To U.S. EPA Region 6:

As you prepare for the upcoming December 4 public meeting, Respondents request that EPA clarify statements – in the Record of Decision (ROD) and in recent news stories and public meetings – suggesting that higher concentrations of dioxins and furans in surface water above the TCRA cap indicate that the cap is "leaking." Those statements are not accurate.

Higher concentrations of dioxins and furans in surface water above the TCRA cap than in surface water upstream of the TCRA cap is due to dioxins and furans from other sources and their presence in sediments within the Preliminary Site Perimeter. Those other sources include:

• direct discharge sources of dioxins and furans to surface water from a variety of permitted wastewater and stormwater outfalls in the immediate vicinity of the TCRA cap and other regional sources of dioxins and furans. Wastewater effluent and urban stormwater are known sources of dioxins and furans as well as PCBs (Paustenbach et al. 1996; Lubliner 2009; Howell et al. 2011a; University of Houston and Parsons 2006)

• dioxin and furan concentrations in tidal water coming up from the Houston Ship Channel that are generally higher than those in upstream areas of the San Jacinto River.

These contributing factors are discussed in more detail in the submissions listed below, and include the Draft Interim Final Feasibility Study (Anchor QEA 2014), the Remedial Investigation Report (Integral and Anchor QEA 2013), the 2016 Surface Water Sampling and Analysis Plan (Integral and Anchor QEA 2016a), and the Data Summary Report: 2016 Studies (Integral and Anchor QEA 2016b).

The direct discharges include two permitted wastewater outfalls along the eastern shore of the San Jacinto River north of I-10 and within USEPA's Preliminary Site Perimeter.

• One is along the eastern shoreline north of I-10 and is a stormwater outfall for a large area to the east and north (see Figure 3-21 from the RI). This stormwater outfall occurs directly to the east of the small island that is northeast of the impoundments north of I-10.

• The other is from the Baytown Water Treatment Authority, on the eastern shoreline directly north of I-10 and directly across from the TCRA cap.

Separately, porewater studies of the TCRA cap (Integral and Anchor QEA 2013, Integral and Anchor QEA 2016b) have shown that the cap is effective is preventing migration to surface water of dioxins and furans in the capped materials. Please do not hesitate to contact me if you would like to discuss.

References:

Anchor QEA, 2014. Draft Final Interim Feasibility Study Report, San Jacinto Waste Pits Superfund Site. Prepared for McGinnes Industrial Maintenance Corporation, International Paper Company, and U.S. Environmental Protection Agency, Region 6.

Howell, N.L., D. Lakshmanan, H. Rifai, and L. Koenig, 2011a. PCB Dry and Wet Weather Concentration and Load Comparisons in Houston-area Urban Channels. Sci. Tot. Environ. 409(10):1867-1888.

Integral and Anchor QEA, 2013. Remedial Investigation Report, San Jacinto River Waste Pits Superfund Site. Prepared for McGinnes Industrial Maintenance Corporation, International Paper Company, and U.S. Environmental Protection Agency, Region 6.
Integral Consulting Inc., Seattle, WA, and Anchor QEA, LLC, Ocean Springs, MS. May 2013.

Integral and Anchor QEA, 2016a. Sampling and Analysis Plan: Surface Water Study, San Jacinto River Waste Pits Superfund Site. Prepared for McGinnes Industrial Maintenance Corporation, International Paper Company, and U.S. Environmental Protection Agency, Region 6.

Integral and Anchor QEA, 2016b. Data Summary Report: 2016 Studies San Jacinto River Waste Pits Superfund Site. Prepared for McGinnes Industrial Maintenance Corporation, International Paper Company, and U.S. Environmental Protection Agency, Region 6.

Integral, 2016. Field Sampling Report: 2016 Surface Water Study. San Jacinto River Waste Pits Superfund Site. Prepared for McGinnes Industrial Maintenance Corporation, International Paper Company, and U.S. Environmental Protection Agency, Region 6. Integral Consulting Inc., Seattle, WA, September 2016.

Lubliner, B., 2009. PBDE and Dioxin/Furans in Spokane Stormwater. Washington State Department of Ecology, Toxics Study Unit, Environmental Assessment Program.

Paustenbach, D., R.J. Wenning, and D. Mather,1996. PCDD/PCDFs in Urban Stormwater Discharged to San Francisco Bay, California USA.Organohalogen Compounds 28:111-116.

University of Houston and Parsons, 2009. Total Maximum Daily Loads for PCBs in the Houston Ship Channel. Contract No. 582-6-60860. Work Order No. 528-6-60860-19. Draft Final Report. Prepared in cooperation with the Texas Commission on Environmental Quality and the U.S. Environmental Protection Agency. University of Houston and Parsons Water & Infrastructure.