspection and Maintenance

Mowing monthly at a cost of \$300 per month	\$3,600
Impoundment/storage area inspected quarterly	<u>\$756</u>

	\$14,636
Contingency (10% minimum)	\$1,464

Total Estimated Annual Cost (2004 dollars)	\$16,100
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Annual costs adjusted to 2021 dollars using the inflation factor of 1.396⁽¹⁾	\$22,473
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Total Unit Post-Closure Care Costs (Post Closure Care began 1994)	
(x6 years remaining on post-closure care)	\$134,838

NOTE:

(1) The annual cost estimate for post-closure care has been adjusted and rounded from 2004 dollars in accordance with 40 CFR §264.144 using the Implicit Price Deflator obtained from the U.S. Department of Commerce, Bureau of Economic Analysis:

<https://apps.bea.gov/iTable/iTable.cfm?reqid=19&step=3&isuri=1&1921=survey&1903=13#reqid=19&step=3&isuri=1&1921=survey&1903=13>

The Implicit Price Deflator for Gross Domestic Product results in an inflation factor of 1.396 from 2004 (Avg 84.773) to 2021 (Avg 118.3293) based on the Index for 2012 = 100.

APPENDIX B

Certification Page

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



Signature



Name/Title

Authorized Representative

Union Pacific Railroad