



Consulting Engineers  
and Scientists

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VIA HAND DELIVERY

December 10, 2014  
PBW Project No. 1358

Ms. Karen Scott  
Industrial Hazardous Waste Permits Section  
MC-130  
Texas Commission on Environmental Quality  
P.O. Box 13087  
Austin, Texas 78711-3087

RECEIVED  
WASTE PERMITS DIVISION  
TEXAS COMMISSION ON  
ENVIRONMENTAL QUALITY  
DEC 10 2014

RECEIVED

**Re: Permit Renewal Application  
Houston Wood Preserving Works, Houston, Texas  
Union Pacific Railroad  
Permit No. HW-50343  
SWR No. 31547**

Dear Ms. Scott:

Please find enclosed an original and three copies of a Permit Renewal application for the Union Pacific Railroad Houston Wood Preserving Works facility in Houston, Texas. The following associated items are also transmitted with the application:

- Six additional copies of Part B Section I,
- Completed TCEQ Core Data Form – included in Part B Section I of the Application,
- Photocopy of a check for the application fee – included in Section XII of the Application, and
- CD with application mailing list formatted for use with Avery Template 5160 – attached.

Thank you for your consideration of this permit renewal application. If you have any questions or need any additional information, please call me at (512) 671-3434.

Sincerely,

PASTOR, BEHLING & WHEELER, LLC

Eric C. Matzner, P.G.  
Associate Hydrogeologist

RECEIVED

DEC 10 2014

WASTE PERMITS DIVISION  
TEXAS COMMISSION ON  
ENVIRONMENTAL QUALITY

Enclosures

cc: Mr. Geoffrey Reeder, Union Pacific Railroad  
Waste Manager, TCEQ Region 12



**Texas Commission on Environmental Quality  
Instructions and Procedural Information  
for Filing a Permit Application for a  
Hazardous Waste Storage, Processing, or Disposal Facility**

**Part A**

**[Form Availability:** This form, as well as other Industrial and Hazardous Waste documents, is available on the Internet World Wide Web, Waste Management home page at address [http://www.tceq.texas.gov/permitting/waste\\_permits/waste\\_mgmt.html](http://www.tceq.texas.gov/permitting/waste_permits/waste_mgmt.html)]

**General Instructions**

1. A person (individual, corporation or other legal entity) who stores, processes or disposes of hazardous waste (except where such storage and/or processing is excluded from permit requirements in accordance with 30 Texas Administrative Code (TAC) Section 335.2) must obtain a permit pursuant to the Texas Health and Safety Code. In applying to the Texas Commission on Environmental Quality, hereafter referred to as the Commission, the applicant shall follow the procedures outlined below, on the application and in the Rules of the Commission.
2. The application (one original plus three (3) complete copies<sup>1</sup>) should be mailed to:

Texas Commission on Environmental Quality  
Attention: Waste Permits Division, MC126  
P. O. Box 13087  
Austin, Texas 78711-3087
3. Signature on Application [30 TAC 305.44]. The application shall be signed by the owner and operator or by a duly authorized agent, employee, officer, or representative of the owner or operator and shall be verified before a notary public. When another person signs on behalf of the owner and operator, this person's title or relationship to the owner or operator should be shown. In all cases, the person signing the form should be authorized to do so by the owner or operator (the Commission may require a person signing on behalf of an owner or operator to provide proof of authorization). An application submitted for a corporation must be signed by (or the signatory must be authorized by) a responsible corporate officer such as a president, secretary, treasurer, vice-president, or designated manager; or for a partnership or sole proprietorship, by a general partner or the proprietor, respectively. In the case of a municipal, state, federal, or other public facility, the application shall be signed by either a principal executive officer or ranking elected official.
4. An application will not be processed until all information required to properly evaluate the application has been obtained. When an application is severely lacking in detail and/or the applicant fails to submit additionally requested information in a timely manner, the application

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<sup>1</sup> The third copy may optionally consist of paper copies of all plans and maps and a computer diskette of the remaining document. The document should be formatted in Word processing software up to and including version 6.1 or a 100% compatible format. Files may be compressed using PKZIP Ver. 2 or a 100% compatible program.

will not be considered to be "filed in accordance with the rules and regulations of the Commission."

Please submit any application revisions with a revised date and page numbers at the bottom of the page(s).

5. Fees and Costs

- a. The fee for filing an application is discussed in Section XI of Part B, form number TCEQ-0376.
- b. The applicant for a permit is required to bear the cost of publication of notice of the application in a newspaper as prescribed by 30 TAC Section 39.5(g).

6. A person may not commence operation of a hazardous waste management facility until the Commission has issued a permit to authorize the storage, processing, or disposal of hazardous waste, except with the approval of the Commission.

7. Designation of Material as Confidential

The designation of material as confidential is frequently carried to excess. The Commission has a responsibility to provide a copy of each application to other review agencies and to interested persons upon request and to safeguard confidential material from becoming public knowledge. Thus, the Commission requests that the applicant (1) be prudent in the designation of material as confidential and (2) submit such material only when it might be essential to the staff in their development of a recommendation.

The Commission suggests that the applicant **NOT** submit confidential information as part of the permit application. However, if this cannot be avoided, the confidential information should be described in non-confidential terms throughout the application, and submitted as a document or binder, and conspicuously marked "CONFIDENTIAL."

Reasons of confidentiality include the concept of trade secrecy and other related legal concepts which give a business the right to preserve confidentiality of business information to obtain or retain advantages from its right in the information. This includes authorizations under 18 U.S.C. 1905 and special rules cited in 40 CFR Chapter I, Part 2, Subpart B.

Section 361.037 of the Texas Health and Safety Code does not allow an applicant for an industrial and hazardous waste permit to claim as confidential any record pertaining to the characteristics of the industrial solid waste.

The applicant may elect to withdraw any confidential material submitted with the application. However, the permit cannot be issued, amended, or modified if the application is incomplete.

## Part II

### Procedural Information

After the submittal of Parts A and B of the application, the TCEQ will provide public notice of receipt of the application. The Executive Director's staff will review the application for completeness of information submitted. During the review, the applicant may be contacted for clarification or additional information. When all pertinent information is present, the application or a summary of its contents will be forwarded for review by other state agencies and local governmental entities interested in water quality control and solid waste management. After technical evaluation, opportunity for public hearing will be afforded.

Note that for facilities which had "commenced on-site storage, processing, or disposal of hazardous waste" [see 30 TAC Section 335.43(b)] on or before the date such waste is identified or listed as hazardous by EPA, the Texas Health and Safety Code provides in Section 361.082(f) that these facilities may continue to manage hazardous waste until such time as the Commission approves or denies the application, provided that the applicant has filed the permit application in accordance with the rules and regulations of the Commission.

The Commission may act upon an application for a permit, permit amendment, permit modification, or renewal of a permit without the necessity of holding a public hearing:

1. (a) When notice of the application has been mailed to persons possibly affected by the proposed permit; and  
  
(b) When notice has been published at least once in a newspaper regularly published or circulated within each county where the proposed facility is located; and  
  
(c) Within forty-five (45) days following publication of the Commission's notice, a Commissioner, the Executive Director or an affected person has not requested a public hearing; or
2. For a Class 1 or a Class 2 permit modification or a minor amendment to a permit. The Commission may, in certain cases, hold a public hearing for a Class 2 permit modification or a minor amendment.

A public hearing may be scheduled on an application for a RCRA hazardous waste permit when requested by a Commissioner, the Executive Director, or an affected person within forty-five (45) days following the newspaper publication.

Requirements of Giving Notice of the Application:

1. By the Applicant: Every applicant for a permit, permit amendment, permit modification, or permit renewal shall publish notice (see note below) of the application at least once in a newspaper regularly published or circulated within each county where the proposed facility is located. Where a public hearing has been requested, notice will be mailed to the applicant in ample time for publication, which shall be not less than thirty (30) days prior to the date set for the hearing. Except in the case of a notice of a permit modification request, the Commission will mail the appropriate notice and instructions for publication to the applicant.

NOTE: Additional publication and direct mail notice to affected persons will result if a public hearing is requested following newspaper publication of the notice of application. The cost of providing this additionally required publication and service of notice to affected persons will be assumed by the applicant.

2. By the Texas Commission on Environmental Quality: The Commission will mail notice of the application (except for permit modifications) to affected persons and certain governmental entities. The notice will be mailed at the same time instructions for newspaper publications are mailed to the applicant.
3. Bilingual Notice Instructions:

For certain permit applications, public notice in an alternate language is required. If an elementary school or middle school nearest to the facility offers a bilingual program, notice may be required to be published in an alternative language. The Texas Education Code, upon which the TCEQ alternative language notice requirements are based, requires a bilingual education program for an entire school district should the requisite alternative language speaking student population exist. However, there may not be any bilingual-speaking students at a particular school within a district which is required to offer the bilingual education program. For this reason, the requirement to publish notice in an alternative language is triggered if the nearest elementary or middle school, as part of a larger school district, is required to make a bilingual education program available to qualifying students and either the school has students enrolled at such a program on-site, or has students who attend such a program at another location to satisfy the school's obligation to provide such a program.

If it is determined that a bilingual notice is required, the applicant is responsible for ensuring that the publication in the alternate language is complete and accurate in that language. Electronic versions of the Spanish template examples are available from the TCEQ to help the applicant complete the publication in the alternative language.

**Bilingual Notice Application Form:**

**Bilingual notice confirmation for this application:**

1. Is the school district of the elementary or middle school nearest to the facility required by the Texas Education Code to have a bilingual program?  YES  NO

(If NO, alternative language notice publication not required)

2. If YES to question 1, are students enrolled in a bilingual education program at either the elementary school or the middle school nearest to the facility?  YES  NO

(If YES to questions 1 and 2, alternative language publication is required; If NO to question 2, then consider the next question)

3. If YES to question 1, are there students enrolled at either the elementary school or the middle school nearest to the facility who attend a bilingual education program at another location?

YES  NO

(If Yes to questions 1 and 3, alternative language publication is required; If NO to question 3, then consider the next question)

4. If YES to question 1, would either the elementary school or the middle school nearest to the facility be required to provide a bilingual education program but for the fact that it secured a waiver from this requirement, as available under 19 TAC §89.1205(g)?  YES  NO

(If Yes to questions 1 and 4, alternative language publication is required; If NO to question 4, alternative language notice publication not required)

If a bilingual education program(s) is provided by either the elementary school or the middle school nearest to the facility, which language(s) is required by the bilingual program?

Spanish

Consideration of the Permit Application by the Commission:

The applicant will be notified by the Commission when the application is set for final consideration. If the Commission issues the permit, the applicant will be mailed a copy of the permit by the TCEQ Office of the Chief Clerk within one (1) month following Commission approval. (NOTE: Only one copy is mailed to the applicant and that copy will be sent to the official mailing address of the applicant as shown on the permit application form.)

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**Texas Commission on Environmental Quality**  
**Permit Application for a Hazardous Waste Storage/Processing/Disposal Facility**  
**Part A - Facility Background Information**

I. General Information

A. Facility Name Union Pacific Railroad Company Houston Wood Preserving Works  
(Individual, Corporation, or Other Legal Entity Name)

TCEQ Solid Waste Registration No: 31547 EPA I.D. No. TXD000820266

Street Address (If Available): 4910 Liberty Road

City: Houston, State TX Zip Code 77026

County Harris

Telephone Number: 281-350-7197 Charter Number NA

If the application is submitted on behalf of a corporation, please identify the Charter Number as recorded with the Office of the Secretary of State for Texas.

B. Facility Contact

1. List those persons or firms who will act as primary contact for the applicant during the processing of the permit application. Also indicate the capacity in which each person may represent the applicant (engineering, legal, etc.). The person listed first will be the primary recipient of correspondence regarding this application. Include the complete mailing addresses and phone numbers.

**Mr. Geoffrey B. Reeder, P.G.**  
**Manager, Environmental Site Remediation**  
**Union Pacific Railroad Company**  
**24125 Aldine Westfield Rd.**  
**Spring, TX 77373**  
**Phone: 281-350-7197**  
**Fax: 402-233-2351**  
**gbreeder@up.com**

2. If the application is submitted by a corporation or by a person residing out of state, the applicant must register an Agent in Service or Agent of Service with the Texas Secretary of State's office and provide a complete mailing address for the agent. The agent must be a Texas resident.

**CT Corporation System**  
**350 North St. Paul Street, Suite 2900**  
**Dallas, TX 75201**  
**Phone: (214) 932-3601**



C. Operator<sup>1</sup>: Identify the entity who will conduct facility operations.

Operator Name Union Pacific Railroad Company

Address: 1400 Douglas St., STOP 1030

City: Omaha State NE Zip Code 68179

Telephone Number: 402-544-5000 Charter Number NA

D. Owner

1. Indicate the ownership status of the facility:

a. Private  \_\_\_\_\_

- (1)  Corporation
- (2) \_\_\_\_\_ Partnership
- (3) \_\_\_\_\_ Proprietorship
- (4) \_\_\_\_\_ Non-profit organization

b. Public \_\_\_\_\_

- (1) \_\_\_\_\_ Federal
- (2) \_\_\_\_\_ Military
- (3) \_\_\_\_\_ State
- (4) \_\_\_\_\_ Regional
- (5) \_\_\_\_\_ County
- (6) \_\_\_\_\_ Municipal
- (7) \_\_\_\_\_ Other (specify)

2. Does the operator own the facility units and facility property?

Yes  No

If you checked "no",

- c. Submit as "Attachment A" a copy of the lease for use of or the option to buy said facility units and/or facility property, as appropriate; and
- d. Identify the facility units owner(s) and/or facility property owner(s). Please note that the owner(s) is/are required to sign the application on page 5.

<sup>1</sup>The operator has the duty to submit an application if the facility is owned by one person and operated by another [30 TAC 305.43(b)]. The permit will specify the operator and the owner who is listed on this application [Section 361.087 Texas Health and Safety Code].

Owner Name Union Pacific Railroad Company

Address: 1400 Douglas St., STOP 1030

City: Omaha State: NE Zip Code: 68179

Telephone Number: 402-544-5000

E. Type of Application Submittal:

Initial  X  or Revision \_\_\_\_\_

F. Registration and Permit Information

Indicate (by listing the permit number(s) in the right-hand column below) all existing or pending State and/or Federal permits or construction approvals which pertain to pollution control or industrial solid waste management activities conducted by your plant or at your location. Complete each blank by entering the *permit number*, or the *date of application*, or "none".

Relevant Program and/or Law	Permit No.	Agency*
1. Texas Solid Waste Disposal Act	<u>31547</u>	<u>TCEQ</u>
2. Wastewater disposal under the Texas Water Code	<u>None</u>	_____
3. Underground injection under the Texas Water Code	<u>None</u>	_____
4. Texas Clean Air Act	<u>None</u>	_____
5. Texas Uranium Surface Mining & Reclamation Act	<u>None</u>	_____
6. Texas Surface Coal Mining & Reclamation Act	<u>None</u>	_____
7. Hazardous Waste Management program under the Resource Conservation and Recovery Act	<u>50343</u>	<u>TCEQ</u>
8. UIC program under the Safe Drinking Water Act	<u>None</u>	_____
9. TPDES program under the Clean Water Act	<u>None</u>	_____
10. PSD program under the Clean Air Act	<u>None</u>	_____

- |   |             |       |
|---|-------------|-------|
| 11. Nonattainment program under the Clean Air Act   | <u>None</u> | _____ |
| 12. National Emission Standards for Hazardous Pollutants (NESHAP) Pre-construction approval under the Clean Air Act | <u>None</u> | _____ |
| 13. Ocean dumping permits under the Marine Protection Research and Sanctuaries Act                                  | <u>None</u> | _____ |
| 14. Dredge or fill permits under section 404 of the Clean Water Act   | <u>None</u> | _____ |
| 15. Other relevant environmental permits  | <u>None</u> | _____ |

\*Use the following acronyms for each agency as shown below:

- TCEQ = Texas Commission on Environmental Quality
- TRC = Texas Railroad Commission
- TDH = Texas Department of Health
- TDA = Texas Department of Agriculture
- EPA = U.S. Environmental Protection Agency
- CORPS = U.S. Army Corps of Engineers

- G. Give a brief description of the nature of your business.
- H. The TCEQ requires that a Core Data Form (Form 10400) be submitted on all incoming applications unless a Regulated Entity and Customer Reference Number has been issued by the TCEQ and no core data information has changed. For more information regarding the Core Data Form, call (512) 239-1575 or go to: [www.TCEQ.state.tx.us/permitting/projects/cr](http://www.TCEQ.state.tx.us/permitting/projects/cr).

Signature Page

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 the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Operator Signature: RMGrimaila Date: 12/5/14

Name and Official Title (type or print) Bob Grimaila, UP Safety

Operator Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name and Official Title (type or print) \_\_\_\_\_

Operator Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name and Official Title (type or print) \_\_\_\_\_

Operator Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name and Official Title (type or print) \_\_\_\_\_

To be completed by the operator if the application is signed by an authorized representative for the operator

I, \_\_\_\_\_ hereby designate \_\_\_\_\_  
(operator) (authorized representative)

as my representative and hereby authorize said representative to sign any application, submit additional information as may be requested by the Commission; and/or appear for me at any hearing or before the Texas Commission on Environmental Quality in conjunction with this request for a Texas Water Code or Texas Solid Waste Disposal Act permit. I further understand that I am responsible for the contents of this application, for oral statements given by my authorized representative support of the application, and for compliance with the terms and conditions of any permit which might be issued based upon this application.

Printed or Typed Name of Operator or Principal Executive Officer

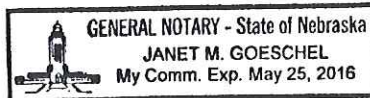
Signature

(Note: Application Must Bear Signature & Seal of Notary Public)

Subscribed and sworn to before me by the said Robert M. Grimaila on this 5<sup>th</sup> day of December, 2014.

My commission expires of the 25<sup>th</sup> day of May, 2016

Janet M. Goeschel  
Notary Public in and for Douglas County, Nebraska



II. Facility Background Information

A. Location of Facility for which the application is submitted

1. Give a description of the location of the facility site with respect to known or easily identifiable landmarks.

**The facility is located on the south side of Liberty Road between the intersections of Liberty and Lockwood Drive and Liberty and Waco Street, approximately one mile from the intersection of Interstate 10(I-10) and Waco Street.**

2. Detail the access routes from the nearest U.S. or State Highway to the facility.
3. Enter the geographical coordinates of the facility:

Latitude:  29  deg  47  min  14  sec

Longitude:  95  deg  19  min  13  sec

4. Is the facility located on Indian lands?

Yes  No

B. Legal Description of Facility

Submit as "Attachment B" a legal description(s) of the tract or tracts of land upon which the waste management operations referred to in this permit application occur or will occur. Although a legal description is required, a metes and bounds description is not necessary for urban sites with appropriate "lot" description(s). A survey plat or facility plan drawing which shows the specific points referenced in the survey should also be included in Attachment B.

C. SIC Codes

List, in descending order of significance, the four digit standard industrial classification (SIC) codes which best describe your facility in terms of the principal products or services you produce or provide. Also, specify each classification in words. These classifications may differ from the SIC codes describing the operation generating the hazardous wastes.

4-digit SIC Code	Description
4011	Railroad – Line Haul Operating

SIC code numbers are descriptions which may be found in the Standard Industrial Classification Manual prepared by the Executive Officer of the President, Office of Management and Budget, which is available from the Government Printing Office, Washington, D.C. Use the current edition of the manual.

III. Wastes and Waste Management

A. Waste Generation and Management Activities

Is any hazardous waste [see Title 40, Code of Federal Regulations (CFR), Part 261] presently or proposed to be generated or received at your facility?

Yes  No

**If no**, go to Section III.B.2 below.

**If yes**, answer the following question.

1. Are you presently registered with TCEQ as a solid waste generator?

Yes  No  Pending

**If no**, contact the Industrial and Hazardous Waste Division of TCEQ in Austin, Texas to obtain registration information. Also, continue with the application form (go to Number 2 below).

**If yes**, go to Section I of your TCEQ Notice of Registration, determine which of your wastes are hazardous, and list these wastes (and mixtures) in Table III-1 (see Number 2 below).

2. Complete Table III-1, Hazardous Wastes and Management Activities, below, listing all hazardous wastes, all mixtures containing any hazardous wastes, and hazardous debris which were, are presently, or are proposed to be handled at your facility in interim status or permitted units. (see 40 CFR 261 and 268.2), attaching additional copies as necessary.

*Guidelines for the Classification & Coding of Industrial Wastes and Hazardous Wastes*, TCEQ publication RG-22, contains guidance on how to properly classify and code industrial waste and hazardous waste in accordance with 30 TAC 335.501-335.515 (Subchapter R).

If you are not registered with TCEQ, enter "NA" for TCEQ Waste Code Number.

For the EPA Hazardous Waste Numbers, see 40 CFR 261.20-33. For annual quantity, provide the amount in units of pounds (as generated and/or received) for each waste and/or waste mixture.

B. Waste Management Units Summary

1. For each waste and waste mixture listed in Table III-1 that is stored, processed, and/or disposed on-site (except where such storage and/or processing is excluded from permit requirements in accordance with Texas Administrative Code (TAC) Section 335), complete Table III-2, Hazardous Waste Management Unit Checklist, and enter the name of each hazardous waste management unit (Note: Please make copies of Table III-2 if necessary).

Give the design capacity of each hazardous waste management unit in any of the units of measure shown. In the case of inactive or closed units for which design details are unavailable, an estimate of the design capacity is sufficient.

Please provide a description for each waste management unit described in your own words on the line provided for "Waste Management Unit."

2. Has the applicant at any time conducted the on-site disposal of industrial solid waste now identified or listed as hazardous waste?

Yes  No

**If yes**, complete Table III-2 indicating the hazardous waste management units which were once utilized at your plant site but are no longer in service (i.e., inactive or closed facility units).

**If no**, and if no hazardous waste is presently or proposed to be stored [for longer than 90 days (see 30 TAC Section 335.69)], processed, or disposed of at your facility, then you need not file this permit application. Otherwise proceed with the application form.

3. Provide an estimate of the total weight (lbs) of hazardous waste material that has been disposed of and/or stored within your site boundaries and not removed to another site.

#### C. Location of Waste Management Units

1. Submit as "Attachment C" a drawn-to-scale topographic map (or other map if a topographic map is unavailable) extending one mile beyond the facility boundaries, depicting the following:
- The approximate boundaries of the facility (described in Section II.B) and within these boundaries, the location and boundaries of the areas occupied by each active, inactive, and proposed hazardous waste management unit (see Table III-2). Each depicted area should be labeled to identify the unit(s), unit status (i.e., active, inactive, or proposed), and areal size in acres.
  - The overall facility and all surface intake and discharge structures;
  - All on-site injection wells where liquids are injected underground;
  - All known monitor wells and boreholes within the property boundaries of the facility; and
  - All wells, springs, other surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant within the map area and the purpose for which each water well is used (e.g., domestic, livestock, agricultural, industrial, etc.).
2. Submit as "Attachment D" photographs which clearly delineate all hazardous waste

management storage, processing, and disposal units, as well as sites of future storage, processing and disposal units.

D. Flow Diagram/Description

Show as "Attachment E" process flow diagrams and step-by-step word descriptions of the process flow, depicting the handling, collection, storage, processing, and/or disposal of each of the hazardous wastes previously listed in this application.

The flow diagrams or descriptions should include the following information:

1. Originating point of each waste and waste classification code;
2. Means of conveyance utilized in every step of the process flow;
3. Name and function of each facility component through which the waste passes;
4. The ultimate disposition of all wastes (if off-site, specify "off-site") and waste residues.



IV. Index Of Attachments

List and index below all attachments to this application and indicate if included or not included:

<b>Item</b>	<b>Attachments</b>	<b>Attachment</b>	<b>Included</b>	<b>Not Included</b>
I.D.2.a	Lease/Option to buy	A		X
II.B	Site legal description	B	X	
III.C.1	Facility boundaries and adjacent waters map	C	X	
III.C.2	Photographs	D	X	
III.D	Process flow diagram/description	E		X

**Table III-1 Hazardous Wastes and Management Activities**

Verbal Description of Waste	TCEQ Waste for Code and Classification Code	EPA Hazardous Waste Number	Storage <sup>1</sup> of Wastes Received from Off-Site	Processing <sup>2</sup> of Wastes Received from Off-Site	Disposal of Wastes Received from Off-Site	Storage <sup>1</sup> of Wastes Generated On-Site	Processing <sup>2</sup> of Wastes Generated On-Site	Disposal of Wastes Generated On-Site	Annual Quantity Generated and/or Received
Soil generated primarily by the boring of monitor wells around the clean-closed wood preserving operation surface impoundment.	0001301H	F034 K001				X			0
Aqueous Waste with low surfactants. Groundwater generated from drilling activities for investigative purposes.	0909101H	F034 K001				X			0
Creosote sludge, soil mixture generated as part of corrective action performed on-site.	0912489H	F034 K001				X			0
Groundwater generated from purging of various monitor wells for investigative purposes.	0914101H	F034 K001				X			1020 lbs
Soil derived from the boring of monitor wells for investigative purposes.	0915301H	F034 K001				X			0
Plastic and used personal protective equipment generated as a result of monitor well and/or soil sampling.	0917406H	F034 K001				X			0
Spent Solvent	0501203H	D001 D018 D039				X			0
Recovered creosote NAPL from groundwater monitoring wells	0918219H	F034 K001 U051				X			750 lb

**Table III-1 Hazardous Wastes and Management Activities (continued)**

Verbal Description of Waste	TCEQ Waste for Code and Classification Code	EPA Hazardous Waste Number	Storage <sup>1</sup> of Wastes Received from Off-Site	Processing <sup>2</sup> of Wastes Received from Off-Site	Disposal of Wastes Received from Off-Site	Storage <sup>1</sup> of Wastes Generated On-Site	Processing <sup>2</sup> of Wastes Generated On-Site	Disposal of Wastes Generated On-Site	Annual Quantity Generated and/or Received
Drilling mud from boring monitor wells for investigative purposes	1481514H	D002				X			
Purge water generated as part of groundwater monitoring and investigation	1482110H	D002				X			

<sup>1</sup>"Storage" means the holding of solid waste for a temporary period, at the end of which the waste is processed, disposed of, or stored elsewhere.

<sup>2</sup>"Processing" means the extraction of materials, transfer, volume reduction, conversion to energy, or other separation and preparation of solid waste for reuse or disposal, including the treatment or neutralization of hazardous waste, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste, or so as to recover energy or material from the waste or so as to render such waste non-hazardous or less hazardous; safer for transport, store or dispose of; or amenable for recovery, amenable for storage, or reduced in volume. The "transfer" of solid waste for reuse or disposal as used above, does not include the actions of a transporter in conveying or transporting solid waste by truck, ship, pipeline, or other means. Unless the Executive Director determines that regulation of such activity is necessary to protect human health or the environment, the definition of "processing" does not include activities relating to those materials exempted by the Resource Conservation and Recovery Act, 42 U.S.C. 6901 **et seq.**, as amended.

Table III-2 Hazardous Waste Management Unit Checklist

Waste Management Unit	TCEQ N.O.R. Unit #	Status <sup>1</sup>	Design Capacity <sup>2</sup>	Number of Years Utilized	Date in Service
Surface Impoundment Area which is a closed RCRA-regulated surface impoundment	001/SWMU 1	Closed (requesting NFA)	5,065 yd <sup>3</sup>	3	1979-1982
Tank Car	002/SWMU 7	Inactive	12,500 gal	Unknown	Unknown
Sub-surface Tank	003/SWMU 7	Inactive	NA	Unknown	Unknown
Container Storage Area	004	Active (<90 day unit)	450 ft <sup>2</sup>	19	1995-Present
Waste Pile	005	Inactive	NA		1907-2010
Miscellaneous Storage Containers	006	Inactive	NA		
Northern and Southern Drainage Ditches	SWMU 2	Closed	Unknown	Unknown	Unknown
Recent Process Area	SWMU 4	Closed	Unknown	22-30	Started sometime between 1955 and 1962 until mid-1980s
Original Process Area	SWMU 5	Closed	Unknown	44-51	1911 through sometime between 1955 and 1962
Water Treatment and Boiler System	SWMU 6	Closed	Unknown	24-30	Started between 1955 and 1965 through mid-1980s
Tank Car Storage Area	SWMU 7/NOR 002 and 003	Closed	Unknown	~26	Late 1950s through 1984
Aboveground Storage Tank Area	SWMU 8	Closed	Unknown	24-30	Started between 1955 and 1965 through 1984
Location of Former UST No. 44-023-05	SWMU 9	Closed	2,000 gal	26	1966 through June 1992
Location of Former Sap Water Treatment Tank	SWMU 10	Closed	Unknown	5	1979 - 1984
Oil Water Separators	SWMU 11	Closed	Unknown	10	1979 – 1989
Railroad Tie Storage Area	SWMU 12	Closed	Unknown	70-75	1911 through mid-1980s

<sup>1</sup>Indicate only one of the following: Active, Inactive, Closed, or Proposed

<sup>2</sup>Cubic yards, gallons, pounds, gallons/minute, pounds/hour, BTUs/hour, etc.

**Attachment B**

**LEGAL LAND DESCRIPTION**

Union Pacific Houston Wood Preserving Works  
Part A Hazardous Waste Permit Application Item II.B

**ATTACHMENT B**

Legal Description  
Union Pacific Railroad Company  
Houston Wood Preserving Works  
And  
Closed Surface Impoundment

**Entire Site**

The following descriptions were obtained from Harris County Appraisal District website ([www.hcad.org](http://www.hcad.org)) and in accordance with Part A, Section II.B, in lieu of a meets and bounds survey, the appropriate lot descriptions are provided for the facility.

**4910 Liberty Rd.**

HCAD ID 0402600000040

Tracts 11, 12, 13 & 14, Abstract 32 Harris & Wilson Survey

HCAD ID 0040600000001 (partial)

Tracts R100 in blocks 54, 55, 56 & 58, 59 & 60 & 62 thru 70, Augusta Survey

**1<sup>st</sup> Street Properties**

HCAD ID 0082430000002

Lot 2 Block 1, Busch & Kyle U/R Survey

HCAD ID 0082430000003

Lots 3 & 4 Block 1, Busch & Kyle U/R Survey

**2<sup>nd</sup> Street Properties**

HCAD ID 0082430000005

Lot 5 Block 1, Busch & Kyle U/R Survey

HCAD ID 0082440000004

Lot 4 Block 2, Busch & Kyle U/R Survey

HCAD ID 0082430000007

Lot 7 Block 1, Busch & Kyle U/R Survey

HCAD ID 0082440000005

Lot 5 Block 2, Busch & Kyle U/R Survey

HCAD ID 0082430000008

Lot 8 Block 1, Busch & Kyle U/R Survey

HCAD ID 0082440000007

Lot 7 Block 2, Busch & Kyle U/R Survey

HCAD ID 0082440000001

Lot 1 Block 2, Busch & Kyle U/R Survey

HCAD ID 0082440000008

Lot 8 Block 2, Busch & Kyle U/R Survey

HCAD ID 0082440000002

Lots 2 & 3 Block 2, Busch & Kyle U/R Survey

HCAD ID 0082440000009

Lot 6 Block 2, Busch & Kyle U/R Survey

**Kirk Alley Properties**

HCAD ID 0402530000186

Tracts 31A, 31B, 31G & 31H-1, Abstract 32  
Harris & Wilson Survey

HCAD ID 0402530000188

Tract 31E, Abstract 32 Harris & Wilson Survey

HCAD ID 0402530000187

Tract 31F, Abstract 32 Harris & Wilson Survey

HCAD ID 0402530000190

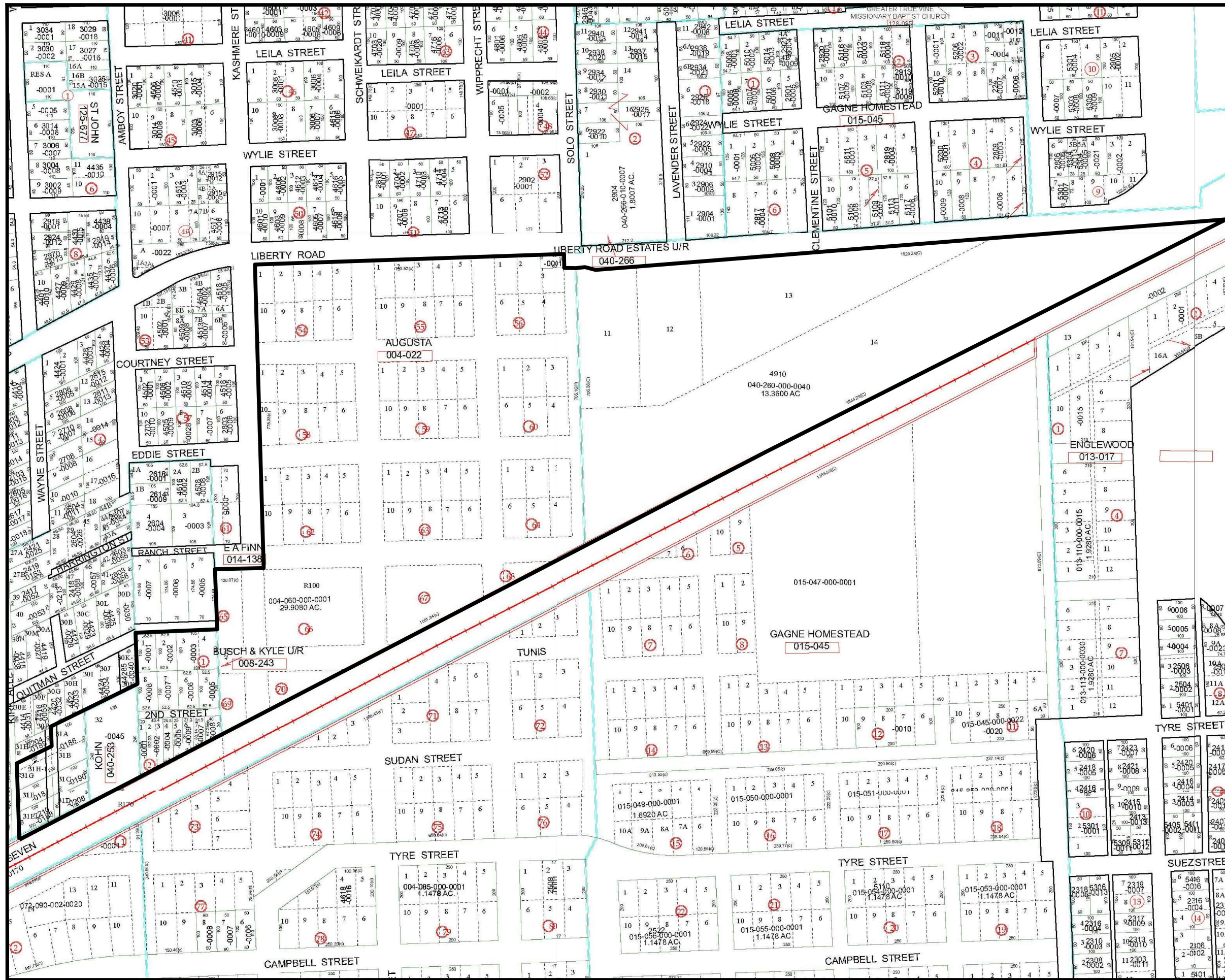
Tract 31C, Abstract 32 Harris & Wilson Survey

HCAD ID 0402530000206  
Tract 31D, Abstract 32 Harris & Wilson Survey

HCAD ID 0402530000045  
Tract 32, Kohn, Abstract 32 Harris & Wilson  
Survey

**Closed Surface Impoundment**

Being a parcel of land out of the Harris and Wilson Survey, Abstract 32, Harris County, Texas, same being all of fractional Block 65 lying east of and adjoining the east line of the E.A. Finn Addition recorded in Volume 73, Page 317 of the Harris County Deed Records (H.C.D.R.) and the east line of the Busch and Kyle Subdivision recorded in Volume 183, Page 69 H.C.D.R. and the adjoining closed and abandoned street between and adjoining Block 65 and Block 66 out of the Augusta Addition to the City of Houston per the map recorded in Volume 56, Page 139 of the Harris County Deed Records.



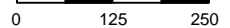
**EXPLANATION**

— UPRR Facility Boundary

Note:  
Please see Attachment B for the lot descriptions.



Approx. Scale in Feet



SOURCE:  
Base map from hcad.org, facet 5558A.

**UNION PACIFIC RAILROAD CO.**

**HOUSTON WOOD PRESERVING WORKS**

Attachment B Figure 1

**FACILITY PLAN**

PROJECT: 1358	BY: AJD	REVISIONS
DATE: NOV., 2014	CHECKED: ECM	

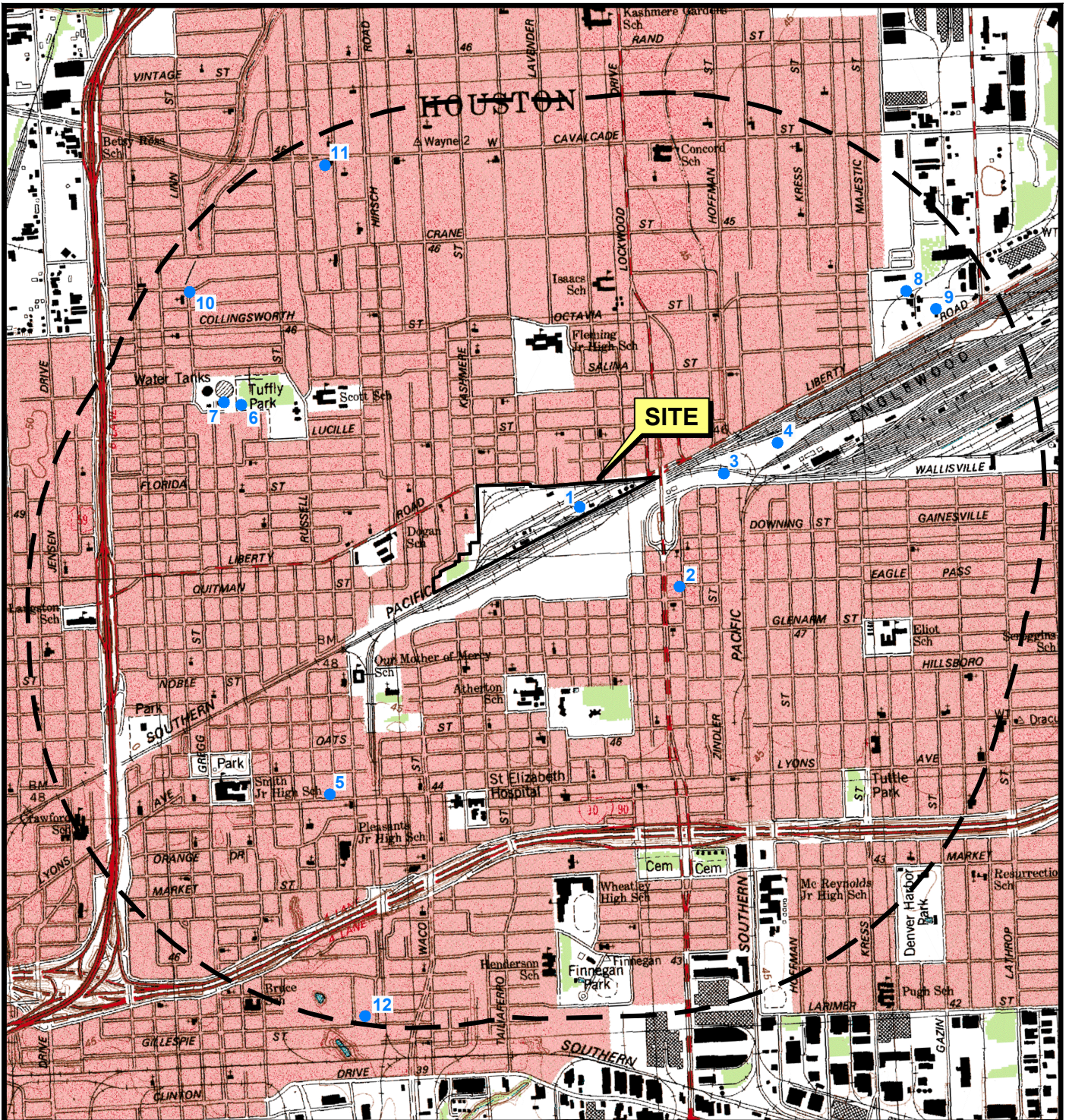
**PASTOR, BEHLING & WHEELER, LLC**  
CONSULTING ENGINEERS AND SCIENTISTS



**Attachment C**

**SITE INFORMATION MAPS**

Union Pacific Houston Wood Preserving Works  
Part A Hazardous Waste Permit Application Item III.C.1



**EXPLANATION**

1 ● Water Well Location



QUADRANGLE LOCATION

Note:  
Water well inventory within 1 mile  
of Site (Banks, 2014).



Scale in Feet



SOURCE:  
Base map from www.tnris.gov, Settegast, TX 7.5 min. USGS quadrangle dated 1982.



**UNION PACIFIC RAILROAD CO.**

**HOUSTON WOOD PRESERVING WORKS**

Figure C-1  
Item III.C.1

**WATER WELL MAP**

PROJECT: 1358

BY: AJD

REVISIONS

DATE: NOV., 2014

CHECKED: ECM

**PASTOR, BEHLING & WHEELER, LLC**  
CONSULTING ENGINEERS AND SCIENTISTS

**ATTACHMENT C**  
**LIST OF WELL OWNERS AND USES WITHIN 1-MILE RADUS**  
**UNION PACIFIC HOUSTON WOOD PRESERVING WORKS**  
**HOUSTON, TEXAS**

PBW Map ID	Well ID	Well Owner	Current Water Use	Depth Drilled	Completion Date	Reported Aquifer
1	65-14-809	Southern Pacific Railroad	Destroyed	947	01/01/1925	Evangeline
2	65-14-8A	Houston Lighting & Power	Industrial	1550	01/19/1982	Evangeline
3	HGSDHG1968	Southern Pacific Trans. Co.	Irrigation	1200	01/01/1954	Evangeline
	65-14-802	Southern Pacific Railroad	Industrial	1201	01/01/1954	Evangeline
	65-14-801	Southern Pacific Railroad	Industrial	1206	01/01/1954	Evangeline
	HGSDHG1967	Southern Pacific Trans. Co.	Irrigation	1200	01/01/1981	Evangeline
4	65-14-814	Southen Pacific Railroad	Destroyed	919	01/01/1941	Evangeline
5	65-14-7	Dr. Carroll	Other	530	12/06/1984	Chicot
	65-14-8F	Dr. Carroll	Other	223	08/28/1984	Chicot
6	65-14-759, G1010013HH, USGS-294728095200101	City of Houston Northeast #2	Plugged	1291	01/01/1938	Evangeline
	USGS-294728095200102	USGS	Observation	1596	02/01/1980	Evangeline
	USGS-294728095200103	USGS	Observation	487	02/15/1980	Chicot
	USGS-294728095200104	USGS	Observation	1035	02/15/1980	Evangeline
	USGS-294728095200105	USGS	Observation	298	02/01/1980	Chicot
	USGS-294728095200106	USGS	Observation	2170	04/25/1980	Evangeline
	65-14-7	Williams Brothers Const.	Plugged	280	6/5/1992	NA
7	65-14-727, G1010013HG	City of Houston Northeast #1	Plugged	1876	01/01/1931	Evangeline
8	65-14-517, 65-06-8D	Corbett Fabricating Co	Industrial	344	03/04/1966	Chicot
9	65-14-508	General Metals Corp.	Unused	912	01/01/1938	Evangeline
	65-14-505	General Metals Corp.	Unused	217	01/01/1943	Chicot
10	HGSDHG1084, 65-14-406, USGS-294745095201001	City of Houston Northeast #3	Plugged	1993	05/15/1944	Evangeline
11	65-14-507, G1010013ND	City of Houston Kashmere Gardens	Plugged	544	01/01/1940	Chicot
	65-14-501, G1010013NC	City of Houston Kashmere Gardens	Plugged	1035	07/01/1948	Evangeline
12	65-14-823, 65-14-8, USGS-294609095194601	National Vinegar Co.	Industrial	506	04/14/1987	Chicot
	HGSDHG4117	National Vinegar Company	Industrial	350	01/01/1990	Chicot
	65-14-4	National Vinegar	Plugged	200	04/14/1998	Chicot

**EXPLANATION**

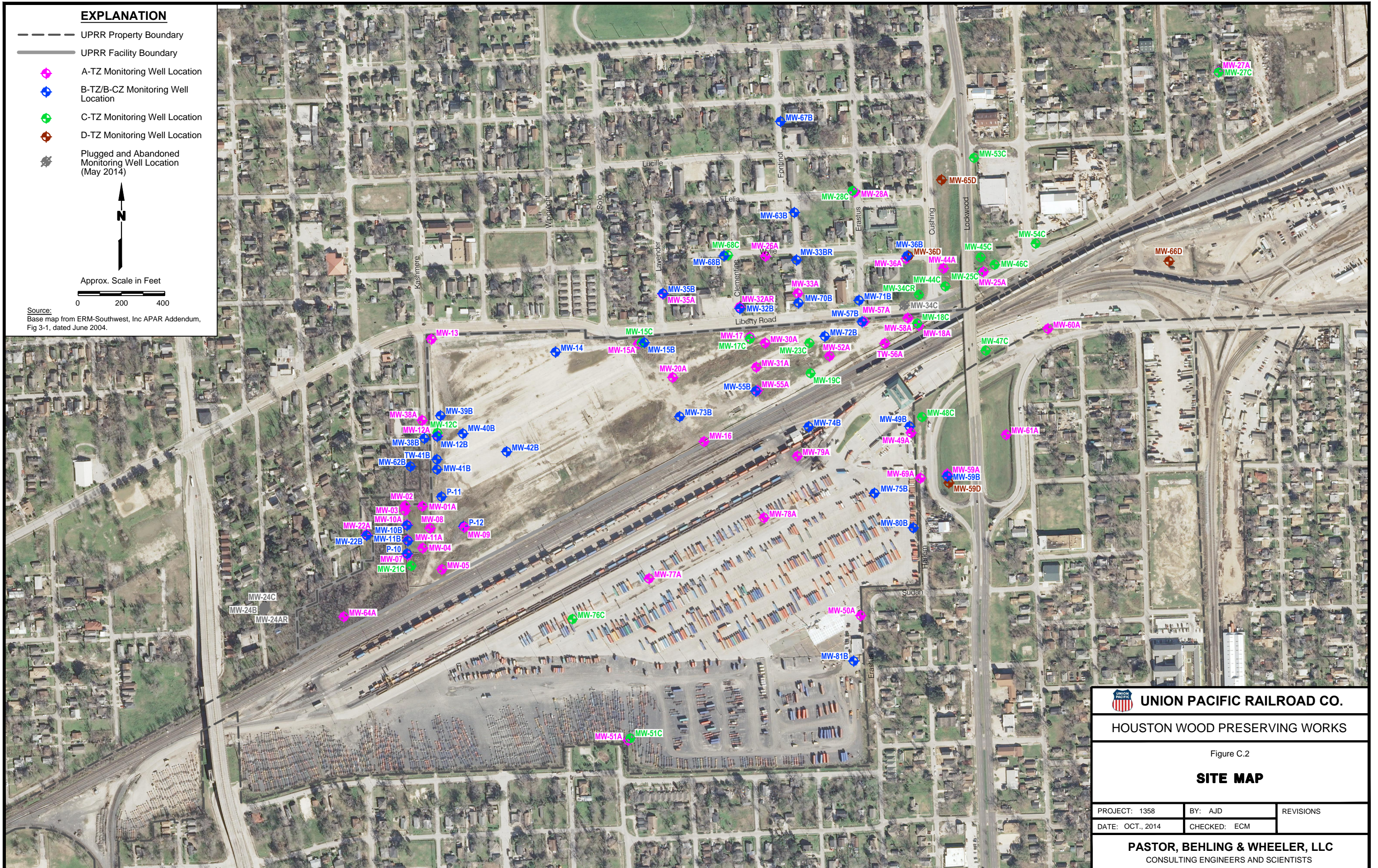
- UPRR Property Boundary
- UPRR Facility Boundary
- ◆ A-TZ Monitoring Well Location
- ◆ B-TZ/B-CZ Monitoring Well Location
- ◆ C-TZ Monitoring Well Location
- ◆ D-TZ Monitoring Well Location
- ◆ Plugged and Abandoned Monitoring Well Location (May 2014)



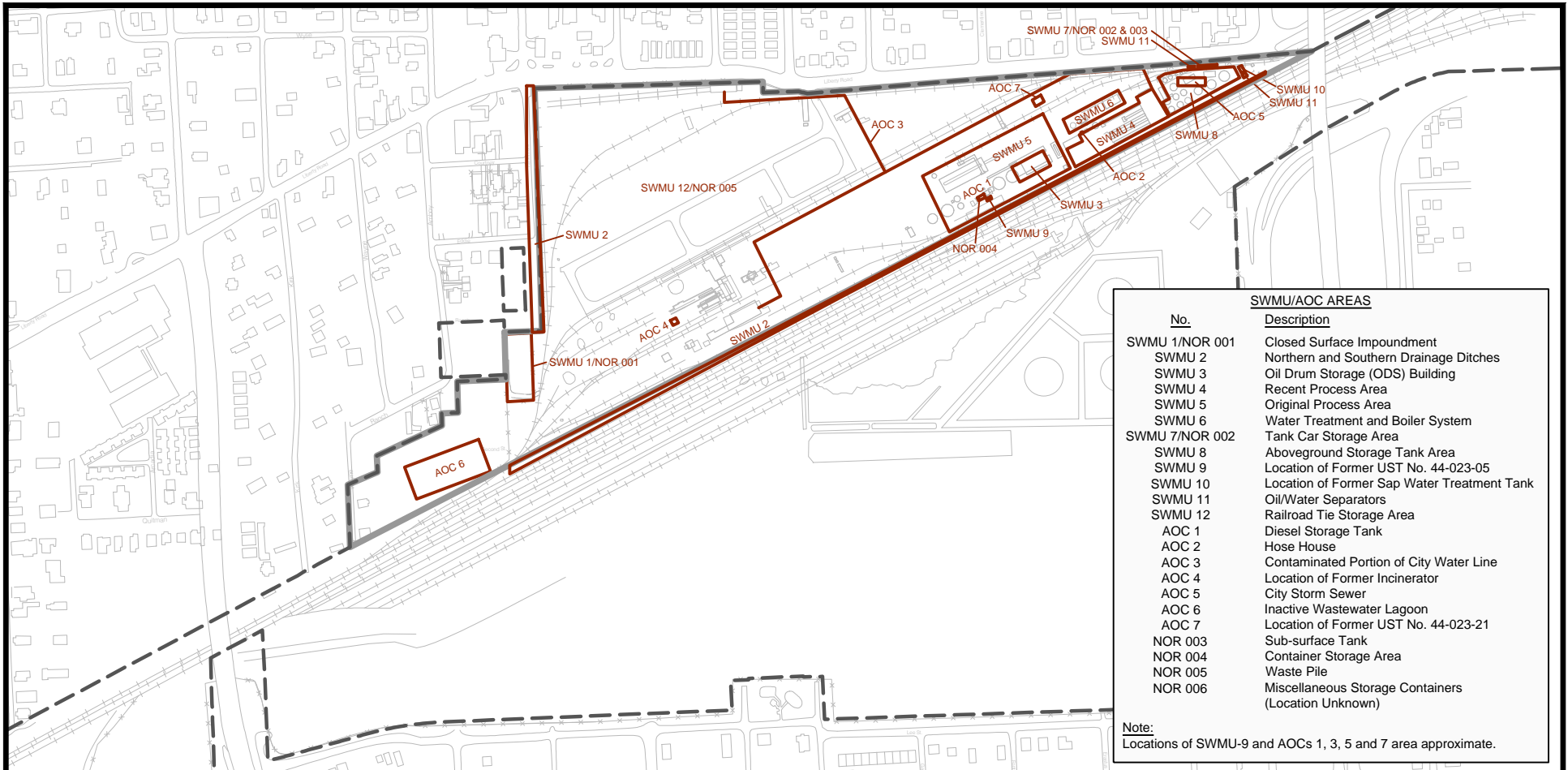
Approx. Scale in Feet



Source:  
Base map from ERM-Southwest, Inc APAR Addendum,  
Fig 3-1, dated June 2004.

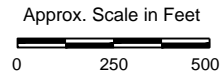


<b>UNION PACIFIC RAILROAD CO.</b>		
<b>HOUSTON WOOD PRESERVING WORKS</b>		
Figure C.2 <b>SITE MAP</b>		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: OCT., 2014	CHECKED: ECM	
<b>PASTOR, BEHLING &amp; WHEELER, LLC</b> CONSULTING ENGINEERS AND SCIENTISTS		



**EXPLANATION**

- UPRR Property Boundary
- UPRR Facility Boundary
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- \*\*\* Fence
- +—+—+ Railroad



**SOURCE:**  
Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

**UNION PACIFIC RAILROAD CO.**

**HOUSTON WOOD PRESERVING WORKS**

Figure C.3

**LOCATIONS OF FORMER WASTE MANAGEMENT UNITS**

PROJECT: 1358	BY: AJD	REVISIONS
DATE: NOV., 2014	CHECKED: ECM	

**PASTOR, BEHLING & WHEELER, LLC**  
CONSULTING ENGINEERS AND SCIENTISTS

**Attachment D**

**PHOTOGRAPHS OF HAZARDOUS WASTE MANAGEMENT AREAS**

Union Pacific Houston Wood Preserving Works  
Part A Hazardous Waste Permit Application Item III.C.2

**SWMU No. 1**  
**UNION PACIFIC HOUSTON WOOD PRESERVING WORKS**  
**HOUSTON, TEXAS**



Photo 1: View of SWMU No. 1, looking north.



Photo 2: View of signage at SWMU No. 1, looking southwest.