



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: August 28, 2008

Subject: Report #13: August 10, 2008 – August 23, 2008

CPUC ENVIRONMENTAL MONITOR (EM): Jody Fessler

CPUC EM Jody Fessler was on site Friday, August 15th and Friday, August 22nd.

WELL SITES:

Summary of Activity:

Well Site 21 (WS-21)

On Monday, August 11th, Ensign Drilling moved drill rig (skidded) from WS-21-5 to WS-21-4 and began drilling of the 9⁷/8-inch hole. On Tuesday, August 12th, Ensign Drilling began drilling the 14½-inch hole and continued drilling the 9⁷/8-inch hole. Drilling of the 14½-inch hole continued throughout the week (see Figure 1). On Saturday, August 16th, Ensign Drilling set and cemented 10¾-inch surface pipe at 2,000 feet. They are drilling 24 hours a day, 7 days a week.

During the week of August 17th through August 23rd, Ensign Drilling continued drilling at WS-21-4. On Friday, crews lost circulation on well WS-21-4 at 4,802 feet. On Saturday, Ensign Drilling set a cement plug at the bottom of the hole. They are drilling 24 hours a day, 7 days a week.

Well Site 22 (WS-22)

During the week of August 10th through August 16th, a workover rig was set up at WS-22-7 and WS-22-9. On Thursday, August 14th, a workover rig was set up at WS-22-10. On Friday, August 15th, a workover rig was set up at WS-22-8.

During the week of August 17th through August 23rd, a workover rig was set up at WS-22-7. On Monday, crews began frac of WS-22-7 and completed the frac on Tuesday. On Wednesday, crews began to perforate for production and run gravel packs for WS-22-7. On Thursday, crews completed perforating for production and on Friday, crews completed gravel packs for WS-22-7 (see Figure 2). On Saturday, crews swabbed WS-22-7 and rigged down.

Well Site 23 (WS-23)

On Wednesday, August 13th, crews began moving cover rock to prepare for piping excavation and Dillon and Murphy survey crew staked the pipeline from WS-22 to WS-23 to the pig launcher area. On Thursday, August 14th, crews completed moving the cover rock at the well site pad in preparation for pipe trench excavation (see Figure 3).

No work activities occurred at WS-23 during the week of August 17th through August 23rd.

Observation Well Lambie 6 (Well L6)

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

Observation Well Lambie 7 (Well L7)

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

Agoura Hills • San Francisco • Sacramento • San Diego • Phoenix



PIPELINE:

Summary of Activity:

On Monday, August 11th, crews moved the 12-inch pipe to the pipeline right-of-way. On Thursday, August 14th, crews laid out the trench for the pipeline in the WS 23 area. On Friday, August 15th, crews moved the pipe to WS 23 area and began double-jointing work.

On Monday, August 18th, and Tuesday, August 19th, crews checked coating and repaired the 12-inch pipeline from the compressor station area east of WS-21 (approximately 1850 feet). On Wednesday, crews installed shrink sleeves at the weld joints and checked coating, made 12-inch pipeline welds, and x-rayed the 12-inch pipeline welds. On Thursday, crews installed the HDPE pipe and fiber optic cable in the pipeline trench and began shading (first phase of backfill) the pipeline between the compressor station and WS-21. On Friday, crews completed shading of the pipeline from the compressor station to east of WS-21.

ACCESS ROADS:

Summary of Activity:

No construction activity was conducted on the access roads during the subject weeks. The access roads are being used to access the work sites.

STAGING AREAS:

Summary of Activity:

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

COMPRESSOR STATION SITE:

Summary of Activity:

During the week of August 10th through August 16th, Rockford crews worked Monday through Friday and conducted compaction of foundation areas, excavation for foundations and piping, building of forms for compressor foundations, piping fabrication, installation of rebar for compressor block foundations, and x-ray work (see Figure 4).

During the week of August 17th through August 23rd, Rockford crews worked Monday through Friday and conducted miscellaneous pipe fabrication, installation of rebar and form work for compressor foundations, and removed cover rock from the south end of the tank battery area.

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.

NOTICES TO PROCEED (NTP):

To date, six Notice 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 8-28-08)

| 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 – WS-22 with workover drill rig and WS-21 with drill rig as seen from WS-23 well pad, August 15, 2008.



Figure 2 – Pipeline right-of-way from Compressor Station for WS-21 in the foreground and WS-22 in the background, August 22, 2008.



Figure 3 – Pipeline trench area at WS-23 well pad, August 15, 2008.



Figure 4 – Crews working on the compressor foundations at the Compressor Station, August 15, 2008.