

	<b>California Public Utilities Commission</b> <b><i>Mitigation Monitoring, Compliance, and Reporting Program</i></b>
	<b>Central Valley Gas Storage Project</b>  <b>Compliance Status Report 13</b>  <b>October 28, 2011</b>

**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 October 15 to October 28, 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 October 17, 20, 25, and 27, 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***

**Construction Activity at the Remote Well Pad Site and Compressor Station Site**

Construction activities at the remote well pad site undertaken during the period covered by this report included: operation of the temporary compressor; pipe assembly; pipe testing; well head work; gas injection; completion of trenching for electrical line and 16-inch pipeline installation (See Photograph 1,

Attachment A); connecting the 16-inch pipeline to the right-of-way at the northern end of the site; and pressure testing of the 16-inch natural gas pipeline.

Ongoing work at the compressor station site included: completion of framing for the auxiliary building and the compressor building; installation of siding on the auxiliary building and the compressor building; continuation of pipe fabrication/assembly; completion of natural gas pipeline trench at the southern end of the site; natural gas pipeline installation and backfilling at the southern end of the site were underway (See Photograph 2, Attachment A); completion of engineered base installation in the northern portion of the site where storage tanks will be placed; staging of equipment and materials in the storage tank area; installation of a temporary chain-link fence around the materials storage area; installation of tanks and associated pipework at the compressor building; installation of two compressor engines in the compressor building; and nitrogen testing of the 24-inch natural gas pipeline was completed.

Dust emissions at both sites have been controlled with 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 and plastic sheeting covering the excavated soil associated with trenching in the southern portion of the site. Silt fences were observed to be in working order. 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: completion of tie-in, backfilling, and re-contouring the open cut trench crossing at D-2; pipe lowering, backfilling, and grading of the right-of-way between the Remote Well Pad and Compressor Station (See Photograph 3, Attachment A); final grading and raking of the right-of-way between the Glenn Colusa Canal and the Metering Station; completion of the hydrostatic testing for the 24-inch natural gas pipeline (See Photograph 4, Attachment A); dewatering of the 24-inch natural gas pipeline; breakdown and removal of the pumps and pipe associated with hydrostatic testing activity; and pressure testing of the 24-inch natural gas pipeline.

Containment measures at active construction areas were observed to be in working order and the areas left clean upon completion of work. 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 was on-going in accordance with the revised dewatering plan. Silt fencing and sensitive resource exclusion fencing (ESA fencing) was 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.

On October 17, 2011, the CPUC informed CVGS that the placement of pumps for hydrostatic testing adjacent the Glenn-Colusa Canal was in conflict with mitigation measures included in the approved MMCRP (APM HAZ-1). The CPUC issued Non-Compliance Report #3 requesting that all work associated with hydrostatic testing pumping equipment be halted until either a variance request was processed in accordance with Section 3.2 of the MMCRP or the equipment was relocated to meet the requirements of APM HAZ-1. CVGS submitted a variance request (VAR-14) to amend APM HAZ-1, which allowed placement of the pumping equipment adjacent the Glenn Colusa Canal subject to installation and maintenance of secondary fluid containment measures. Variance 14 was approved by the CPUC on October 18, 2011 and, following installation of secondary containment measures, hydrostatic testing activity resumes thereafter (See Photograph 5, Attachment A).

#### 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 has been completed and a portion of the trench has been backfilled. The approved temporary work area was being used for excavated soil storage. Silt fence had been installed along the west, south, east, and north 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 and engineered base installed and compacted. An access gate has been installed at the Dirks Road entrance to the Metering Station. Installation of foundations has been initiated. A temporary chain-link fence has been installed around the Metering Station site. Silt fence had been installed around the perimeter of the Metering Station site and the permanent access road from Dirks Road. The natural gas pipeline entrance at the east edge of the Metering Station is mostly backfilled, with a small portion remaining open to accommodate hydrostatic testing (See Photograph 6, Attachment A).

#### ***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 in 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 complete. A total of eight injection withdrawal wells were drilled on site. 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. Buried electrical line installation continues. Installation of the 16-inch natural gas pipeline continues. Connection of the 16-inch natural gas pipeline to the right-of-way has been completed.

### 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 compressor building and auxiliary building is complete. Siding installation for the compressor building and the auxiliary building is underway. Installation of two compressor engines has been completed. Pipe assembly and fabrication continues. Excavation of the trench for pipeline installation at the southern end of the site has been completed. Pipe has been lowered and backfilling of the trench is underway. The large soil stockpile at the 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 has been completed. This area is being used for materials storage and has been surrounded with a temporary chain-link fence.

### 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. All auger boring activities have been completed. All horizontal directional drilling (HDD) operations have been completed. The installation of pipe at D-2 crossing is complete and backfilling was underway at D-2/Southam Road. Pipe welding and finishing is complete. Backfilling and grading is underway between the Remote Well Pad and Compressor Station sites. The right-of-way between the Metering Station and the Remote Well Pad has been backfilled, graded, and raked. Removal of temporary bridges and matting material has

been completed. De-watering of trenches and holes along the pipeline right-of-way has been completed. De-watering following hydrostatic testing of the pipelines was underway near the Compressor Station.

CPUC Environmental Monitors continue final inspections of the pipeline right-of-way between the Metering Station and D-2/Southam Road. Items requiring attention along this portion of the alignment will be provided to CVGS so that action can be taken prior to final completion of work along the pipeline right-of-way.

#### Metering Station and 400/401 Line Interconnect

The Metering Station site and access road from Dirks Road has been graded and engineered base installed and compacted. An access gate has been installed at Dirks Road. Excavation for equipment foundations has been completed and foundation pouring is underway. The natural gas pipeline entrance at the east edge of the Metering Station is mostly backfilled, with a small portion remaining open to accommodate hydrostatic testing. 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 has been completed and a portion of the trench has been backfilled.

### **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 November 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.

***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:** Trenching for buried electrical lines at the Remote Well Pad site. Trenches include wildlife escape ramps at trench ends.



**Photo 2:** Backfilled portion of the trench at the south end of the Compressor Station site. Excavated soil has been covered to prevent displacement during rain events.

## ATTACHMENT A (Continued)

---



**Photo 3:** Pipeline right-of-way backfilling and grading between the Compressor Station and the Remote Well Pad site .



**Photo 4:** The terminus of the 24-inch natural gas pipeline at the Compressor Station. The pipeline is undergoing hydrostatic pressure testing.

## ATTACHMENT A (Continued)

---



**Photo 5:** Pumps and compressors setup adjacent the Glenn Colusa Canal for hydrostatic testing of the pipeline. Secondary containment measures have been installed as required by Variance 14.



**Photo 6:** Natural gas pipeline terminus at the Metering Station. A small portion of the trench remained open for future tie-in at 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	Y
10A	April 18, 2011	Berm Installation for Preparation of Natural Gas Pipeline Right-of-Way	Y
9A	May 11, 2011	Test Boring at Horizontal Directional Drilling (HDD) Locations along 24-inch Pipeline Alignment	Y
2	May 13, 2011	Southam #3, #4, and Sara Louise #1; inspection and work-over activities	Y
6A	May 16, 2011	L-172 meter and interconnection	Y
5A	May 17, 2011	Drill up to 10 injection/withdrawal wells at remote well pad site	Y
6B	May 31, 2011	Remote well pad civil foundations, piping systems, temporary compressor, and equipment installation	Y
6D	May 31, 2011	Pacific Gas & Electric electrical pole relocation on Southam Road and new electrical pole installation on McAusland Road	Y
12	June 15, 2011	Complete test well and install saltwater disposal pipeline to remote well pad site	Y
6C	July 7, 2011	Compressor station civil foundations, piping systems, temporary compressor, and equipment installation	Y
10B	July 27, 2011	Preparation of 24-inch pipeline right-of-way	Y
4	August 3, 2011	Construction of 16-inch dual gathering lines and 24-inch pipe segment between compressor station and remote well pad site	Y
9B	August 3, 2011	Horizontal directional drilling (HDD) for 24-inch pipeline	Y
11	August 3, 2011	Construction of 24-inch pipeline between remote well pad and L-401 meter station	Y
13A	August 3, 2011	Construct L-401 meter station and pipeline connection to L-401	Y
7	August 4, 2011	Installation of emitting equipment (compressors, dehydration, generators) at the compressor site	Y
5B	August 5, 2011	Gas injection at remote well pad site	Y
13B	August 29, 2011	Installation and removal of PG&E power poles and conducting electrical work at the metering station	Y
2A	September 2, 2011	Southam #2 inspection and work-over activities	Y

## 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
13	October 7, 2011	Install temporary 8-inch water line for hydrostatic testing	Approved	October 10, 2011
14	October 17, 2011	Amend APM HAZ-1 to allow storage of construction equipment within 100 feet of a sensitive environmental resource with secondary containment measures in place.	Approved	October 18, 2011