

September 21, 2015

Ms. Nicole Osuch  
Project Manager, Voluntary Remediation Program  
Arizona Department of Environmental Quality  
1110 W. Washington Street  
Phoenix, AZ 85007

Subject: Plan for Redevelopment of Arizona Monitoring Well MW-55-120, PG&E Topock Compressor Station, Needles, California; VRP Site Code 506252-01

Dear Ms. Osuch:

Thank you for your letter dated August 28, 2015 (ADEQ letter) in which you stated that the Arizona Department of Environmental Quality (ADEQ) Voluntary Remediation Program (VRP) has no further comments after reviewing PG&E's letter dated August 13, 2015 (PG&E's letter). As indicated in PG&E's letter, MW-55-120 will be redeveloped, before beginning the four quarterly sampling events at that well (from third quarter 2015 through second quarter 2016) as requested by the VRP.

E-mail correspondence with Joey Pace of ADEQ VRP after receiving the ADEQ letter confirmed that a simple work plan for redevelopment should be submitted to ADEQ and copied to the California Department of Toxic Substances Control (DTSC). This letter presents the plan for redevelopment of MW-55-120, and includes information required under Arizona Revised Statute (A.R.S.) Section 49-175, (A) (3) and (8), with other requirements of A.R.S. 49-175 waived, as requested in Ms. Pace's e-mail of September 1, 2015.

### **Redevelopment Plan**

#### ***Schedule***

PG&E's consultant CH2M HILL plans to contract Cascade Drilling of Peoria, AZ to perform the redevelopment. One field day during the weeks of October 5-9 or 12-16, 2015 is targeted for the redevelopment work, assuming that Agency approval is received by September 30.

MW-55-120 will be sampled within a week after redevelopment, but not less than 48 hours after redevelopment. The fourth quarter sampling at MW-55-120 will be performed at least 30 days after the third quarter sample is collected in October.

#### ***Redevelopment Approach***

Before work begins, a spill containment pad will be placed around the flush-mount well completion and under the development truck. The water level and total well depth will be measured.

The pump truck hoist will be used first to bail the well with a stainless steel bailer to remove fines within the well, then to surge the well with a close-fitting surge block to agitate the filter pack. After several cycles of alternately bailing the well and surging over the length of the screened interval, over a duration of one to two hours, the well will be pumped with at least 15 casing volumes removed.

The discharge will be monitored during the purge for stabilization of water quality parameters (pH, temperature, specific conductance, oxidation-reduction potential) including turbidity. Stable water quality parameters including measured turbidity of 10 nephelometric turbidity units (NTU) will be the development target.

This entire process will be performed at least once during the redevelopment mobilization. It is anticipated that 20 to 45 casing volumes (approximately 135 to 300 gallons) of water will be pumped from MW-55-120 during redevelopment. The water level elevation and total well depth will be measured after each bailing, surging and pumping cycle.

Purge water from redevelopment will be conveyed to the IM3 treatment plant for disposal following approved procedures for treatment of groundwater monitoring purge water.

### ***Record Keeping and Reporting***

Redevelopment will be documented using the attached form to record field measurements. A completed redevelopment form as well as a text narrative of the redevelopment effort will be included in the letter reporting third quarter sampling results from MW-55-120. The results letter will be sent to the property owner of the well (Mr. Chet Hitt, Topock 66 Marina), ADEQ VRP, and DTSC in advance of the third quarter GMP-PMP report, which will also include the MW-55-120 sampling results.

### **Information Required under A.R.S Section 49-175 (A) (3) and (8)**

The following information is provided for topics of A.R.S. Section 49-175 (A) (3) and (8).

*(3) If site characterization is completed for the site or portion of the site addressed in the application, a plan for remediation which will comply with subsection B of this section and a schedule for completion...*

The redevelopment of MW-55-120 is expected to improve the usefulness of this monitoring well for continued monitoring of the current interim measure no. 3 (IM3) (CH2M HILL 2005) and for use as a monitoring location during the upcoming final groundwater remedy (CH2M HILL 2014).

*(8) A list of any permits or legal requirements known by the applicant to apply to the work to be performed or already performed by the applicant:*

The Topock interim measures are being performed under a CERCLA permit exemption. This exemption still requires compliance with substantive requirements of applicable permits. This work plan is submitted for regulatory approval of the redevelopment task. The procedures used will follow standard operating procedures in the final remedy design (CH2M HILL 2014). The current access agreement between PG&E and Mr. Chet Hitt will allow performance of the redevelopment task.

### **References**

CH2M HILL. 2005. *Topock Program Sampling, Analysis, and Field Procedures Manual, Revision 1, PG&E Topock Compressor Station, Needles, California*. March 31.

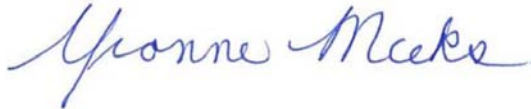
\_\_\_\_\_. 2014. *Basis of Design Report/Pre-Final (90%) Design Submittal for the Final Groundwater Remedy*. September.

Ms. Nicole Osuch  
Arizona Department of Environmental Quality  
April 2015 Groundwater Sampling Results Letter  
September 21, 2015  
Page 3

To move ahead with the redevelopment and third quarter sampling at MW-55-120 as early in October as possible, we respectfully request your approval of this redevelopment plan by September 30, 2015.

If you have any questions, please call me at (805) 234-2257.

Sincerely,



Yvonne Meeks  
Topock Project Manager

Enclosure

cc: Aaron Yue/DTSC  
Chris Guerre/DTSC  
Karen Baker/DTSC  
Joey Pace/ADEQ  
Jay Piper/CH2M HILL

Att: Well Development Log Form



## Monitoring Well Development Log

<b>Project or Client:</b> <b>Project No.:</b> <b>Field Crew:</b>	<b>Location:</b> <b>Well ID:</b> <b>Date:</b>
<b>Total Well Depth (ft. bgs):</b> <b>Depth to Water (ft btoc.):</b> <b>Top of screen (ft. bgs):</b> <b>Well Diameter (in.)</b> <b>Length of Saturated Zone (ft.):</b> <b>PID Measurement (ppm)</b>	<b>Purge Method:</b> <b>Placement of Pump (ft.btoc):</b> <b>Pumping Rate (gpm):</b> <b>Climatic Conditions:</b> <b>Product Level (ft.):</b> <b>Pore Volume (Gallons)</b>

### Field Parameters

Time	Depth to Water (ft. BTOC)	Purge Rate (gpm)	Gallons Removed	pH	Temp (C)	*Cond. (mS/cm)	ORP (mV)	Turbidity (N.T.U.)	*TDS	D.O. (mg/L)	Comments

### Sample Information

Color	NA
Odor	NA
Turbidity	NA
Laboratory Analysis	NA
Sample ID	NA
Total No. of Bottles	NA
Notes	
Analytical Laboratory	NA
Sample Date/Time	NA
Transported via	NA

Signature/Sampler:

Capacity of Casing (gal/linear feet): 1"-0.041; 2"-0.16; 4"-0.65; 6"-1.47; 8"-2.61; 10"-4.08