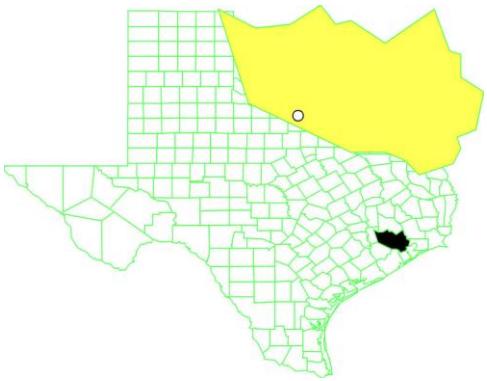
SAN JACINTO RIVER WASTE PITS
Harris County, Texas



EPA Region 6
EPA ID# TXN000606611
Site ID: 0606611

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U.S. Congressional District 36
Updated: December 2013

EPA website: http://www.epa.gov/region6/6sf/texas/san_jacinto/

Background

The Site consists of a set of impoundments approximately 14 acres in size, built in the mid-1960s for disposal of paper mill wastes, and the surrounding areas containing sediments and soils potentially contaminated with the waste materials that had been disposed of in the impoundments. The set of impoundments is located on a partially submerged 20-acre parcel of real estate on the western bank of the San Jacinto River, in Harris County, Texas, immediately north of the Interstate Highway 10 (I-10) Bridge over the San Jacinto River between two unincorporated areas known as Channelview and Highlands. An additional impoundment is located south of I-10. Residential, commercial, industrial, and other land use activities occur within the area surrounding the site. Residential development on the eastern bank of the river is present within 0.5 mile of the Site.

In 1965, the impoundments north of I-10 were constructed by forming berms within the marsh, to the west of the main river channel. These impoundments at the Site were divided by a central berm running lengthwise (north to south) through the middle, and were connected with a drain line to allow flow of excess water (including rain water) from the impoundment located to the west of the central berm, into the impoundment located to the east of the central berm. In 1965 and 1966, pulp and paper mill wastes (both solid and liquid) were transported by barge from the Champion Paper Inc. paper mill in Pasadena, Texas and unloaded at the Site into the impoundments north of I-10. The Champion Paper mill used chlorine as a bleaching agent, and the wastes that were deposited in the impoundments have been found to be contaminated with polychlorinated dibenzo-p-dioxins, polychlorinated furans (dioxins and furans), and some metals. Physical changes at the Site in the 1970s and 1980s has resulted in partial submergence of the impoundments north of I-10 and exposure of the contents of the impoundments to surface waters. South of the dam at Lake Houston, the San Jacinto River, including the area surrounding the Site, is tidally influenced.

The EPA issued an Action Memorandum on April 2, 2010 for a time critical removal action to stabilize the waste pits and to prevent direct human and benthic contact with the waste materials until the site is fully characterized and a remedy is selected.

Current Status

The EPA and potentially responsible parties (PRPs) are implementing:

- A Remedial Investigation/Feasibility Study (RI/FS) under an EPA Unilateral Administrative Order (November 20, 2009). The Remedial Investigation and Human Health Risk Assessment Reports have been approved with modifications. The Draft Feasibility Study Report is currently being reviewed by EPA and other agencies.
- Additional ground water sampling in the Southern Impoundment has been completed. The sampling results did not detect any dioxin contamination deeper than the shallow zone or adjacent to the west bank of the area.

In July 2012 some erosion of the armor rock was seen on the west side of the cap. The underlying geotextile was intact, and there was no visible exposure of the waste material in the waste pits. Maintenance of the cap consisted of placing new armor rock material that is denser than the material originally specified for this area. The repair work was performed beginning August 1 and completed August 3, 2012. Although no visible release of waste was observed, the EPA has asked the US Army Corps of Engineers to conduct a third party review of the overall cap design and construction. This review was issued on November 1, 2013.

As part of an overall watershed management strategy, the EPA, U.S. Army Corps of Engineers (USACE), and Texas Commission on Environmental Quality (TCEQ), have implemented a special permits evaluation process (since November 1, 2009) for a water body area around the Site. The public announcement and the area can be found:

- EPA: www.epa.gov/region6/6sf/texas/san_jacinto/tx_san_jacinto_public_announcement_20091021.pdf
- USACE: http://www.swg.usace.army.mil/Portals/26/docs/regulatory/SanJacinto.pdf
- TCEQ: www.tceq.state.tx.us/remediation/superfund/epa/sanjacpits

The following agencies and local governments are involved in the Site cleanup process:

- Federal and State Natural Resource Trustees: National Oceanic and Atmospheric Administration (NOAA), U.S. Fish & Wildlife Service (FWS), Texas Commission on Environmental Quality (TCEQ), Texas Parks and Wildlife Department (TPWD), Texas General Land Office (TXGLO).
- Coordination Partners: U.S. Army Corps of Engineers (USACE), U.S. Coast Guard (USCG), U.S. Department of Health and Human Services/Agency for Toxic Substances and Disease Registry (ATSDR), Texas Department of State Health Services (TXDSHS), Texas Department of Transportation (TXDOT), Harris County (HC), Port of Houston Authority (POHA), Houston-Galveston Area Council (HGAC).

The PRPs are:

- McGinnes Industrial Maintenance Corporation (MIMC).
- International Paper Company (IPC).

Site Map

San Jacinto River
Waste Pits
1966 Original Perimeter of Impoundments
N
0 125 250 375 500
Feet
Sources:
Aerial Photo: USGS, 1966
Impoundment Boundaries: Created by EPA Region 6 using 1966 aerial photo from USGS
EPA makes no claims as to the accuracy of the data or its suitability for any particular use.
Map created: March 18, 2010
EPA Region 6
GIS Support Team
Dallas, Texas
20100318JD01

San Jacinto River
Waste Pits
Preliminary Perimeter - EPA (SJRWP)
Permits Areas of Concern - USACE, EPA, TCEQ (SJRWP)
1966 Original Perimeter of Impoundments - EPA (SJRWP)
Identified Impoundment South of I-10 - EPA (SJRWP)
San Jacinto River
N
0 0.4 0.8 1.2
Miles
Sources:
Aerial photo is from DigitalGlobe 1/2009.
Preliminary Perimeter is from EPA Region 6.
1966 Original Impoundment was created by EPA Region 6 using 1966 aerial photo from USGS.
Impoundment South of I-10 was created by EPA Region 6 using 1964 aerial photo from USGS.
Permits Area of Concern is from the USACE, EPA, and TCEQ.
EPA makes no claims as to the accuracy of the data or its suitability for any particular use.
Map created: February 18, 2011
EPA Region 6
GIS Support Team
Dallas, Texas
20110218JD01

Benefits

Cleanup actions will address human health and ecological risks (see Health Considerations).

National Priorities Listing (NPL) History

Proposal Date: 9/17/2007 (72 FR 53509)
Final Listing Date: 3/19/2008 (73 FR 14719)

A Time Critical Removal Action (TCRA) to install a protective cap over the northern waste pits was performed under an EPA Administrative Order on Consent (May 17, 2010) and EPA TCRA Decision Document (July 28, 2010). The removal action was completed in July 2011. The TCRA addressed source stabilization activities within the original perimeter of the northern waste pits.

The RI/FS currently in progress will address nature and extent activities beginning with the preliminary perimeter. Watershed management strategies will address permitted disposal activities within the permits area of concern.

After the Site is fully delineated, a complete description will be presented in the Record of Decision, along with Wastes and Volumes to be addressed by the Remedial Action.

Wastes and Volumes

The primary hazardous substances documented at the site are dioxins (polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans). Dioxin concentrations up to 360,000 parts per trillion (organic carbon normalized) have been found in samples collected from the submerged portion of the original 1966 waste ponds. After the Site is fully delineated, a complete description will be presented in the Record of Decision.

Health Considerations

1) The primary hazardous substances documented at the Site are polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans.

- ATSDR (polychlorinated dibenzo-p-dioxins): http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=363&tid=63
- ATSDR (polychlorinated dibenzofurans): http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=937&tid=194

2) The Site is resides in a water body known as the San Jacinto River, within a watershed commonly known as the Houston Ship Channel and Galveston Bay. Active and inactive industries exist in this watershed. Total Maximum Daily Load (TMDL) studies are being conducted by the State of Texas in this watershed

- TCEQ: http://www.tceq.state.tx.us/implementation/water/tmdl/nav/counties/harristmdls.html

3) Information about active fish consumption advisories in the Houston Ship Channel and Galveston Bay watershed:

- TXDSHS: http://www.dshs.state.tx.us/seafood/MapsPDF/HSC-UGB-Blue-Crab-Advisory-Map-2008.pdf

- TXDSHS: http://www.dshs.state.tx.us/seafood/MapsPDF/AdvisoryMaps/GalvestonBayandHSC1_28_2009.pdf

4) Dioxin Inter-Agency Working Group, Updated Questions and Answers about Dioxin: http://cfpub.epa.gov/ncea/smallURL.cfm?tag=f18l4ds

5) EPA Research and Clean Up Information on Dioxin:

- EPA Research: http://www.epa.gov/dioxin/
- EPA Clean Up: http://www.clu-in.org/contaminantfocus/default.focus/sec/Dioxins/

6) We all live in a watershed -- the area that drains to a common waterway, such as a stream, lake, estuary, wetland, aquifer, or even the ocean -- and our individual actions can directly affect it. Working together using a watershed approach will help protect our nation's water resources. For more information: http://water.epa.gov/type/watersheds/

Community Involvement

A community meeting was held on 9/22/2011 in Highlands, TX to provide an update on site activities and to respond to questions.

Community involvement is the process of engaging in dialogue and collaboration with community members. The goal of Superfund community involvement is to advocate and strengthen early and meaningful community participation during Superfund cleanups, including:

- Encourage and enable community members to get involved.
- Listen carefully to what the community is saying.
- Take the time needed to deal with community concerns.
- Change planned actions where community comments or concerns have merit.
- Keep the community well informed of ongoing and planned activities.
- Explain to the community what EPA has done and why.

For more information on how to get involved: http://www.epa.gov/superfund/community/

Or contact:

Donn R. Walters
EPA Region 6 Main Office
1445 Ross Ave, Suite 1200
Dallas, Texas 75202
email: walters.donn@epa.gov
toll free: 800.533.3508

The San Jacinto River Waste Pits Superfund Site is also part of EPA's Community Engagement Initiative: http://www.epa.gov/oswer/engagementinitiative/

Site Contacts

EPA/Lead Agency:		
Superfund Remedial Project Manager:	Gary Miller	(214) 665-8318
Superfund On-Scene Coordinator:	Valmichael Leos	(214) 665-2283
Superfund Site Attorney:	Anne Foster	(214) 665-2169
Superfund Regional Public Liaison:	Donn Walters	(214) 665-6483
Watershed Management (Permits):	Sharon Parrish	(214) 665-7275
TCEQ/State of Texas		
Superfund Project Manager:	Stephen Ellis	(512) 239-5337
Superfund Site Attorney:	Christa McLintok	(512) 239-4610
Superfund Community Relations:	Crystal Taylor	(512) 239-3844
Watershed Management (Permits):	Sue Reilly	(512) 239-4590
Watershed Management (TMDL):	Ron Stein	(512) 239-4507
USACE:		
Watershed Management (Permits):	Felicity Dodson	(409) 766-3105
NRDA Lead Administrative Trustee	Jane Sarosdy (TXGLO)	(512) 475-3786
(Trustees include NOAA, FWS, TCEQ, TXGLO, and TPWD)		
Potentially Responsible Parties (IPC and MIMIC):		
Project Coordinator:	David Keith Anchor QEA, LLC	(228) 818-9626
Site Information Repository:	Stratford Branch Library 509 Stratford Street Highlands, TX 77562	(281) 426-3521

EPA Toll Free Region 6 Superfund Information Line: (800) 533-3508

EPA Region 6 Freedom of Information Act Online Request Form:
http://www.epa.gov/region6/6md/foia/foiaform.htm

EPA Region 6 Contact Us Online Request Form:
http://www.epa.gov/region6/r6coment.htm