

Daily Report 11/15/13

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. The detectors at one residence are out of calibration: the resident is away on family business and will not be in the area until December.
- 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.

Plan for today:

- Continue monthly monitor calibration.
- Continue indoor air screening.
- Continue in-home air monitoring of TBC properties.
- Monitor ventilation systems.

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.
- Mission Utility Service set up horizontal boring equipment on the east side of Sportsman's Drive, approximately midway of the north/south roadway. A borehole was advanced to the north to the location of the existing access excavation (~450'). HDPE pipe was pulled through the bore. The work areas were cleaned and secured at the end of the day.
- Encountered gas while drilling PMW-18. WHE was initially successful in mitigating the kicks; none developed into a blowout. However, during well construction, when the drill casing was retracted immediately above the top of the MRAA a kick occurred that pressurized the capped casing to 50 psi. Two above-grade 8" drill casing threaded joints had pinhole leaks of gas. A ventilation fan was utilized to disperse the gas from the pinhole leaks such that the LEL meter showed no detectable levels within a foot of the pinholes. It was determined that the only way to continue with the well completion was to vent the gas. A 2" HDPE line was used to connect the water pump line to the existing Flare 6 (West of Bayou Corne) pipe network. At 2030 hrs, the rig valves were opened allowing pressurized gas to flow out of the casing, through the sonic head, and then into the flare piping system. From 2030 to 2130 hrs, Flare 6 was venting gas at 90 to 115 SCFM.



The flame itself remained extremely robust for the first two hours, with an average flame height of 15 ft.

• Tetra Tech utilized 2 fulltime techs to monitor the situation overnight, under the direction of Paul Scott, and with the approval of TBC.

Plan for Today:

- WHE sonic (track) continue with MRAA wells.
- Mission Utility Service continue with well infrastructure on Sportsman's Drive.
- Determine appropriate course of action at PMW-18.

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.
- Assisted Sage, CB&I and Pisani with obtaining additional gas samples at several wells
- Shut in ORW-10 at ~2:15 pm for no flow; well is watered in.
- Monitored continuous pumping at ORW-40; water level at 31.54 feet, well head pressure @ 20.0 psi.
- Performed dewatering/logging at ORW-43; removed 440 gallons (transferred to the frac tank); no pressure developed at the well head.
- Order materials for completing connections to planned wells ORW-49 & 50; built stands to support meter runs.
- Repair a leak on the meter run at ORW-14; also added isolation valves.

Plan for Today:

- Complete daily flare, Barton meter, generator, and compressor maintenance.
- 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 south berm: subsidence rate appears to be lessening.
- Miller Engineers surveyed settlement plates.
- Rock's Trucking operated the Baker pumps from 7:00 am to 6:00 pm.

Plan for Today

• Inspect berm.