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

To: Junaid Rahman, CPUC
From: Vida Strong, Aspen Project Manager
Date: April 24, 2009
Subject: Report #23: February 22, 2009 – April 25, 2009

CPUC ENVIRONMENTAL MONITOR (EM): Jody Fessler

CPUC EM Jody Fessler was on site March 20th, April 15th, and April 21st.

WELL SITES:

Summary of Activity:

Well Site 21 (WS-21)

No construction activity was conducted at WS-21 for the period of February 22 through the first week of March. During the second week of March, crews set forms for the light pole foundations and removed start-up screens from the wellheads. During the third week of March, crews installed conduit for light poles, installed grounding, poured concrete for the light pole foundations, and completed excavation for electrical distribution rack foundation (see Figure 1). During the fourth week of March, crews installed underground conduit for lighting circuits; set forms, rebar and anchor bolts for electrical distribution rack foundation; and poured concrete. Crews installed the electrical distribution rack structure on March 30. Crews completed conduit installation and began pulling wire on April 8 and completed pulling on April 9. Crews began cable testing on April 10 and conducted wire terminations on April 11. Clean-up work was conducted at WS-21 during the week of April 13-18.

Well Site 22 (WS-22)

No construction activity was conducted at WS-22 for the period of February 22 through the first week of March. During the second week of March, crews excavated for the light pole foundations and set forms. During the third week of March, crews installed conduit for the light poles, installed grounding, poured concrete for the light pole foundations, and completed excavation for electrical distribution rack foundation (see Figure 2). During the fourth week of March, crews installed underground conduit for lighting circuits; set forms, rebar, and anchor bolts for electrical distribution rack foundation; and poured concrete. Crews installed the electrical distribution rack on March 30. Crews also installed conduit at the electrical distribution rack throughout the week of March 30 – April 4, and the painting crew began blasting and priming of wellhead piping. Crews pulled wire from end devices to distribution rack panels on April 6. Clean-up work was conducted at WS-22 during the week of April 13-18.

Well Site 23 (WS-23)

Crews worked on above grade and underground conduit to instruments on February 25 and 26. Crews also excavated for foundations on February 26 and poured slurry for sub-grade on February 27. During the first week of March, crews installed underground and above ground conduit and set forms for various foundations. During the second week of March, crews installed conduit at the light pole foundations, conducted piping backfill, poured concrete, installed start-up screen at the wellhead, and set forms for the pig launcher support. During the third week of March, crews completed forms for the pig launcher supports, poured concrete, installed rebar for pig launcher containment foundation, installed air tank and manifold, conducted backfill activities, installed grounding, and installed electrical distribution rack (see Figure 3). During the fourth week of March, crews pulled wire and tested cables, terminated instrument circuits, and continued backfill and compaction around foundations. Crews installed worked on instru-



ment wiring terminations on March 30. The paint crew completed the primer coat to piping. Forms for the pig launcher 9700 containment were installed on April 2. No additional work occurred at WS-23 during the subject period.

Observation Well Lambie 6 (Well L6)

No construction activities occurred at Well L6 during the subject period.

Observation Well Lambie 7 (Well L7)

No construction activities occurred at Well L7 during the subject period.

Well Site 5 (Wagenet 5 – W5) Observation Well

On April 5, the landowner installed a temporary electric fence around the work area to discourage cattle from entering the construction area. On April 9, hand harvesting of specified plants was conducted in the disturbance area. Two species of plants were moved outside of the disturbance area and marked with pink and yellow flags. Crews transplanted 1425 plants under the supervision of Jones & Stokes biological monitors. On April 15, crews began installing the wildlife exclusion fence per Dr. Shellhammer's recommendations and the USFWS BO. A small trencher was first used to dig a trench so that the fence could be easily keyed in. The trencher then got stuck and crews had to dig a trench by hand and key-in the fence (see Figures 4 and 5). Crews finished installing the fence on April 16 and conducted weed-eating around the perimeter of the fence as directed by Dr. Shellhammer. Crews also installed a work exclusion fence along the access road to the well pad area. On April 17, Wagenet 5 well casing was exposed. On April 20, crews started building up the access road and well pad area with soil, which was then compacted. On April 21, crews finished adding soil to the well pad area and began to install gravel on top of the compacted soil (See Figure 6). This work is ongoing.

PIPELINE:

Summary of Activity:

No construction activities were conducted along the pipeline during the subject period.

ACCESS ROADS:

Summary of Activity:

The access roads are being used by construction vehicles and equipment to access the construction sites.

STAGING AREAS:

Summary of Activity:

The disturbed temporary work area/staging area on the north side of the compressor station has revegetated well.

COMPRESSOR STATION SITE:

Summary of Activity:

February 22 – 28, 2009

Electrical work included underground conduit work. Foundation work included sub-grade work, form work, and concrete pours. Mechanical work included welding and tie-ins. Compressor building work included setting and connecting columns onto foundation and assembling portions of the roof structure on the ground.

March 2009

Throughout the month of March, electrical work included excavating for conduit installation; installing underground conduit; cable tray installation; miscellaneous grounding installation, repair, and tie-in to existing grid; wire installation; electrical work in compressor building. Foundation work included founda-

tion and cable tray excavations, foundation form and rebar work, pouring concrete foundations, removing forms from foundations, and forming containment walls. Mechanical work included backfill of piping, welding tests, fabrication of miscellaneous exhaust and inlet structures and cable tray support structures, installing cable tray supports, installing HDPE piping in trench, and coating of underground piping. Compressor building work included setting the main roof supports and overhead crane onto structure, framing, sheeting walls, installation of roof insulation and panels, installation of fans and inner sheeting, and installation of gutters and trim (see Figure 7).

March 29 – April 4, 2009

Electrical work included installation of cable trays and conduit, instrument wiring, and miscellaneous grounding work. Foundation work included excavating for foundations, setting rebar for foundations, constructing forms, and pouring concrete. Mechanical work included beginning the final assembly and commissioning procedures for engines and compressors, miscellaneous pipe fabrication and installation, and coating of underground piping sections. Roll-up doors and flashing work will be performed at a later date on the compressor building.

April 5 – April 11, 2009

Electrical work included installing conduit and cable trays, pulling wire, installing breaker in new MCC unit, installing fiber optic cable inside cable tray to new MCC area, and grounding work. Foundation work included excavating for foundations, form and rebar work, pouring concrete, and backfilling and compacting around foundations. Mechanical work included commissioning and certifying crane, engine/compressor work for unit CBA-3000, setting of standby generator and transformer onto foundations, and piping fabrication and installation.

April 12 – April 18, 2009

Electrical work included cable tray and wire installation, power system work, conduit installation inside the compressor building, transformer testing, and grounding. Foundation work included excavating for foundations, form and rebar work, and pouring concrete foundations. Mechanical work included setting gas cooler on foundation, work on glycol contactor and unit CBA-3000, piping fabrication and installation, miscellaneous pipe excavation and backfill, and preparing piping system for hydrotesting.

METERING SITE:

Summary of Activity:

Electrical work and PG&E's work is complete at the Metering Station. On March 23, crews conducted excavation for the remaining pipe support foundations. On March 26, crews set rebar for pipe support foundations. On April 16, crews poured concrete for pipe supports. Backfilling, clean-up activities, final grading and painting still remain to be completed.

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) 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. Erosion controls were in place and functioning at all work sites. 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. The access road to W5 was being kept watered to prevent dust. The SMHM wildlife exclusion fencing was in place and functional.

NOTICES TO PROCEED (NTP):

To date, seven Notices to Proceed (NTPs) have been issued for the Kirby Hills Natural Gas Storage Facility Phase II Project (see Table 1). No additional NTPs are anticipated for the project.

TABLE 1
Notice to Proceed Requests
(Updated 4-24-09)

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 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.
#7	12-14-08	12-17-08	Request to conduct modifications at the Metering Station, located west of Birds Landing Road in Solano County.
#8	4-7-09	4-16-09	Request authorization from the CPUC to commence with construction activities at observation well Wagenet 5 (W5).

VARIANCE REQUESTS:

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

PHOTOGRAPHS



Figure 1 – Pouring cement at Well Site 21 (WS-21), March 20, 2009.



Figure 2 – Piping work at Well Site 22 (WS-22), March 20, 2009.



Figure 3 – Well Site 23 (WS-23), March 20, 2009.



Figure 4 – Wagenet 5 (W5) Observation Well Site area partially fenced with wildlife exclusion fence, April 15, 2009.



Figure 5 – Wagenet 5 (W5) Observation Well Site pad area, April 15, 2009.



Figure 6 – Wagenet 5 (W5) Observation Well Site pad area, April 21, 2009.



Figure 7 – Compressor building being constructed at Compressor Station, March 20, 2009.