

## **CES Environmental Services, Inc. (As of February 27, 2015)**

The EPA mobilized to the Site on September 3, 2014 and began addressing the wastes and spills located on site.

As of February 27, 2015, the EPA Team has addressed the following:

**Vacuum Boxes (original):** Wastes contained in the original 11 vacuum boxes have been transferred into shippable vacuum boxes and off-site for disposal (Trustee addressed 1 of these vacuum boxes). All original vacuum box containers have been removed from the site (Trustee approved their contractor, C4 Environmental, to obtain these boxes for the price of cleaning the boxes and providing them with cleaning certificates)

**Roll-Off Boxes (original):** Wastes contained in the original 2 roll-off boxes have been disposed (Trustee addressed 1 roll-off box). All original roll-off boxes have been removed from the site (Trustee approved their contractor, C4 Environmental, to obtain these boxes for the price of cleaning the boxes and providing them with cleaning certificates)

**Frac Tanks (original):** Waste removed from 8 of 12 frac tanks (3 of 12 were originally empty). Wastes in 1 of the original frac tanks (FT1004) has not been yet been addressed as the disposal company was unable to receive the waste due to strong chemical odors. On-site treatment with off-site disposal for the material is expected in early March. Four (4) of the emptied frac tanks that were originally rented by CES Environmental Services during their operations were released back to those rental companies (1 to Dynamic Rental Systems, 3 to Dana Transport). The remaining frac tanks will remain on-site for anticipated cleanup operation waste storage (4 CES, 4 Dana Transport).

**Aboveground Storage Tanks (ASTs):** Liquids and sludge have been removed from 18 of 20 Steel ASTs. Two (2) Steel ASTs and three (3) Poly Tanks remain to be addressed. The two (2) Steel ASTs are awaiting waste disposal facility acceptance. The three (3) Poly Tanks will be addressed with the along with similar waste streams located within drums/totes/miscellaneous containers.

**Waste Water Treatment Tanks (WWTT):** Liquids and sludge have been removed from 15 of 20 WWTTs. The remaining tanks consist of one (1) tank containing organic sludge, one tank containing lime slurry, two tanks containing acid, and one tank containing neutral liquid. Prior to beginning Waste Water Tank removal, the secondary containment required liquid and solid removal. The secondary containment is substantially complete but additional and periodic cleaning will be necessary due to rainfall into the building as well as drips/leaks from cleanup operations.

**Totes/Drums/Vats/Misc Containers:** Empty containers have been segregated for cleaning (pressure washing). Full/Partially Full containers have been sampled, field characterized and currently being segregated into appropriate waste streams to be bulked, sampled, and properly containerized for disposal. There are approximately 8 poly tanks, 2 Vats, and 150 totes/drums with materials to be addressed. Additionally, there are approximately 166 RCRA empty totes/drums to be addressed. Initial bulking work has been done on the neutral liquid waste stream.

**Removal of Contaminated Sediments/Solids:** General cleaning of visibly contaminated areas causing sheens on storm water has been completed. The cleaning of stained areas will continue to the extent possible but is not a high priority unless it is or possibly could cause a sheen on the storm water. Silt barriers and oil absorbent boom are in place to reduce sediment and hydrocarbon releases to storm water drains during a rain event.

**Loading Bays (Main Warehouse):** The bays and warehouse trenches have been substantially cleared of debris and chemical wastes to the extent possible. Additional work will be necessary.

**Truck Cleaning Bay:** The bays have been cleaned and sludge substantially removed from trenches leading to sump. This area will be used for container cleaning activities, as necessary.

**Storm Water Management:** This activity continues as rainfall occurs. Storm water is being allowed to drain from the site through silt barriers and absorbent boom. The southern portion of the facility currently remains diked which disrupts cleanup operations after a rain event. The site is usually inundated with storm water during a rain event. A one inch rainfall adds approximately 180,000 gallons of water on the facility where approximately 60,000 gallons drains to the northern portion of the facility and 120,000 drains to the southern portion of the facility where it is currently diked. Eventually, the diked area will be opened up to allow normal storm water runoff to occur albeit through silt barriers and absorbent boom. The City of Houston has assisted EPA in allowing it to discharge the original accumulated and contaminated storm water into the City of Houston sanitary sewer and this option currently remains an option for questionable storm water issues should the need arise.

**Waste Piles (Southern Portion of Facility):** Trustee removed wastes dumped to the ground in March 2014 due to the theft of 7 roll-off boxes. An additional debris pile exists that is associated with the construction of the berm around the southern portion of the facility.

**Lab Chemicals/Company Profile Samples:** Trustee consolidated and disposed;

**Bulk Process Chemicals:** Trustee collected and disposed; (COMPLETED)

### **Items that Remain to be completed:**

1. Wastewater Treatment Tank Area
  - Sludge Removal: T108, LIME
  - Acid Removal: R02, PT6
  - Liquid Removal: R01
  - Piping: Remove Materials
  - Secondary Containment: Final Cleanup
2. Aboveground Storage Tank Area
  - Liquid/Sludge Removal: ST1, ST6
  - Acid Removal: PT1, PT2
  - Liquid Removal: PT3
  - Piping: Remove Materials
  - Secondary Containment: Remove contaminated Sand and Final Cleanup
3. Frac Tank Waste Disposal
  - FT1004/FT1002 (Lonestar Ecology)
  - FT30335
  - FT215012 (Sludge Removal)
  - Contact Dana Transport and Have Them Pick up FT's
  - Move FT1001/FT5180 to North Side of Property

4. Bulk Poly Tanks, Totes, Vats, Drums, Misc Containers, Carbon, Supersacks
5. Remove Material (Liquids/Solids) form Large VAT South of ASTs
6. Main Warehouse  
Chop Saw Piping in Trench and Remove Trench Solids  
Clean Contaminated Solids from Warehouse Floor
7. Truck Wash Bay, Shed, Former Shed:  
Truck Wash Bay: Remove Liquids/Solids and from Sump and Trenches and Final Clean  
Shed: Remove Liquids/Solids from Sump and Drains and Final Clean  
Former Shed: Remove Liquids/Solids from Sumps and Trenches and Final Clean
8. Clean Empty Poly Tanks, Totes, Drums, Vats, etc.
9. Dispose of Containerized Wastes (vac boxes, fracs, rollofs)

Roll-Off Boxes:

| Number   | Status  |
|----------|---|
| OT 25563 | Sand Trench Residue                                 |
| OT 25480 | Fine material, soil sand from North Pond<br>Asphalt |
| OT 25160 | Sand from Warehouse                                 |
| OT 25452 | Sand from Warehouse                                 |
| OT 25319 | Debris (ADS Hose, Wood,Pails, Plastic, PPE)         |
| OT 25134 | Debris ( Pails, PPE, Wood)                          |

Vacuum Boxes:

| Number       | Status                                   |
|--------------|--|
| VB 25318     | Sludge S T 2                             |
| VB 25306     | Sludge S T 2 (D018), S T 5 (NH)          |
| VB 25278     | Sludge N T 9, N T 10, N T 11             |
| VB 25226     | Sludge S T 3, S T 5, S T 7               |
| VB 25302     | Sludge N T 3, N T 5, N T 6, S T 8 N OT 8 |
| VB 25287     | Sludge NT7, NT8                          |
| VB 25333     | Sludge NT8                               |
| VB 25281     | Sludge NT8                               |
| VB 25343     | Sludge NT8                               |
| VBDW 25196   | Sludge NT8                               |
| VB 2501      | Sludge ST6                               |
| VB 25348     | Sludge S T 5                             |
| VB A 0825097 | Sludge ST 5                              |

|          |                                      |
|----------|--------------------------------------|
| VB A 785 | Sludge ST 5                          |
| VB 25206 | Sludge ST 5                          |
| VB 25274 | Sludge ST 5                          |
| VB 25341 | Sludge ST 8                          |
| VB 25251 | Sludge ST 8                          |
| VB 25322 | Sludge ST 8                          |
| VB 25203 | Sludge T1, T 11, T 3                 |
| VB 25315 | Sludge T-7, T-8, T11, T 10, T 9, T 4 |
| VB 25146 | Sludge FT 1001, FT 215012            |

Frac Tanks:

| Number           | Status                                   |
|------------------|--|
| FT 1004 (CES)    | Full Approved Lonestar Qualifying w/CB&I |
| FT 30335 (DANA)  | 10,000 gallons                           |
| FT 215012 (DANA) | Empty                                    |
| FT 1002 (CES)    | Empty-Rinsed                             |
| FT 1001 (CES)    | Empty-Rinsed                             |
| FT 5180 (CES)    | Empty-Rinsed                             |
| FT 33527 (DANA)  | Empty-Cleaned                            |
| FT 30338 (DANA)  | Empty-Cleaned                            |

EPA Removal Costs (2/25/15 estimate): \$ 1,186,554.17