

	<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 12</b>  <b>October 14, 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 1 to October 14, 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 3, 5, 7, 11, and 14, 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***

**Drilling Operations at the Remote Well Pad Site and Foundation, Structural, and Pipeline Excavation work at the Compressor Station**

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

the drill rig and associated equipment from the site; operation of the temporary compressor; pipe assembly; pipe testing; continued gas injection; trenching for electrical line installation (See Photograph 1, Attachment A); trenching and pipe lowering; and installation of buried electrical lines to the perimeter fence.

Ongoing work at the compressor station site included: framing for the auxiliary building and the compressor building; continuation of pipe assembly; excavation of the trench for pipeline installation at the southern end of the site (See Photograph 2, Attachment A); installation of pipelines in the trench at the southern end of the site; initiation of backfilling the trench at the southern end of the site; 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; and installation of tanks and associated pipework at the compressor building.

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 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.

#### 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 auger boring activity at D-5, D-6, and Dirks Road (See Photograph 3, Attachment A); completion of the final HDD at Hunters Creek (D-43) and disassembly of the HDD rig for transport offsite; dewatering of auger bore holes and trenches; removal of temporary bridges and matting material (between the Metering Station and D-5; re-grading/raking of the right-of way between the Metering Station and Interstate 5 and between the Colusa Drain and D-5/Dodge Road; installation of pipeline markers along the ROW between the Metering Station and D-5; demobilization of equipment from the ROW between the Metering Station and D-5; trenching, pipe installation, and backfilling between D-5 and the Compressor Station (See Photograph 4, Attachment A); and setup of hydrostatic test equipment and 8-inch water line between the Glenn-Colusa Canal and the Metering Station (Variance 13) (See Photograph 5, Attachment A).

Containment measures at the HDD and auger bore sites 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 is on-going in accordance with the revised dewatering plan. 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.

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 was submitted to the CPUC on October 4, 2011. The memo identified corrective actions or justifications why certain BMPS were not implemented. Additionally, an amendment to the project SWPPP was submitted to the CPUC on October 5, 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 has been completed and a portion of the trench has been backfilled (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, 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. Excavation for equipment foundations has been initiated. 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.

#### ***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.

### 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 is complete. Framing for the auxiliary building is underway. 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. One open cut trench crossing is underway at D-2/Southam Road. Pipe welding and finishing is occurring within the ROW between the Compressor Station and the Remote Well Pad site. Trenching, pipe

lowering, and backfilling is underway between the Remote Well Pad and Compressor Station sites. The right-of-way between the Metering Station and D-5 has been backfilled, graded, and raked. Removal of temporary bridges and matting material has been completed between the Metering Station and D-5. De-watering of the pipeline right-of-way has been completed between the Metering Station and D-5. De-watering continues where shallow groundwater is encountered between D-5 and the Compressor Station.

CPUC Environmental Monitors have begun final inspections of the pipeline right-of-way between the Metering Station and D-5/Dodge 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. Excavation for equipment foundations has been initiated. 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 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.

***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

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**Photo 1:** Trenching for buried electrical lines at the Remote Well Pad site.



**Photo 2:** Excavated trench at the south end of the Compressor Station site. Excavated soil covered in anticipation of upcoming rain event.

## ATTACHMENT A (Continued)

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**Photo 3:** Pipe welding and backfilling of the trench along Dirks Road (between D-57 and D-59).



**Photo 4:** Trench backfilling and grading of the right-of-way between D-5/Dodge Road and the Remote Well Pad site.



## ATTACHMENT A (Continued)

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**Photo 5:** Pumps and compressors setup adjacent the Glenn Colusa Canal for hydrostatic testing of the pipeline.



**Photo 6:** Pipe lowered within the trench between the Metering Station and the 400-401 Line Interconnect. Wildlife ramp installed along the trench to facilitate wildlife exit if necessary.

## 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