

EPA SUPERFUND UPDATE – HURRICANE HARVEY

Crystal Chemical

Post-Hurricane Harvey condition of soil and groundwater at Crystal Chemical Co. Superfund site is consistent with historical site conditions that existed before the hurricane made landfall

Soil and groundwater samples were collected from the Crystal Chemical Co. Superfund site on September 11, 2017. Arsenic detected in the samples is consistent with historic samples collected at the site and are all below Record of Decision cleanup goals.

The 6.8-acre Crystal Chemical Co. site is located in southwest Houston, Texas. Between 1979 and 1981, Crystal Chemical manufactured arsenic-, phenolic- and amine-based herbicides on site. Outdoor storage of raw and finished herbicide products and poor containment of arsenic during loading and unloading operations resulted in arsenic leaks and spills. Although the site is not in a flood-prone area, it is located in the 100-year floodplain. In 1976, the area was subject to repeated flooding, which carried arsenic-contaminated wastewaters off site. These activities and events contaminated soil and groundwater with arsenic.

The Crystal Chemical Company Superfund site is in Long Term Response Action (post cleanup construction) with a ground water monitoring requirement. The Site soil remedy called for on-site consolidation and capping of arsenic contaminated soils. The ground water remedy called for the construction of a slurry wall around the remaining portion of the arsenic ground water plume, which contains arsenic concentrations above the remedial goal; monitoring of ground water outside of the slurry wall is required to document no migration of the plume. Remedy construction was completed in 1982.

The next site evaluation will be during the Superfund Five-Year Review. EPA is responsible for reviewing Superfund remedial actions at least every five years where hazardous substances, pollutants or contaminants will remain on site above levels that allow for unlimited use and unrestricted exposure. The last Five-Year Review for this site was completed in September, 2015. CERCLA also requires that EPA report to Congress regarding these sites. A Superfund Five-Year Review Report to Congress is prepared each fiscal year.