

Questions from Jan 24, 2013 GBF/HARC Public Meeting on the San Jacinto River Waste Pits Superfund Site (SJRWP)

1. Who owned the waste pits site and where did the waste come from?

McGinnes Industrial Maintenance Corp (MIMC) purchased and used the pits at the Site for storage of waste sludge from Champion Paper Co., located in Pasadena, Texas. Champion Paper was purchased by International Paper (IP), and the Responsible Parties are MIMC and IP.

2. Will dioxin kill grass or trees?

Based on the extensive vegetation that was growing on top of the waste pits before the cap was installed, it is unlikely that the dioxin would kill grass or trees.

3. There are lots of private wells, how do you know there is no contamination in the groundwater?

Groundwater samples have been collected as part of this project, and the only evidence of contamination in groundwater was in the samples collected from the water immediately below the pits. However, there have been reports of metals contamination in local wells that appear to be unrelated to the site. The EPA is initiating an investigation of these reports separately from the San Jacinto Waste Pits investigation.

4. Why is Harris County suing if everyone is safe?

The website of Harris County Attorney Vince Ryan includes a [news article about the lawsuit](#), including a link to the complaint. If you have questions, you contact Rock Owens of the Harris County Attorney's Office at (713) 274-5121 and rock.owens@cao.hctx.net.

5. If we are all safe, why are there signs posted?

It is not safe to come in direct contact with the waste, and it is important that the cap remains undisturbed. The fencing and signage is important to make sure that the cap remains undisturbed so that there is no direct exposure to the waste. It is also not safe to consume fish at levels above the fish advisory. Thus it is important to have signs to let people know about the fish advisories.

6. Was the waste in the waste pits ONLY paper mill waste?

There is only paper mill waste in the northern impoundment. In the Southern Impoundment there has been other debris identified along with paper mill waste and evidence of hydrocarbons.

7. Why hasn't the south pit area been fenced off?

The most immediate hazard was related to the northern impoundment because the actual wastes were at the surface and presented an exposure route to humans via skin absorption and ingestion. The southern impoundment is currently under investigation and fencing, along with other remedial measures, will be evaluated in the Feasibility Study scheduled for completion in Fall 2013. In regards to people fishing in the area off of Market Street adjacent to the southern impoundment, the average dioxin concentration in fish caught here is not expected to be too much different than the average levels in fish caught elsewhere because of the wide range where individual fish may swim and because of numerous other sources of dioxin in the river and ship channel.

8. How do we get people to stop fishing? / Why can't we ban all fishing?

The Texas Department of State Health Services (DSHS) does not have the authority to ban the act of fishing. It does have the authority to declare a body of public water a prohibited area if a survey reveals that aquatic life are unfit for human consumption. The declaration of a body of public water as a prohibited area only makes it illegal to harvest or possess aquatic life for human consumption.

The waters of the Houston Ship Channel and San Jacinto River are classified as a prohibited area for molluscan shellfish defined as oysters, clams, and mussels and therefore it is illegal for fishermen to harvest or possess molluscan shellfish from this area.

The concentrations of contaminants evaluated by the DSHS in the other aquatic life, i.e. fish and blue crab, from the Houston Ship Channel and San Jacinto River are not high enough for the DSHS to recommend the prohibited area declaration. Instead, the DSHS has implemented advisories based on their statewide health assessment guidelines. The DSHS and others have provided information on the fish advisories in the area, along with signage so that people can make informed choices. Although DSHS has issued numerous fish consumption advisories for the river, ship channel, and upper bay, fishing in these waters is not illegal and there is no regulatory mechanism to prevent people from choosing to ignore the warnings. Public input and ideas on how to effectively communicate the advisory information and the risks associated with ignoring the advisory would be appreciated.

9. How do I find out more about the Patrick Bayou site?

A summary of the site that was updated in December 2012 is located at:

<http://www.epa.gov/earth1r6/6sf/pdf/patrick-bayou-tx.pdf>

The U.S. Environmental Protection Agency (EPA) and the Potentially Responsible Parties (PRPs) have completed negotiations, and have entered into an Administrative Order on Consent (AOC) to conduct the Remedial Investigation and Feasibility Study (RI/FS) for the Site. The purpose of the RI/FS is to determine the nature and extent of contamination and to gather sufficient information about the Site to support an informed risk management decision regarding which remedy is the most appropriate for the Site. Shell, Lubrizol Corp., and Occidental Chemical Corp,

are the PRPs and have agreed to perform the RI/FS at the site. Several “rounds” of sampling have been completed. The EPA and TCEQ (as well as numerous trustees) have completed the review of the “Sediment and Surface Water COPC Delineation Data Report; and this report has now been finalized. The draft version of both the Ecological Risk Assessment and the Human Health Risk Assessment is currently being reviewed.

Site Repository: Deer Park Public Library, 3009 Center St., Deer Park, TX 77536

Site Contacts

EPA Remediation Project Manager:	Philip Allen	(214) 665-8516
State Project Manager:	Danielle Sattman Soule	(512) 239-0158
EPA Community Involvement:	Jason McKinney	(214) 665-8132
EPA Regional Public Liaison:	Donn R. Walters	(214) 665-6483
EPA Site Attorney:	Anne Foster	(214) 665-2169
EPA Toll-Free Telephone Number:		(800) 533-3508

10. What is going on with the PCBs and other contaminants as part of the TMDL process?

Investigations are still underway. You can learn more at the Houston-Galveston Area Council (HGAC) website: <http://www.h-gac.com/community/water/tmdl/hsc-ugb/default.aspx>.

11. Why isn't the river fenced off so that people can't get there?

Fencing in the area of the Southern Impoundment will be evaluated as part of the Feasibility Study. However, please note that because of the wide range where individual fish may swim and because of numerous other sources of dioxin in the San Jacinto River and Houston Ship Channel, the average dioxin concentration in fish caught near the waste pits is not expected to be too much different than the average levels in fish caught elsewhere. Although DSHS has issued numerous fish consumption advisories for the river, ship channel, and upper bay, fishing in these waters is not illegal.

12. What is being done about new spills?

Most of the dioxin contamination in the river is from releases from many years ago. New spills have reporting requirements, and cleanup activities are overseen by the Texas Commission on Environmental Quality.

13. How long will it take before the fish are safe to eat?

The contaminants that are driving the fish consumption advisories in the vicinity of the San Jacinto River and Houston Ship channel are not only dioxins but also polychlorinated biphenyls (PCBs). The dioxin contamination in the fish is related to both the San Jacinto Waste Pits site and numerous other sources throughout the San Jacinto River, Houston Ship Channel, and Upper Galveston Bay. The intention of the TMDL process is to create a plan to address the contamination, but system wide solutions are complex and will likely take several years.

14. What's being done about all the other sources of contamination?

The TMDL process seeks to identify other potential sources of contamination, and when these sources are identified, they will likely be addressed on a case-by-case basis.

15. Why can't they warn people in seafood restaurants?

Since the seafood served in restaurants may come from a wide variety of sources, it is not practical or warranted to issue a blanket warning about seafood restaurants in general. Pages 2 through 4 of the [Texas Commercial Fishing Guide](#) (TCFG) issued by the Texas Parks and Wildlife Department clearly summarize all of the fish consumption advisories or bans in effect in the state. The remainder of the TCFG (40+ pages) specifies other commercial fishing rules and regulations, and it is the responsibility of every commercial fisherman to be familiar with and to follow all of these advisories, rules, and regulations with respect to the fish they catch and sell to local seafood restaurants. Depending on the infraction, failure to follow the advisories, rules, and regulations may result in anything from a simple fine up through jail time and revocation of the fishing license.

16. Did some dioxins come from chemical plants?

The largest source of dioxin to the environment is the incineration of waste and/or the burning of trash. Some chemical plants also produce dioxin, especially those involved in the production of polyvinyl chloride. Other sources include metals smelting, wood burning, coal fired power plants, and chlorine bleaching of wood pulp. Dioxin releases from many of these sources have declined dramatically since 1987.

17. What is going on with the south impoundment?

The investigation of the southern impoundment is on-going. The investigation may not be completed by the time the Remedial Investigation (RI) Report for the northern impoundments is complete. If this happens, the results for the Southern impoundment investigation will be presented in an addendum to the RI report, which will be completed before the Feasibility Study is finalized.

18. What about all the sediment/sand that was dredged and removed from the river?

There was a sand mining operation immediately upstream (northwest) of the waste pits that did result in partial excavation of the pit's impoundment A (aka the western impoundment, western cell) as shown in Figure 6 on page 70 on the [Public Health Assessment](#) that was completed for this Superfund project. What has been described is that sediments were dredged out and then the sand was separated from the finer silts and clays in a washing process. The silt and clay went back into the river at this location. The separated sand was then sold; therefore it is difficult to readily know where that sand ended up. The concentration of dioxins in the washed sand is currently unknown, but that process would have likely *reduced* concentrations of dioxin in them to levels much lower than those we have seen in the pits themselves. The properties of

dioxin make it not adhere well to sand; however, it does adhere well to silts and clays. In the Public Health Assessment, *Conclusion 6* on page 15 describes risks from exposure to *sand mined from the operation* as unknown since there is currently no information on the final location of the mined sand or their dioxin concentrations. *Sediments at the site former sand mining operation* have been sampled for dioxin concentrations; the Public Health Assessment describes the risk of developing cancer from exposure to those sediments as low. The Public Health Assessment recommends that this sand mining issue be further investigated in the Superfund process. See pages 20, 43, 44, 50, 51, and 152-153 (Public Comment Response 2-2C) for more information.

Sand mining is different from the dredging most people have seen occurring in Galveston Bay and tributaries, which consists of maintenance dredging or deepening and widening of the existing channels to provide the depths needed for today's ships and barges. In those operations, the dredged material is either used beneficially, e.g. to build a wetland or bird island -or- if it is not suitable for beneficial use (i.e. too "soupy" from it being too much silt) then it is placed in a dredged material placement area (DMPA). Those DMPAs are located all along the Houston Ship Channel from Loop 610 to out in mid-Galveston Bay. If the dredged materials are from an area that has historic contamination from spills, discharges or runoff pollution, it is first tested for a variety of toxic materials to make sure it is safe. If it is found to be too contaminated, then it is to be disposed of in a suitable hazardous waste site.

Permits are required for dredging and those permits do require the final destination of the dredged materials to be specified. The U.S. Army Corps of Engineers [Galveston District](#) issues those permits and has this information, in addition to information about the contaminants that were tested prior to the dredging. Here are some sources of info on dredging and beneficial uses of dredged material: <http://www.swg.usace.army.mil/Missions/Navigation.aspx> and <http://www.betterbay.org/>

Finally, the Corps of Engineers has issued special requirements for any dredging operations in the area of the pits due to the potential for contamination. See <http://www.swg.usace.army.mil/Portals/26/docs/regulatory/SanJacinto.pdf>.

19. What are the risks of eating fish collected from near the waste pits vs. the risks from fish caught in the rest of the bay?

The fish in the area typically have a range of dioxin concentrations from less than 1 to 6 or more picogram/gram (pg/g). The average concentration in the 9 fish and crab samples used for evaluating potential health risks from fish consumption in the [Public Health Assessment](#) which was developed for the SJRWP Superfund cleanup process, was 2.277 pg/g (range 0.097 – 6.04 pg/g). Since most fish species will travel considerable distances up or down-stream, the dioxin concentrations in any particular fish may vary considerably depending on the feeding habits of that fish and where it spent most of its time. Because of the constant intermingling of all the

different fish, average dioxin levels are expected to be similar throughout the entire advisory area.

20. Is there a representative from the county to discuss the Harris County Lawsuit?

Contact Rock Owens, Harris County Attorney's Office at (713) 274-5121 and rock.owens@cao.hctx.net.