

Work Variance Request Form

Groundwater Remedy Phase 1 Construction, PG&E Topock Compressor Station, Needles, California

PG&E TOPOCK GROUNDWATER REMEDIATION PROJECT

Work Variance Request #9 – Relocate MW-A to a location downgradient of IRZ-11 and convert IRZ-11 to monitoring well

Request Prepared By: PG&E

Request Approval From: DTSC and DOI

Date Submitted: March 20, 2020

Date Approval Required: 3/24/2020

Variance Request Number: 9

Map Area: N/A

Location: Floodplain

Land Manager: BLM Land Owner Parcel Number: 650-151-05

Current Vegetative Cover/Land Use: Floodplain

Existing Sensitive Resource? No Yes, Specify: _____

Variance From: Mitigation Measure Work Plan/Procedure Response to Comments

Drawing Permit Condition Other (Basis of Design Report)

Detailed Description of Variance and Justification (Attach additional information if necessary):

Attachments : Photo Construction Drawing Aerial Photo Mark-Up Correspondence Other

	Air Quality		Hazardous Materials		Aesthetic
	Biological Resources		Noise		Water Resources
X	Soils (Less Soil Disturbance)		Paleo Resources		
	Cultural Resources		Hydrology and Water Quality		

Description and Justification:

This Work Variance Request (WVR) addresses DTSC's direction to PG&E to a) relocate MW-A from the location depicted in the Basis of Design report and b) convert IRZ-11 to a monitoring well. Attached is a figure showing the well locations and access routes. Below are relevant excerpts from various email communications from DTSC to the Tribes, CWG, and TWG on February 13 and March 9, 2020 as well as direction to PG&E on March 19, 2020:

"DTSC looked at the recent groundwater data with relations to the current remedial infrastructures, in particular the northern part of the chromium plume at the flood plain and found that the shallow chromium plume at IRZ-9 and IRZ-13 location is lacking monitoring wells based on the new plume configuration. To properly monitor this plume and confirm its downgradient extent, shallow monitoring wells should be installed at two locations: at the IRZ-11 location (a previously deferred injection well) and approximately 100 to 200 feet downgradient of the IRZ-11 location. Monitoring into the future is also needed to ensure the IRZ-9 and IRZ-13 extraction cleans up the shallow contamination and monitors water quality changes attributed to extraction. These monitoring wells would be re-purposed wells from the original design (i.e., convert IRZ-11 to a monitoring well and relocated monitoring well MW-A) but with much shallower total depths based on the current understanding of the chromium plume."

"In following up on the monitoring well matter, DTSC did not receive any comments in response to our site walk summary and request for comments on the locations and access of the proposed MW-A relocation and conversion of IRZ-11 to a water table monitoring well. DTSC notes that during the site walk, Margaret Eggers, TRC recommended consideration of a nested well at the IRZ-11 location in case one will be needed in the future. DTSC is carefully evaluating the technical merit for a deeper well at that location. Meanwhile, DTSC is also in receipt of PG&E's comment with an alternate and preferred access route to the south of the stated access to MW-A' which is demarcated on the attached map. DTSC understands that initially (during the site walk) the area proposed was thought to be off-limits due to cultural/archaeological reasons but has now been confirmed by an additional evaluation with Tribal monitors that it can be accessed. DTSC also understands that the proposed monitoring well areas (both IRZ-11 and MW-A') are within the project work area and therefore was surveyed in the past for archaeological and biological clearances. Nevertheless, as part of the project protocol, PG&E will conduct an additional evaluation prior to any work activities within those areas. Based on the information stated above, DTSC requests that PG&E prepare the necessary Work Variance Request (WVR) for moving MW-A to the current proposed MW-A' location for formal approval. Although the proposed monitoring well replacing IRZ-11 remains close to the original design location and a Work Variance Request should not be required, DTSC believes that documenting the change in the WVR will provide a full record of the decisions that are being made."

Work Variance Request Form (Continued)

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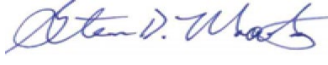
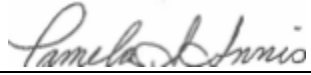
Work Variance Request #9 – Relocate MW-A to a location downgradient of IRZ-11 and convert IRZ-11 to monitoring well

Description and Justification (Continued):

After the March 5, 2020 field meeting, AE archaeologists and Transcon biologists conducted a field reconnaissance of the general areas for MW-96 and MW-97 and the access route to MW-96. Similar to the original IRZ-11 and MW-A, the new wells MW-96 and MW-97 are located in close proximity to an existing access route. No new access route is required. The east-west portion of the access route to MW-96 is the same access route (with stabilization mats) that is used to access well RB-2 by drill rig and support equipment. The north-south portion of the access route to MW-96 is the same access route used for sampling of the existing monitoring wells in the floodplain. Soil stabilization mats will be placed along this portion to facilitate access to MW-96 for the drill rig and supporting equipment. Minimal vegetation trimming, if any, is needed along this access route. No cultural or historical resources were identified during the field reconnaissance. In keeping with current site practice, a pre-construction last look will be conducted prior to the start of site preparation. Onsite biologists will also conduct pre-construction survey. Existing monitoring protocols will be implemented during construction to ensure resource protection.

Sonic drilling will be conducted at both MW-96 and MW-97. Sonic drilling is the same drilling technique evaluated for installation of monitoring wells in the final design. Since the former IRZ-11 is converted to a monitoring well (MW-97), less footprint would be required (smaller diameter borehole, smaller well vault) and less drilling spoils and wastewater will be generated. Since MW-96 is projected to be shallower than the original MW-A, less drilling spoils will be generated.

Approval Signatures:

	3/20/20		4/24/2020
PG&E Project Manager	Date	Approving Agency	Date
	4/24/20		4/24/2020
PG&E QA Manager	Date	Approving Agency	Date

Future Activity Allowance Determination Matrix for Work Variance Request (W V R)

Work Variance Request No. 9 Date: 4/24/2020

Future Activity Allowance (FAA) is an activity that is not considered in the remedy design but necessary to support the project objectives. FAA is a Material Deviation which is defined in the final groundwater remedy design as: Material Deviation means a change or correction required to prevent a condition that would (1) render the approved design non-compliant with codes, regulations, and /or engineering standard of practices, (2) render planned well locations and/or constructions fail to meet the project objectives, (3) cause significant schedule delay, and/or (4) cause a significant increase in costs. (CH2M Hill, 2015)

According to the SEIR Project Description, "The inclusion of the Future Activity Allowance is not intended to account for minor adjustments (work variances) of the remedy design during construction resulting from field conditions. DTSC's objective for the inclusion of the Future Activity Allowance is to consider the potential impacts of needing to take additional but previously unforeseen activities that were not contemplated as part of the Final Remedy Design but are activities that would improve the performance of the remedy, or are necessary to gather additional information on the remedy performance, and/or aid in the transition of the active remedy to monitored natural attenuation." (ESA, 2017)

1. Are all components of the WVR in the approved final design as reviewed in the SEIR?

Yes No

2. Are all components of the WVR staying within an infrastructure alignment in the approved final design?

Yes No

If answers to both 1 and 2 are Yes, STOP – action is not Future Activity Allowance

3. For components not in approved final design, will the WVR require new access not identified for use in the final design and create new ground disturbance beyond those anticipated in final design?

Yes No (see additional discussion in Section 7)

If answer is No, STOP – action is not Future Activity Allowance. If Yes, proceed...

4. For components not in approved final design and require new access or new ground disturbance, will the ground disturbing activity be outside the 2018 SEIR project boundary?

Yes No

If answer is Yes, STOP – action is subject to additional CEQA evaluation. WVR approval will be considered after DTSC completes CEQA determination.

5. For WVR requiring new access and/or new ground disturbance, but project components are in approved final design and within the 2018 SEIR project boundary, is the variance necessitated by field conditions which are outside the control of the operator (e.g. refusal during drilling, unstable ground, existing design jeopardizes health and safety, modification to avoid archaeological resource, existing design does not conform to engineering standards, etc.)?

Yes No

Future Activity Allowance Determination Matrix

WVR No. 9

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If answer is No or otherwise explained in Section 7 below, action is Future Activity Allowance, follow Communication Protocol for Future Activities Allowance, Exhibit 3 to the Statement of Decision and Resolution of Approval. If the answer is Yes, action is Future Activity Allowance, and DTSC will work with Tribes to meet the time sensitivity of the WVR. Regardless of response, because of new access and/or new ground disturbance, WVR action may be subject to Federal Consultation. Inquire with BLM to determine whether there is a need to follow Consultation during Construction protocol.

6. Does the addition of WVR cause an exceedance from infrastructure limits specified in the 2018 certified Final SEIR (Table 3-1 for well boreholes; Table 3-2 for pipeline trenches, electrical/communication conduit, roadway improvements, or sizes of buildings and structures; Table 3-4 for volume of soil disturbance and Table 3-5 for water usage)?
- Yes No

If answer is Yes, STOP – action is subject to additional CEQA evaluation. WVR approval will be considered after DTSC completes a CEQA checklist to determine if there are new or substantially more significant environmental impacts than disclosed in the 2018 SEIR.

7. Other extenuating circumstances or information for FAA considerations: No
 Yes – provide information and/or justification

Although there is a change in the location of Monitoring Well A from the approved groundwater design, access to monitoring point is from approved access corridor already established in the flood plain. No additional permanent access is required (see WVR #9 Figure).

Conclusion: WVR No. 9 is not a FAA is a FAA

Signature of DTSC reviewer:  Date: 4/24/2020