San Jacinto River Waste Pits

Superfund Site

Site Briefing For EPA HQ

September 21, 2017

9872118

United States Environmental Protection Agency

San Jacinto River Waste Pits

South Impoundment 1965

Sand Separation Area
Northern Waste Pits
Southern Impoundment
10
San Jacinto River
Harris County,TX
0 250 500 750 1,000
Feet
Oklahoma
Arkansas
Dallas
Louisiana
Texas
Austin
Houston
San Antonio
San Jacinto River Waste Pits
20160927ML01

Site History

- 1960s: Paper mill waste disposal.
- 2008: EPA adds Site to the NPL.
- 2009: EPA Order to McGinnis and International Paper to conduct RI/FS.
- 2010: McGinnis & International Paper sign Consent Order to construct a temporary cap.
- 2011: Temporary cap completed.
- 2012, 2013, 2014, 2015, 2016, 2017: Cap repairs
- 2014: PRPs submit initial draft FS. EPA asks USACE input.

Site History

- 2015: EPA dive team discovers 20 foot gap in the temporary cap; dioxin exposed. PRP's ordered to repair the cap. Intense media interest.
- 2016:
  - Another cap repair needed, inspection protocols updated.
  - 8 foot deep scour found near cap.
  - EPA assumed authorship of the FS.
  - Remedy Review Board, HQ dioxin risk assessors, Contaminated Sediment Workgroup, ORD and OSRTI consulted on Proposed Plan.

Changing River Conditions

1966

1997

Preferred Alternative

Northern Waste Pits

- Remove 152,000 cubic yards of waste for offsite disposal.
- Cost: $105 million.

Southern Impoundment

- Remove 50,000 cubic yards of waste for offsite disposal.
- Cost: $9.9 million.

Preferred Alternative Rationale

- Dioxin waste is highly toxic and persistent (100s of years).
- High threat of repeated storms and constant river flow against man-made features.
- The history of armor cap maintenance.
- Avoids catastrophic release in un-controlled situation [USACE projected significant loss over 80% cap area].

Other Alternatives Considered

- No further action.
- Institutional controls.
- Upgraded caps.
- Partial Solidification/Stabilization.
- Partial removal alternatives.

➡ None are Reliable for all Storm Events

Public Comment Period

- September 29, 2016 to January 12, 2017; public meeting in October 2016.
- 7,000 written comments received – [94% in favor of removal, 3% opposed, 3% no preference]
- 48,000 petition signatures

Site Stakeholders

- San Jacinto River Coalition
- Galveston Bay Foundation
- Coastal Conservation Association Texas
- San Jacinto River Fleet
- San Jacinto Citizens Against Pollution (CAP)
- Sediment Management Workgroup
- Texas Association of Business
- McGinnes [Waste Management]
- International Paper

Site Stakeholders

- Texas Commission on Environmental Quality
- Harris County
- City of Baytown
- Port of Houston Authority
- Federal & State Trustees (NOAA, USFWS, TCEQ, TX GLO, TPWD)
- Congressional – Babin (R-TX36); Green (D-TX29);
- USACE, USGS

Key Issues

- ***Would an improved cap be permanent?***
  - Last year USACE modeling report said a huge storm could have significant erosion on 80% of cap.
    - PRPs could not duplicate USACE model results.
    - USACE performing additional modeling for Alternative 3aN.
  - Historical photos show loss of land; flood & site history demonstrate erosion & river morphology changes.
    - 8-ft deep scour adjacent to cap in 2016.
- ***Can Principal Threat Waste be excavated without spreading pollution?***
  - PRPs & others fear dioxin release inevitable with removal.
  - USACE indicated that excavation in the “dry” behind cofferdam could be accomplished without material release.

Cost Estimates

- Enhanced cap (Alternative 3aN):
  - Proposed Plan: $24.8 million
  - Now: $80 million (100 yr. O&M & 0.7% discount rate)

- Excavation & disposal (Alternative 6N):
  - Proposed Plan: $87 million
  - Now: $105 million* (with cofferdam & dry excavation)