

# Daily Report 11/21/13

### 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 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.
- Continued Health and Safety controls for work in the Sportsman's Drive area. Sage monitored the RAE Systems 's area monitors at the ORW-49 and ORW-50 locations. Also monitored the 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.
- Set up the perimeter air monitoring instrumentation and emergency equipment, per the ORW Community Installation Plan, at ORW-50. WHE advanced the borehole at ORW-50 to 138 ft bgs. Only minor gas kicks occurred; all were easily mitigated with potable water. Installed well and materials up to the top bentonite seal above the gas zone screen. Allow to hydrate overnight. Continuous monitoring of the perimeter breathing zone revealed no H2S or LEL detections. Performed follow-up sweeps of the CPT-120 & 99 locations with the MSA gas meter: no detections were measured.
- Thompson Engineering and Faucheux placed and secured the CPT rig on the barge; the barge was moved into position at CPT-121



Plan for Today:

- Thompson Engineering drilling CPT-121.
- WHE sonic (track) team grout and install the temporary well head at ORW-50; Tt continue Health and Safety controls.
- WHE sonic (truck) team continues well development at MRAA-04D.

# 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.
- Performed a 3-hour flow rate test at ORW-52 and 53. Increased the orifice plate sizes from 1/8" to ¼"; pressures dropped 15 to 18 psi quickly. At the end of the test run, reset the wells with the 1/8" orifice plates; ORW-52 began to recover, ORW-53 did not; will recheck today.
- Installed the meter run, choke valve and Barton meter at ORW-49. Completed piping connections, opened the well to flare #5. Starting pressure: 49.0 psi; stabilized at 44.0 psi; differential pressure indicates 3 mcf flow rate.
- Closed the valve at ORW-27 per DNR request.
- Removed the choke valve, meter run and Barton meter from ORW-42; converted ORW-42 to PMW-19-S; converted PMW-12-S to ORW-54; re-labeled each well accordingly.
- Dewatered ORW-10: removed 525 gallons; starting well head pressure: 27 psi; ending well head pressure at 30 psi; starting water level: 8.78 feet, ending water level: 44.83'.
- Started electric pump at ORW-43: average gpm of 2.7; starting well head pressure: 0.0 psi, ending: 0.0 psi; starting water level: 13.68', ending 20.44'. Removed 170 gallons of water.

Plan for Today:

- Complete daily flare, Barton meter, generator, and compressor operation and maintenance activities.
- Continue dewatering at ORW-10.
- 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.