

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

Central Valley Gas Storage Project

Compliance Status Report 11

September 30, 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 16 to September 30, 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, metering station site, the 400-401 line interconnect, temporary off-site storage areas, and the natural gas pipeline alignment. Site observations were completed on September 20, 22, 23, 27, and 30, 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.

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Implementation Actions

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

Construction activities at the remote well pad site undertaken during the period covered by this report included: drilling of the eighth injection well; operation of the temporary compressor; pipe assembly; nitrogen testing at well heads; and continued gas injection.

Ongoing work at the compressor station site included: completion of building foundations at the auxiliary building, utility building, and the compressor building; completion of framing and siding for the utility building; framing for the auxiliary building and the compressor building (See Photograph 1, Attachment A); continuation of pipe assembly; excavation of the trench for pipeline installation at the southern end of the site (See Photograph 2, Attachment A); removal of the large soil stockpile at the northern end of the site; grading and installation of engineered base in the northern portion of the site where storage tanks will be placed; and the soil stockpile removed from the northern end of the site has been relocated to Storage Area 1 with BMPs installed.

Dust emissions at both sites have been controlled with two water trucks 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 observed 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. 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.

On September 26, 2011 at approximately 1:00 pm, CVGS had a "well kick" during drilling operations at the Remote Well Pad site. Drilling contractors informed CVGS that there was a higher than normal flow of drilling mud from well 2-L. Flow of mud was terminated within 15 seconds. A significant amount of drilling mud was on the well pad area, and was cleaned up quickly. Initial reports from the site showed there was no release of gas. There were no injuries. There was no equipment damaged. CVGS implemented the measures identified in a well contingency plan and normal operations resumed on September 27, 2011.

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: excavation and auger boring (at D-5, D-6, Dirks Road) (See Photograph 3, Attachment A); completion of HDD at Interstate 5, disassembly of the HDD rig, relocation of the HDD rig to the Glenn-Colusa Canal, completion of the HDD at the Glenn-Colusa



Canal, disassembly of the HDD rig, relocation of the HDD rig to Hunters Creek, setup of the HDD rig at Hunters Creek; dewatering of auger bore holes and trenches (See Photograph 4, Attachment A); completion of pipe stringing along the ROW, pipe welding; trenching; lowering pipe into trenches; backfilling trenches; tie-in; removal of temporary bridges and matting material (between I-5 and 4 Mile Road); and regrading/raking of the right-of way between Interstate 5 and Loretz Road.

Containment measures at the HDD and auger bore sites were observed to be in working order. Wildlife escape ramps in excavated areas were installed. 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. Trac-out was being swept from public roadways (See Photograph 5, Attachment A).

On September 21, 2011 the CPUC issued Incident Report #1 related to the use of unauthorized temporary bridges along the pipeline alignment. The incident report documented unauthorized activities observed by the CPUC during construction. The CPUC issued a variance approval letter on August 15, 2011 (Variance No. 7) providing approval for the use of fourteen temporary bridges along the pipeline ROW; however, seven bridges were not included in the variance approval letter issued by the CPUC. Following receipt of Incident Report #1, CVGS provided a Variance Request to the CPUC on Sept. 22, 2011 to include the seven temporary bridges in question and Variance No. 12 was issued by the CPUC on September 23, 2011. During the time period between issuance of Incident Report #1 and approval of Variance No. 12, use of non-approved temporary bridges was prohibited.

A frac-out associated with HDD activity at the Glenn-Colusa Canal occurred on September 22, 2011. The frac-out occurred on the west side of the Glenn-Colusa Canal in an orchard area. The frac-out was cleaned up in accordance with the MMCRP and CVGS provided an incident report to the CPUC on September 27, 2011.

On September 28, 2011, the CPUC informed CVGS that several BMP's observed on site had not been installed in accordance with the project's SWPPP and identified a list of BMPs that had been identified in the project's SWPPP but had not been installed along the right-of-way or at various project areas. The CPUC requested a response within 48-hours as to why the BMPs identified in the SWPPP had not been installed and asked that corrective actions be identified. In the event the BMPs were determined to be no longer required, it was requested that the project QSP amend the SWPPP in accordance with their recommendations. The project QSP visited the site on September 30, 2011 to review the issues raised and a follow-up memo is forthcoming.

As presented in the previous Compliance Status Report (No. 10), issues related to compliance with mitigation measures were identified by CPUC monitors. The following summarizes actions taken by CVGS to address these issues:



- 1. Temporary Bridges –The BMP's observed at temporary bridge locations 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 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 employed a full-time sweeper to clean track-out materials 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. The project QSP visited the site on September 19, 2011 and submitted a summary memo on September 20, 2011. The summary memo addressed corrective actions to be taken in the field to address maintenance of BMP's as well as required amendments to the SWPPP that would more accurately reflect field conditions. A SWPPP amendment is to be submitted and filed.
- 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 received 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). An amended Dewatering and Discharge Plan was prepared by CVGS and reviewed by the CPUC on September 30, 2011.

Construction Activities at the Metering Station and 400/401 Line Interconnect

PG&E crews have excavated the area above the 400/401 line interconnect, completed trenching between the 400/401 Line Interconnect and the Metering Station, and welded the pipeline between the Metering Station location and the 400/401 Interconnect location. Pipe lowering into the trench was underway (See Photograph 6, Attachment A). 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.



The Metering Station site and access road from Dirks Road has been graded. Pipe has been staged in the 10-acre staging area, and trenching is actively being completed in the area to the east of the Metering Station.

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 early October 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. Nitrogen testing of the wells has been completed. Pipe assembly continues.

Compressor Station

CVGS has completed pad site preparation and grading at the compressor station site. Foundation work is complete for the compressor building, utility building, and the auxiliary building. Framing and installation of siding have been completed at the utility building. Framing for the auxiliary building and the compressor building is underway. Pipe assembly and fabrication continues. Excavation of the trench for pipeline installation at the southern end of the site is underway. The large soil stockpile at the

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northern end of the site has been relocated to Storage Area 1 with BMPs installed. Grading and installation of engineered base in the northern portion of the site where storage tanks will be placed is 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-5, D-6, and the Dirks Road crossing. Operation of the horizontal directional drilling (HDD) rig and associated equipment is underway at Hunters Creek (D-43). The HDD has been completed for the Colusa Drain (D-19), I-5, and the Glenn-Colusa Canal (D-61). 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. Removal of temporary bridges and matting material is underway between I-5 and 4 Mile Road.

Metering Station and 400/401 Line Interconnect

The Metering Station site and access road from Dirks Road has been graded. Pipe has been staged in the 10-acre staging area, and trenching is actively being completed in the area to the east of the Metering Station. PG&E crews have excavated the area above the 400/401 line interconnect, completed trenching between the 400/401 Line Interconnect and the Metering Station, 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.

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.

Metering Station – CVGS began construction on September 27, 2011 and anticipates completing construction by November 2011.

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Natural Gas Connecting Pipeline (*Segment A*) – CVGS began construction on August 8, 2011 and anticipates completing construction by October 31, 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, 2011 and anticipates completing construction by October 31, 2011.

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

ATTACHMENT A Photos



Photo 1: Framing of compressor building at the Compressor Station site.



Photo 2: Trench excavation at the south end of the Compressor Station site.

ATTACHMENT A (Continued)



Photo 3: Sensitive resource exclusion fencing and temporary bridges at D-5 and D-6.



Photo 4: Auger bore hole and dewatering activity at D-10a.

ATTACHMENT A (Continued)



Photo 5: Pipeline staging and trenching along Dirks Road. Street sweeper actively working to remove tracked-out dirt and other project related debris from public roadways.



Photo 6: PG&E crews lowering pipe into the trench at the 400-401 line interconnect work area.

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	Approved	September 19, 2011
11	September 19, 2011	Amendment to APM BIO-12 allowing construction in giant garter snake habitat to be extended to November 1st from the current restriction of October 1st	Approved	September 29, 2011
12	September 22, 2011	Use of seven additional temporary bridges during construction	Approved	September 23, 2011