



235 Montgomery Street, Suite 935, San Francisco, CA 94104-3002
Tel. 415-955-4775, Fax 415-955-4776, www.aspeneg.com

**PROJECT MEMORANDUM
KIRBY HILLS NATURAL GAS STORAGE FACILITY PROJECT, PHASE 2**

To: Junaid Rahman, CPUC
From: Vida Strong, Aspen Project Manager
Date: October 17, 2008
Subject: Report #17: September 28, 2008 – October 11, 2008

CPUC ENVIRONMENTAL MONITOR (EM): Jody Fessler

CPUC EM Jody Fessler was on site Friday, October 3rd.

WELL SITES:

Summary of Activity:

Well Site 21 (WS-21)

September 28th – October 4th

Throughout the week, Ensign Drilling had a workover rig on WS-21-5. On Tuesday, crews installed risers and flanges on the HDPE lines and blinded above grade. Crews also backfilled the piping area, leaving an opening where cables exit the trench, and reinstalled cover rock in the area. On Saturday, crews installed valves and blind flanges on the 12-inch manifold.

October 5th – October 11th

On Monday and Tuesday, Ensign Drilling had a workover rig on WS-21-5. On Wednesday, Halliburton was on site conducting frac work at WS-21-4. On Thursday, Halliburton conducted frac work at WS-21-5. On Friday, crews prepared for gravel pack/screen installations at WS-21-4 and WS-21-5.

Well Site 22 (WS-22)

September 28th – October 4th

On Tuesday, crews began installation of the 6-inch underground piping and conducted miscellaneous pipe spool fabrication. On Wednesday, crews installed the underground 12-inch valve at the pipeline on the west side of WS-22. Crews also moved fabricated piping, valves, and miscellaneous material from the compressor station to WS-22. On Thursday, crews installed the 12-inch manifold at the pipeline connection and worked on piping fabrication and installation for the metering and wellhead area. On Friday and Saturday, crews continued to work on piping fabrication and installation for the metering and wellhead area (see Figure 1).

October 5th – October 11th

On Tuesday, crews connected piping for three wellheads at WS-22 and installed a temporary flow control and measurement system for three wells. On Wednesday, crews began installation of piping for the fourth well and completed installation of the flow control and measurement system for the three wells. Crews also installed start-up screens at three wells for early injection and completed assembly and bolt torque for early injection. On Thursday, crews continued to install piping for the fourth well. On Friday, crews completed assembly of the fourth well piping system to the wellhead and pulled start-up screens at the wellheads, cleaned, and reinstalled.

Well Site 23 (WS-23)

September 28th – October 4th

Throughout the week, Ensign Drilling continued to drill at WS-23-15. Crews are drilling 24 hours a day, 7 days a week (see Figure 2).



October 5th – October 11th

Throughout the week, Ensign Drilling continued to drill at WS-23-15. Crews are drilling 24 hours a day, 7 days a week.

Observation Well Lambie 6 (Well L6)

No work activities occurred at Well L6 during the subject week.

Observation Well Lambie 7 (Well L7)

No work activities occurred at Well L7 during the subject week.

PIPELINE:

Summary of Activity:

September 28th – October 4th

On Monday, crews began installation of topsoil between WS-21 and WS-22. On Tuesday, crews completed right-of-way grading between WS-21 and WS-22. On Wednesday, crews worked on piping at WS-22. The right-of-way is backfilled between the compressor station and WS-21 (see Figure 3).

October 5th – October 11th

On Sunday, crews filled the system with water, pressurized, checked for leaks, and stabilized overnight in preparation for hydrotesting on Monday. On Monday, crews conducted hydrostatic testing of the pipeline from the compressor station to the west end of WS-22, including early injection “E” spec piping inside the compressor station.

ACCESS ROADS:

Summary of Activity:

On Monday, September 29th, crews began installation of geotextile fabric and rock on the access road between the compressor station and WS-21. On Tuesday, September 30th, crews completed installation of rock on the access road from the compressor station to WS-21.

STAGING AREAS:

Summary of Activity:

Crews are utilizing the temporary work area/staging yard on the north side of the compressor station for materials storage, equipment storage, and welding operations.

COMPRESSOR STATION SITE:

Summary of Activity:

September 28th – October 4th

Throughout the week, crews continued fabrication, welding, and installation of “D Spec” early injection piping system; conducted form and rebar work for the glycol contactor foundation; poured concrete for glycol contactor foundation pedestal; poured concrete inside compressor skid CBA-3000; de-watered “D Spec” early injection piping; and prepared “E Spec” piping and pipeline for hydrotest (see Figure 4).

October 5th – October 11th

Throughout the week, crews prepared compressor foundation CBA-4000 for epoxy grout pour; continued assembly of the compressor skid packages; conducted tie-in to the slug catcher for early injection piping; began re-assembly of piping following hydrotest, continued fabrication, welding, and installation of early

injection piping system; completed several piping tie-ins inside the compressor facility; poured epoxy grout for the compressor skid unit CBA-4000; placed concrete inside compressor skid unit CBA-4000; stripped grout forms from CBA-4000 foundation; stripped forms for glycol contactor foundation; completed piping assembly and bolt torque for early injection; began early injection to three wells at WS-22; conducted form work for the glycol regeneration skid foundation; began installing piping in trenches inside the compressor station; and set anchor bolts in the glycol regeneration skid.

Environmental Compliance:

The CPUC EM observed that all work activities were in compliance with the approved Mitigated Negative Declaration and other permit requirements. The CPUC EM reviewed LGS’ Environmental Inspector’s (EI) daily reports and survey reports. Environmental training of crew personnel by LGS’s EI was on-going as new crew personnel came onto the site. Sensitive environmental areas were staked, flagged, and/or fenced. The wetland area near WS-23 was fenced off and had silt fencing installed on the upslope side so potential erosion from WS-23 would not enter the wetland area. The CPUC EM observed water trucks continuously watering the work areas and access roads. The refueling tank and other small cans at the compressor station were surrounded with secondary containment. The sites were cleaned of trash on a daily basis.

NOTICES TO PROCEED (NTP):

To date, six Notices to Proceed (NTPs) have been issued for the Kirby Hills Natural Gas Storage Facility Phase II Project (see Table 1). Additional NTPs are anticipated for the project.

TABLE 1
Notice to Proceed Requests
(Updated 10-17-08)

NTP #	Date Requested	Date Issued	Description
#1	4-11-08	4-21-08	Request authorization from the CPUC to commence with construction activities associated with three new wells (Well Sites 21, 22, and 23), a 2,700-foot-long pipeline (flow line), and access roads and staging areas for Phase II of the Kirby Hills Natural Gas Storage Facility Project.
#2	4-11-08	4-20-08	Request authorization from the CPUC to commence with reentry and conversion of Wells Lambie 6 and Lambie 7 to observation wells for Phase II of the Kirby Hills Natural Gas Storage Facility Project.
#3	5-2-08	5-6-08	Request a NTP from the CPUC for PG&E’s hot tapping work at the Kirby Hills Natural Gas Storage Facility meter station, located west of Birds Landing Road in Solano County.
#4	4-29-08	5-7-08	Request authorization from the CPUC to commence with the civil, mechanical, electrical, and instrumentation work at the compressor station facility of the Kirby Hills for Phase II of the Kirby Hills Natural Gas Storage Facility Project.
#5	5-23-08	N/A	Request authorization from the CPUC for extra work space at the corner of Shiloh Road and the access road to Kirby Hills. This work space was already approved under NTP #1 and therefore NTP #5 is not necessary. Wetland areas within the work space will be totally avoided.
#6	6-9-08	6-13-08	Request to install compressor units on foundations at Compressor Station.

VARIANCE REQUESTS:

No Variance Requests have been submitted to the CPUC to date.

PHOTOGRAPHS



Figure 1 – Crews working on piping at WS-22, October 3, 2008.



Figure 2 – Ensign Drilling continues drilling at WS-23-15, October 3, 2008.



Figure 3 – Right-of-way between the compressor station and WS-21, October 3, 2008.



Figure 4 – Pouring cement foundations at the Compressor Station, October 3, 2008.