

Daily Report 11/22/13

Tetra Tech

<u> Directive #1 – Indoor Air</u>

- Draft Concept Plan for phased approach to indoor air monitoring plus installation of alarm systems and ventilation systems was submitted to DNR on 12/13/12 for comments; the detailed Work Plan was submitted to DNR on 1/14/13 for comments.
- Installed a total of 98 detectors at 45 locations. No positive alarms have occurred to date for either % LEL or H2S.
- A total of ten monitoring pairs and associated transmitters have been provided to Assumption Parish, at their request.
- Continued monthly monitor calibration.
- Completed visual inspection and maintenance of the under slab ventilation systems. Liquids found in the systems were removed and transported to the TBC frac tank.
- Performed ambient air and gas monitoring for the ventilation systems no detects of H2S or LEL.

Plan for today:

- Continue monthly monitor calibration.
- Continue indoor air monitoring.
- Continue in-home air monitoring of TBC properties.
- Continue ventilation system operation, maintenance, and monitoring.

Directive #2 – Additional Relief Wells and Directive #3 – Overall Plan

- Met with DNR/Shaw on 1/24/13; reached agreement on well designs.
- Radius of Influence (ROI) wells are installed at well pads ORW-5 & ORW-9.
- The field portion of ROI testing was completed July 21st. Report is being finalized.
- Continued H & S controls for work in the Sportsman's Drive area. Sage monitored the RAE Systems area gas monitors at ORW-49 and ORW-50 locations. Monitored ambient air in the drilling area (ORW-50) and the exclusion zone with a 5-gas meter on a 15 minute cycle; no levels of H2S or LEL were registered.
- WHE completed construction of ORW-50. No gas kicks were noted. Installed 3 lifts of grout totaling 307 gals to complete the well to the surface. Continuously monitored perimeter breathing zone: no H2S or LEL detections were measured.
- Constructed several concrete well pads across the Site.
- Performed follow-up sweeps of the CPT-120 & 99 locations with the MSA gas meter: no detections were measured.
- Thompson Engineering (barge-mounted rig) advanced the cone for CPT-121 to 114.12' bgs.



- Completed weekly Storm Water Pollution Prevention Plan (SWPPP) inspection.
- Rock's Trucking crew brought in topsoil for excavation areas of Sportsman's Drive; placed soil and graded; brought sweeper in at the end of the day to clean the road.

Plan for today:

- Thompson Engineering drill CPT-122.
- Completed Job Safety Analysis summaries for each site project; will post in project office.

Directive #4 – Operation of All Wells

- Flares #2, #3, #4, #5, and #6 are operating. One additional flare, and a trailer-mounted backup flare, are available as needed. TBC Flare #1 will require insulation repair prior to being put into service.
- Well work overs are ongoing for all low-producing and non-flowing wells.
- Barton meters have been installed on flowing wells; performed routine maintenance.
- Performed daily flare operation and maintenance.
- Performed daily relief well operation and maintenance.
- Completed daily ORW well data collection.
- Entergy completed the power connection to the drop near flare 6; Boudreaux Electric completed connections to the flare and the area lighting.
- Dewatered ORW-43: average gpm of 2.7; starting well head pressure: 0.0 psi, ending: 3.0 psi; starting water level: 13.81', ending 22.73'; 900 gallons removed.
- Increased flow at ORW-49: increased choke to 5.0; pressure held at 45 psi; flow rate increased to 3.7 mcf.
- Pre-assembled meter run fittings for ORW-50. Installed unistrut supports for the meter run; installed the Level Troll transducer.
- WHE crew installed master valve at ORW-50; installed bollards at various locations.
- Assisted WHE and Rock's Trucking crews with trenching for the gas and water lines at ORW-50.
- Dewatered ORW-43.

Plan for Today:

- Complete daily flare, Barton meter, generator, and compressor operation and maintenance activities.
- Dewater ORW-43.



Directive #5 – Sinkhole Containment

- Submitted Joint Application to OCM and COE, which included sinkhole containment design and additional ORW wells, on 2/14/13.
- Initial containment of the sinkhole area was completed.
- A pre-construction meeting was held on-site on March 27th for TBC and contractors.
- Construction of the containment system began April 1st.
- The current configuration of the sinkhole containment system is completed.
- Inspected berms surrounding the sinkhole.
- Miller Engineers surveyed settlement plates.
- Rock's Trucking operated the Baker pumps.
- Rock's Trucking completed repairs at guard shack.

Plan for Today

• Inspect berm.