

California Public Utilities Commission Mitigation Monitoring, Compliance, and Reporting Program

Central Valley Gas Storage Project

Compliance Status Report 10

September 15, 2011

SUMMARY

The California Public Utility Commission (CPUC) is responsible for overseeing implementation of the mitigation measures set forth in the final initial study/mitigated negative declaration (FIS/MND) for the Central Valley Gas Storage (CVGS) project. The CPUC has established a third-party monitoring program and adopted a Mitigation Monitoring, Compliance, and Reporting Program (MMCRP) to ensure that measures approved in the FIS/MND to mitigate or avoid significant impacts are implemented in the field. This MMCRP status report is intended to provide a description of construction activities on the project, a summary of site inspections conducted by the CPUC's third-party monitors, the compliance status of mitigation measures required by the MMCRP, and anticipated construction activities. This compliance status report covers construction activities for the period of September 2 to September 15, 2011.

MITIGATION MONITORING, COMPLIANCE, AND REPORTING

Site Inspections/Mitigation Monitoring

A CPUC third-party environmental compliance monitor conducted site observations in areas of active construction, which included the 10-acre compressor station site, 5-acre remote well pad site, the 400-401 line interconnect, temporary off-site storage areas, and portions of the natural gas pipeline alignment. Site observations were completed on September 7, 12, and 15, 2011. Areas of active and inactive construction within the project limits were observed to verify implementation of the measures stipulated in the project's MMCRP. Daily observations were documented on daily site inspection forms, and applicable mitigation measures were reviewed in the field.

Implementation Actions

<u>Drilling Operations at the Remote Well Pad Site and Foundation and Structural work at Compressor</u> Station

Construction activities at the remote well pad site undertaken during the period covered by this report included: completion of drilling of the seventh injection well, breakdown and relocation of the drill rig,

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and setup of the drill rig at the location of the eighth well; operation of the temporary compressor; and continued gas injection.

Ongoing work at the compressor station site included construction of building foundations, framing and siding for the utility building (see Photo 1, Attachment A), and continuation of pipe assembly.

Dust emissions at both sites have been an issue due to the hot, dry weather. However, the contractor has kept two water truck on site to spray the roads up to four times daily. Best management practices (BMPs) have been placed around the perimeter of the work area, consisting of a silt fence to minimize the potential for sediment to be transported beyond the work limits. Silt fences were to be in need of maintenance/repair in certain areas where sections had fallen down or otherwise become degraded from exposure. Exclusion fencing has also been placed within areas adjacent to the approved work limits at the direction of the CVGS biologist to ensure that direct impacts to sensitive habitat do not occur during construction. The soil stockpile at the north end of the compressor station site has been observed since 7/28/11 and does not have BMP's in place. All work was being conducted within approved work limits and portable toilets and trash bins were provided for workers. Spill kits are maintained at the field office. Traffic control devices were in place on public roadways within and adjacent the project site.

Construction Activities along the Natural Gas Connecting Pipeline Right-of-Way

Construction activities along the natural gas connecting pipeline right-of-way undertaken during the period covered by this report included: staging of equipment; excavation and auger boring (at D-11, D-14, D-23, D-25, Dirks Road, and the private runway in the Gunnersfield property) (see Photo 2, Attachment A); potholing; completion of HDD at the Colusa Drain, disassembly of the HDD rig, relocation of the HDD rig to the Interstate 5 crossing, initiation of HDD at Interstate 5 (see Photo 3, Attachment A); pipe stringing, welding, and bending; trenching; lowering pipe into trenches; backfilling trenches; dewatering (see Photo 4, Attachment A); and regarding/raking of the right-of way between Interstate 5 and Loretz Road (see Photo 5, Attachment A).

Containment measures at the HDD and auger bore sites were observed to be in working order. Wildlife escape ramps in excavated areas were installed. Holes resulting from potholing were observed to be covered and secured. Spill kits were observed on equipment. Work along the Pipeline alignment was being conducted within approved work limits and portable toilets and trash bins were available for workers. De-watering operations along portions of the pipeline alignment is on-going. Silt fencing, sensitive resource exclusion fencing (ESA fencing), farm infrastructure exclusion fencing, and overhead powerline warning flagging is in place and generally in working condition. Traffic control devices were in place on public roadways within and adjacent the project site.

The following issues related to mitigation measures associated with the pipeline right-of way were observed by CPUC monitors. This information was presented to CVGS on 9/13/11 for corrective action:



- 1. Temporary Bridges The CPUC issued variance approval #7 on August 15, 2011 for installation of temporary bridges across fourteen drainages. The variance approval identifies that Best Management Practices (BMPs) will be installed in accordance with the SWPPP to ensure erosion and sediment control measures will be implemented to minimize the potential for soil to be displaced or transported into sensitive habitat areas. The BMP's currently in place at the temporary bridges did not meet the intent of the SWPPP. CPUC monitors observed gaps in the bridge decking materials, which has resulted in sediment located along the bridge deck from overland construction vehicle travel to be discharged into waters located beneath the bridge deck. In addition, the BMP's located adjacent and beneath the bridge steel frames are not adequate as the soils have a high potential to be displaced or transported into waterways. CVGS responded immediately by implementing corrective actions at temporary bridge locations to minimize soil discharge. The actions included adding a second deck layer to bridges with a layer of geo-mesh material in between the two layers. This action was observed to be effective in preventing soil discharge.
- 2. Dust Control APM AIR-1 states that streets shall be swept daily with water sweepers where the pipeline right-of-way intersects the public road if visible soil material is carried onto adjacent public streets. CPUC monitors observed several public roadways located adjacent to construction activities where sweepers have not been observed to be sweeping in accordance with APM AIR-1. CVGS has identified that a sweeper will be used on public roadways in accordance with the MMCRP.
- 3. Maintenance of BMP's CPUC environmental monitors identified the maintenance of BMP's was not adequate and was not being completed in accordance with the project SWPPP requirements. Specifically, observations were made at the Remote Well Pad Site and Compressor Station Site where silt fence is not being maintained. CVGS has identified that silt fence will be inspected, repaired, and replaced, where necessary.
- 4. Frac-Out The incident report for the frac-out which occurred at the HDD site on the east side of the NRCS wetland had not been receiver within 14 days, as outlined in the MMCRP. CVGS submitted the required incident report on 9/15/11 in accordance with the MMCRP.
- 5. Dewatering CPUC environmental monitors observed dewatering activities inconsistent with the methods described in the Dewatering and Discharge Plan for the Central Valley Natural Gas Storage Project (June 2011). Specifically, discharge operations were observed onto parcels not identified in the Dewatering and Discharge Plan and discharge directly into drainages was observed adjacent auger bore sites along the 24-inch gas pipeline alignment. CVGS will be revising the project Dewatering and Discharge Plan and, in the interim, will not discharge water in a manner inconsistent with the current Dewatering and Discharge Plan.

Construction Activities at the 400/401 Line Interconnect

PG&E crews have excavated the area above the 400/401 line interconnect, initiated trenching between the 400/401 Line Interconnect and the Metering Station (see Photo 6, Attachment A), and welded the pipeline between the Metering Station location and the 400/401 Interconnect location. The approved temporary work area was being used for excavated soil storage. Silt fence had been installed along the west, south, and east edge of the temporary impact area. Silt fence was observed to be in proper working order.

Mitigation Measure Tracking

Mitigation measures applicable to the construction activities were verified in the field and documented in the CPUC's mitigation measures tracking database. A complete list of mitigation measures and applicant proposed measures is included in Section 6 of the FIS/MND (Certification of Public Convenience and Necessity (CPCN) Application A.09-08-008, SCH No. 2010042067). The status of each mitigation measure, including measures applicable to the design and pre-construction phases, is included the project's mitigation measure tracking database, which is available upon request.

Compliance

Pre-construction mitigation measures have been completed as indicated in Notice to Proceed (NTP) No. 1, No. 2, No. 2A, No. 4, No. 5A, No. 5B, No. 6A, No. 6B, No. 6C, No. 6D, No. 7, No. 9A, No. 9B, No. 10A, No. 10B, No. 11, No. 12, No. 13A, and No. 13B (Attachment B). Applicable mitigation measures were verified during site inspections and were determined to be implemented in accordance with the MMCRP.

CONSTRUCTION PROGRESS

Remote Well Pad Site/Observation Wells/Saltwater Disposal Well

CVGS has completed pad site preparation and grading at the remote well pad site. Site preparation and drilling work for observation well conversions at Southam #3, and #4 and Sara Louise #1 is complete. Site preparation and drilling work at the saltwater disposal well is complete. Injection/withdrawal well drilling is underway at the remote well pad site and is expected to continue through September 2011. To date, seven of the injection wells have been completed and drilling at the eighth well is underway. The temporary compressor has been installed and is operational at the remote well pad site. Gas injection has begun at one well at the remote well pad site. Construction of the sound wall at the temporary compressor has been completed. Foundations for the saltwater storage tank have been completed. The permanent perimeter fence has been installed.

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Compressor Station

CVGS has completed pad site preparation and grading at the compressor station site. Foundation work is ongoing at the compressor building and the auxiliary building. The foundation and steel framing work is complete at the utility building and siding installation is underway. Pipe fabrication, foundation work for other site features, and backfilling for completed foundations is also underway.

Natural Gas Connecting Pipeline

Right-of-way preparation is complete, including boundary staking, vegetation mowing, grading, and installation of sensitive resource exclusion fencing, farm infrastructure exclusion fencing, and overhead powerline warning flagging. All pipe has been strung along the right-of-way. Excavation and auger boring was underway at D-11, D-14, D-23, D-25, the Dirks Road crossing, and at the private runway in the Gunnersfield property. Operation of the horizontal directional drilling (HDD) rig and associated equipment is underway at the Interstate 5 crossing. The HDD has been completed for the Colusa Drain (D-19). Pipe welding and finishing is occurring within the ROW between the Compressor Station and the Remote Well Pad site and south of the Remote Well Pad site (between D-6 and D-10. Trenching, pipe lowering, and backfilling is underway between Interstate 5 and D-14, with some tie-ins remaining. Right-of-way grading and raking was occurring between the Colusa Drain and 4 Mile Rd and between Interstate 5 and Loretz Road. Daily de-watering of excavated areas associated with trenching and auger bore locations is underway along portions of the pipeline alignment where shallow groundwater is encountered.

Metering Station and 400/401 Line Interconnect

No work is currently underway at the Metering Station site. The 10-acre staging area adjacent the Metering Station has been graded and is being used for pipe staging and preparation for the HDD connection for the Glenn-Colusa Canal crossing. PG&E are actively working at the 400/401 Line Interconnect, including excavation of the 400/401 Line Interconnect, trenching between the 400/401 Line Interconnect and the Metering Station location, and pipe welding for connection to the Metering Station.

CONSTRUCTION SCHEDULE

Compressor Station – CVGS began construction on April 11, 2011, and anticipates completion of construction by April 1, 2012.

Remote Well Pad Site (includes saltwater tank) – CVGS began construction on April 11, 2011, and anticipates completion of construction by December 2011.

Observation Well Conversions – CVGS began construction on May 31, 2011 and anticipates completing construction by October 2011.

Saltwater Disposal Well – CVGS began construction on June 15, 2011 and anticipates completing construction by December 2011.

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Metering Station – CVGS anticipates starting construction in September 2011 and completing construction by October 2011.

Natural Gas Connecting Pipeline (Segment A) – CVGS began construction on August 8 and anticipates completing construction by November 2011. Preparation of the Natural Gas Connecting Pipeline (Segment A) right-of-way began on August 5, 2011 and was completed as of September 1, 2011.

Natural Gas Connecting Pipeline (Segment B) – CVGS began construction on August 23 and anticipates completing construction by November 2011.

Line 172 Connection Pipeline – CVGS began construction on May 16, 2011 and anticipates completing construction by December 2011.



ATTACHMENT A Photos



Photo 1: Compressor Station utility building under construction, siding being installed.



Photo 2: Auger bore hole excavation and dewatering at the Dirks Road crossing.

ATTACHMENT A (Continued)



Photo 3: HDD at Interstate 5. Drill mud being contained and loaded into trucks for hauling offsite and treatment.



Photo 4: Dewatering operations at the D-24 auger bore onto non-approved parcel. Dewatering at this location has ceased pending submittal of the revised Dewatering and Discharge Plan.

ATTACHMENT A (Continued)



Photo 5: Pipeline right-of-way backfilled, graded and raked east of D-44.



Photo 6: PG&E crew working at the 400/401 Line Interconnect. The 400 and 401 lines have been excavated and trenching is underway for the connection to the Metering Station.

ATTACHMENT B Notices to Proceed

NTP No.	Date Issued	Segment/Component	Conditions Included (Y/N)
1	March 21, 2011	Compressor Station, Remote Well Pad, and Observation Wells	Υ
10A	April 18, 2011	Berm Installation for Preparation of Natural Gas Pipeline Right-of-Way	Υ
9A	May 11, 2011	Test Boring at Horizontal Directional Drilling (HDD) Locations along 24-inch Pipeline Alignment	Υ
2	May 13, 2011	Southam #3, #4, and Sara Louise #1; inspection and work- over activities	Υ
6A	May 16, 2011	L-172 meter and interconnection	Υ
5A	May 17, 2011	Drill up to 10 injection/withdrawal wells at remote well pad site	Υ
6B	May 31, 2011	Remote well pad civil foundations, piping systems, temporary compressor, and equipment installation	Υ
6D	May 31, 2011	Pacific Gas & Electric electrical pole relocation on Southam Road and new electrical pole installation on McAusland Road	Υ
12	June 15, 2011	Complete test well and install saltwater disposal pipeline to remote well pad site	Υ
6C	July 7, 2011	Compressor station civil foundations, piping systems, temporary compressor, and equipment installation	Υ
10B	July 27, 2011	Preparation of 24-inch pipeline right-of-way	Υ
4	August 3, 2011	Construction of 16-inch dual gathering lines and 24-inch pipe segment between compressor station and remote well pad site	Υ
9B	August 3, 2011	Horizontal directional drilling (HDD) for 24-inch pipeline	Υ
11	August 3, 2011	Construction of 24-inch pipeline between remote well pad and L-401 meter station	Υ
13A	August 3, 2011	Construct L-401 meter station and pipeline connection to L-401	Υ
7	August 4, 2011	Installation of emitting equipment (compressors, dehydration, generators) at the compressor site	Υ
5B	August 5, 2011	Gas injection at remote well pad site	Υ
13B	August 29, 2011	Installation and removal of PG&E power poles and conducting electrical work at the metering station	Υ
2A	September 2, 2011	Southam #2 inspection and work-over activities	Υ



ATTACHMENT C Variance Requests

Variance Request #	Submitted	Description	Status	Approval
1	April 6, 2011	Realignment of the 24-inch gas pipeline, including the Southam Pipeline, Weller Pipeline, and Perez Pipeline will be performed. The intent of realignment is to minimize impacts to irrigation systems and agricultural lands.	Approved	April 25, 2011
2	July 1, 2011	Additional temporary work space for pipe staging adjacent an HDD site. Area within a fallow rice field.	Approved	July 20, 2011
3	July 12, 2011	Install 4 new poles to connect power to the compressor station via PG&E Line along Southam Road.	Approved	July 20, 2011
4	July 8, 2011	Utilize HDD to cross the NRCS wetland to avoid surface impacts.	Approved	August 8, 2011
5	July 12, 2011	Offsite area in the City of Colusa to be utilized by Pipeline contractor for office trailers, materials staging, and storage of equipment.	Approved	July 20, 2011
6	July 28, 2011	Construct four new power poles and relocate one existing power pole within the pipeline construction right-of-way.	Approved	August 9, 2011
7	August 8, 2011	Use of temporary bridges during construction.	Approved	August 15, 2011
8	August 15, 2011	Additional temporary work space for five staging areas.	Approved	September 2, 2011
9	August 31, 2011	Replacement of one PG&E pole at the Colusa Drain (D-19)	Approved	September 2, 2011
10	September 7, 2011	Additional temporary work space at the 400/401 Line Interconnect for soil storage and fire hazard reduction	Pending	Pending

