



Matthew Rodriguez
Secretary for
Environmental Protection



Department of Toxic Substances Control

Deborah O. Raphael, Director
5796 Corporate Avenue
Cypress, California 90630



Edmund G. Brown Jr.
Governor

Sent Via E-mail

January 28, 2013

Ms. Yvonne J. Meeks
Portfolio Manager – Site Remediation
Pacific Gas and Electric Company
4325 South Higuera Street
San Luis Obispo, CA 93401

REPAIRING WELLS IN ACCORDANCE WITH CALIFORNIA WELL STANDARDS AT
PACIFIC GAS AND ELECTRIC COMPANY (PG&E), TOPOCK COMPRESSOR
STATION, NEEDLES, CALIFORNIA (EPA ID NO. CAT080011729)

Dear Ms. Meeks,

In recent years, the Department of Toxic Substances Control (DTSC) notes that several monitoring wells/ well head completions installed for evaluation of the PG&E Topock Compressor Station chromium plume have been inundated, damaged and/or destroyed during seasonal storms. These damaged or destroyed wells are no longer in compliance with the California Well Standards. Furthermore, PG&E appears to have failed to follow the "Well Inspection and Maintenance" procedure specified in PG&E's April 2005 Monitoring Plan for Groundwater and Surface Water Monitoring Program and the March 2005 Sampling, Analysis, and Field Procedures Manual.

Although the repairs for the MW-38 well cluster were temporarily placed on hold to evaluate compliance with mitigation measures adopted as part of the certified groundwater remedy Environmental Impact Report (EIR), the repairs have now been delayed for two years. PG&E must take action to comply with the well standards as well as the aforementioned Monitoring Plan and Procedure Manual. As recent storms have damaged additional wells, it is apparent that PG&E must also revise and implement the well maintenance program that will ensure site wells are periodically inspected and appropriately maintained in accordance with requirements.

This notification was prompted by recent well head observations noted by DTSC staff during a site visit on November 6, 2012. The visit noted, among other things, that the recent major storm event on October 11, 2012 had destroyed another well (MW-38D) in Bat Cave Wash and flooded MW-58 well cluster in the East Ravine. Other observations also indicated that certain well head surface construction features (e.g., locking cover, well cap, concrete base) are not in compliance with California Well Standards Bulletin

74-90 (Part II Monitoring Well Construction, Section 10 Surface Construction Features). A Site Visit Report is attached highlighting well head conditions observed on November 6, 2012 as well as prior dates for wells that had been damaged previously.

Since only a small percentage of the site wells were seen during the November 6, 2012 site visit, DTSC plans on inspecting all site wells in the near future to assess compliance.

Currently, the following actions are required of PG&E:

1. Implement the CH2M Hill February 11, 2011 Implementation Plan for Repair of Monitoring Wells MW-38S and MW-38D and Old Well/Pipe Reconnaissance. PG&E must take all reasonable steps to comply with the substantive requirements of all applicable mitigation measures (e.g., cultural sensitivity training, Tribal notification, Tribal monitoring to observe activities). DTSC expects the repair plan to commence by the end of March 2013.
2. Update the 2005 well maintenance plan for all existing wells including a checklist of well criteria that will be periodically assessed at each well. The frequency for inspecting each well should be clearly specified as should the time required to begin and complete repairs. A copy of this plan should be provided to DTSC by the end of February 2013.
3. At a minimum, assess conditions at all existing wells pursuant to PG&E's 2005 Sampling, Analysis, and Field Procedures Manual to ensure they are in compliance with the California Well Standards. PG&E shall provide a report of findings to DTSC by the end of February 2013. This should call out problems identified and actions PG&E is taking to rectify those problems. This assessment should assist in preparation of the well maintenance plan.

As PG&E repairs and maintains wells at the site, please keep in mind that DTSC has not yet provided PG&E with approval to remove wells from the site or from the monitoring program. Therefore, PG&E shall not decommission wells without replacement without prior written approval from DTSC. DTSC has also considered the necessary evaluation to comply with the California Environmental Quality Act (CEQA) with respect to well maintenance activities at the site. DTSC has determined that no CEQA review or further CEQA review is required, for two reasons. First, the February 11, 2011 Implementation Plan was approved on February 24, 2011, based on the findings of the certified programmatic EIR and after significant discussions, comments and response to comments from stakeholders and Tribal Nations. A Notice of Determination was posted for that approval in February 2011. This directive implements that prior approval, which was already found to be consistent with the programmatic EIR, and the time for challenging that legal determination and approval expired 30 days following the notice of determination. In addition, as a separate and independent basis for this determination, DTSC has determined that due to the mandates of adopted requirements governing the proper maintenance and abandonment of wells, DTSC is not making a discretionary approval. The action is

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ministerial as defined under the CEQA guidelines, Section 15369 and therefore exempt from CEQA requirements in accordance with Sections 15268, 15357 and 15369.

If you have any questions or comments regarding this letter, please contact me at (714) 484-5439.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Aaron Yue', with a stylized flourish at the end.

Aaron Yue
Project Manager
Geological Services Branch

aky: 011301C

Enclosure

CC: PG&E Topock Consultative Workgroup Members – Via e-mail
PG&E Topock Geo/Hydro Technical Workgroup Members – Via e-mail
Tribal Representatives in PG&E Contact List – Via e-mail
Technical Review Committee – Via e-mail

Department of Toxic Substances Control Site Visit Report			
To:	Aaron Yue, Project Manager	Date(s) of Visit:	11/06/12
From :	Chris Guerre, Geological Services Unit	Weather:	Sunny, Warm, ~85 deg F
Site/Project Name:	PG&E Topock Compressor Station, 12 miles southeast of Needles, CA		
PCA/SiteCode/W	22120 / 540015		
Purpose of Visit:	Observe damage to groundwater wells after 10/11/12 storm.		
Summary of Activities:			
Observed well head completions for damage around the facility in areas prone to storm damage			
Personnel Onsite		Title	
Barry Collom, CH2MHill (brief discussion)		Groundwater Sampling Field Manager	
Note: PG&E office closed.			
Chris Guerre		Senior Engineering Geologist	
Details:			
- Arrived on site at ~14:00. - Brief discussion and check in with Barry Collom of CH2MHill. - Walk Bat Cave Wash from IM-3 and view wells including: MW-37 cluster, MW-38 cluster, MW-10 and MW-9. Also view Debris Ravine gabion. - Walk AOC-11 topographic low areas and East Ravine to view impact of 10/11/12 storm on well heads. View wells MW-71, MW-12, MW-48, and MW-58 cluster. - Depart site at ~16:30.			
Issues/Comments:			
- Well damage due to storm significant. Well repairs/redesign required to comply with well standards. - Better well maintenance needed to attain compliance with well standards.			
Recommended Action Items:			
Report to DTSC Project Team.			
Attachment(s):			
See attached photo log.			

		
1	Southerly view in Bat Cave Wash of destroyed well cluster MW-38 (11/6/12). The yellow casing rising about a foot from the wash is MW-38S. It is located between a toppled traffic bollard (foreground) and the remnant well head completion from well MW-38D (background).	
		
2	Southerly view in Bat Cave Wash of remnant well head completion from MW-38D (11/6/12). The former base of the completion and exposed white PVC well casing is protruding in the air to the right. Note the yellow pressure transducer cable running out of the disjointed PVC casing.	

		
3	Close up of the yellow pressure transducer cable from well MW-38D running into the ground (11/6/12). The well is no longer visible and excavation will be required to locate the buried, disjointed well.	
4		Northerly view along Bat Cave wash of MW-38 cluster on September 14, 2010. These wells were initially damaged due to storms during the week of January 20, 2010. MW-38D in foreground and MW-38S in background.

	
5	Westerly view of MW-38S in Bat Cave Wash, circa February 2010. Digging out buried well. Total depth was measured to be 33 feet below ground surface. The pressure transducer was missing and assumed to still be inside the well.
	
6	Westerly view of well MW-9 in Bat Cave Wash (11/6/12). No locking cover. Traffic bollard damaged due to excessive erosion.

	
7	View inside protective casing of well MW-9 in Bat Cave Wash (11/6/12). No casing cap is present.
	
8	View of well MW-37S in Bat Cave Wash (11/6/12). Traffic bollard damaged. Lock present. Well pad not visible.

		
9	View of wells MW-58-65 (background) and MW-58BR-Upper/Lower (foreground) in the impoundment area within the East Ravine (11/6/12). Flooding occurred on October 11, 2012.	
		
10	View inside protective casing of well MW-58BR-Upper/Lower in the impoundment area within the East Ravine (11/6/12). No casing cap or lock. Note that water has entered the well following flooding as evidenced by organic debris on both white PVC casings.	

		
11	View of well MW-58-65 in the impoundment area within the East Ravine (11/6/12). Lock present. Note that the debris on top of the protective casing indicates that flood waters had completely overtopped this well.	
	 The image shows a flooded area in a ravine. A blue box labeled 'High Water Mark' with an orange arrow points to a line of brown mud on the left. Another blue box labeled 'MW-58 Cluster' with two red arrows points to a small structure in the water on the right. The water is brown and murky.	
12	View of flooded impoundment area within the East Ravine (10/11/12) in the afternoon several hours after the storm had passed. Both MW-58 wells are almost completely submerged. Note that the high water mark suggests the wells were overtopped for a period of time.	

	
13	View of wells MW-12 and MW-48 in the topographic low area (AOC-11) east of the station (11/6/12). Locks present. The storm has covered the well area with soils and well pads are not visible.
	
14	Northwesterly view of flooded lowland area near the access road approaching the station (aka AOC-11). Wells MW-12 and MW-48 are barely visible in the background (see arrow).