



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: September 19, 2008
Subject: Report #15: August 31, 2008 – September 13, 2008

CPUC ENVIRONMENTAL MONITOR (EM): Jody Fessler

CPUC EM Jody Fessler was on site Friday, September 5th, and Friday, September 12th.

WELL SITES:

Summary of Activity:

Well Site 21 (WS-21)

August 31st – September 6th

On Monday, Ensign Drilling continued to drill at WS-21-4. On Tuesday, crews completed drilling and began rigging down and preparing to move to WS-23. Wednesday through Friday, crews moved equipment from WS-21 to WS-23. On Friday, crews also removed cover rock at WS-21 well pad to prepare for pipeline trench excavation (see Figure 1).

September 7th – September 13th

On Monday, crews completed stripping the rock from the pipeline excavation area and began excavation for the pipeline across WS-21. On Tuesday, crews completed the excavation for the pipeline across WS-21 and moved pipeline bends to WS-21 well pad. On Wednesday, crews installed 100 feet of pipeline across WS-21. On Thursday, crews coated underground pipeline field welds and strung pipe across WS-21.

Well Site 22 (WS-22)

August 31st – September 6th

On Tuesday, the workover rig that had been working with the fishing tool at WS-22-9 was rigged down and moved to WS-22-10. On Wednesday through Friday, the workover rig worked on the completion of WS-22-10 and completed it on Saturday (see Figure 2). Also, Wednesday through Friday, Nabor's coil tubing unit was on WS-22-9.

September 7th – September 13th

Throughout the week, the workover rig was on WS-22-9. On Thursday, crews excavated across WS-22 for pipeline installation.

Well Site 23 (WS-23)

August 31st – September 6th

On Wednesday, Ensign Drilling started moving equipment from WS-21 to WS-23 and crews began rigging up on WS-23-15. On Friday, drilling began for WS-23-15 (see Figure 3). Drilling is taking place 24 hours a day, 7 days a week.

September 7th – September 13th

Throughout the week, Ensign Drilling continued drilling at WS-23-15. Drilling is taking place 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:**

August 31st – September 6th

On Tuesday, crews completed excavation for the pipeline into the compressor station fenced area. On Wednesday, crews welded piping spool for the pipeline into the compressor station. On Thursday, crews moved in material for the road along the pipeline right-of-way, replaced topsoil over the portion of backfilled pipeline between the compressor station and WS-21, and installed fabricated piping from outside the compressor station fence to above grade flange inside the compressor station (see Figure 4). On Friday, crews coated field joints on the pipeline into the compressor station and tested it for damage, padded pipe and began shading at the compressor station area, and connected new spool of HDPE pipe near WS-21 and began padding the trench at 16+00 to 18+00.

September 7th – September 13th

On Tuesday, crews excavated for the pipeline from WS-21 to WS-22. On Wednesday, crews welded miscellaneous pipeline bends to the pipe. On Thursday, crews strung pipe from WS-21 to WS-22. No pipeline activity was conducted on Friday because it was too windy for pipeline welding.

ACCESS ROADS:**Summary of Activity:**

On Monday, September 8th, and Tuesday September 9th, crews worked on constructing the road sub-grade 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:**

August 31st – September 6th

Throughout the week, crews continued stripping forms for the compressor foundations, built up the sub-grade in the compressor building area, conducted welder qualification testing, miscellaneous pipe fabrication, completed compaction around the compressor foundations, sandblasted the surface of the compressor foundations for grout preparation, and began excavation for the Glycol Regeneration Skid foundation grade beam.

September 7th – September 13th

Throughout the week, crews completed excavation for the Glycol Regeneration Skid foundation grade beam, installed expansion joints for epoxy grout onto compressor foundations, conducted miscellaneous pipe and foundation excavation, conducted miscellaneous pipe spool fabrication, conducted excavation for the glycol contactor foundation, and conducted excavation for MAK-6150 Filter Separator foundation (see Figure 5).

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 Inspect (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. 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.

LGS reported that there was a spill at WS-21 on Monday, September 8th, due to an excavator hydraulic hose rupture. Spill measures were immediately and properly initiated.

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 9-19-08)

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 – Drilling completed at WS-21, September 5, 2008.



Figure 2 – Workover rig set up at WS-22-10, September 5, 2008.



Figure 3 – Drill rig set up at WS-23-15, September 12, 2008.



Figure 4 – Pipeline right-of-way on northeast side of Compressor Station, September 5, 2008.



Figure 5 – Excavations for foundations and piping at the Compressor Station, September 12, 2008.