

Work Variance Request Form

Groundwater Remedy Phase 2A Construction, PG&E Topock Compressor Station, Needles, California

PG&E TOPOCK GROUNDWATER REMEDIATION PROJECT

Work Variance Request #13 – Proposed Relocation of In-Vault Power and Controls Equipment to Aboveground Panels on Stanchion with Sunshade at IRZ-39

Request Prepared By: PG&E

Date Submitted: 10/14/2024

Variance Request No.: 13

Location: In the vicinity of the existing IRZ-39 well vault and electrical pull boxes.

Request Approval From: DTSC and DOI

Date Approval Required: 10/16/2024

Map Area: See attached figure

Land Manager/Parcel No.: US Fish and Wildlife Services for Havasu National Wildlife Refuge/APN 650-161-12

Current Vegetative Cover/Land Use: None/Industrial

Existing Sensitive Resource? ☐ No ☒ Yes, Specify: Two palo verde trees nearby

Variance From: ☐ Mitigation Measure ☐ Work Plan/Procedure ☐ Response to Comments Drawing
☐ Permit Condition ☒ Other – Approved 2015 Final Design

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

☐ Attachments: ☐ Photo ☐ Construction Drawing ☒ Aerial Photo Mark-Up ☐ Correspondence
☒ Other - Illustration of New Equipment

Potential Impacts of Variance:

<input type="checkbox"/>	Air Quality	<input type="checkbox"/>	Hazardous Materials	<input checked="" type="checkbox"/>	Aesthetic
<input checked="" type="checkbox"/>	Biological Resources	<input type="checkbox"/>	Noise	<input type="checkbox"/>	Water Resources
<input checked="" type="checkbox"/>	Soils	<input type="checkbox"/>	Paleo Resources		
<input type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Hydrology and Water Quality		

Work Variance Request Form (Continued)

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Description and Justification:

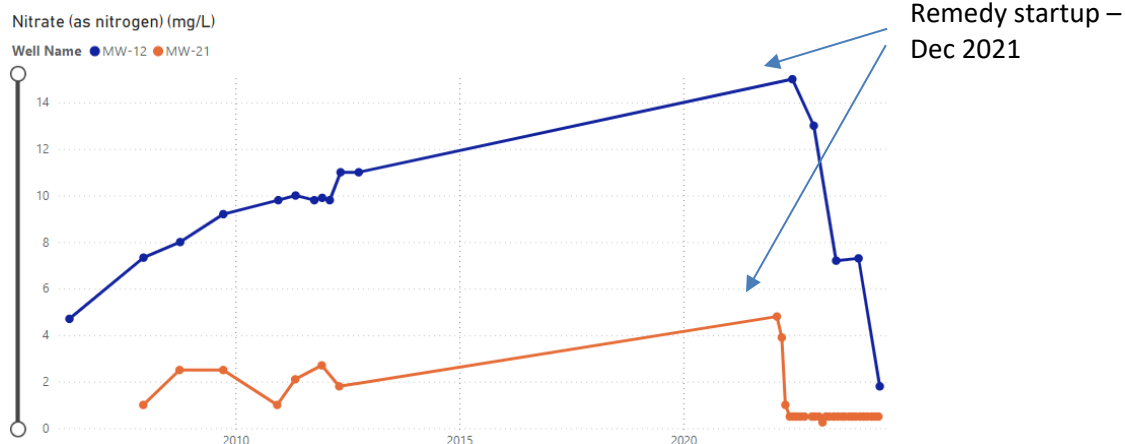
This Work Variance Request (WVR) proposes to relocate in-vault power and controls equipment in the underground IRZ-39 well vault to new aboveground panels on new stanchion with sunshade. This relocation is necessary to restore the operation of well IRZ-39, a component of the National Trails Highway Insitu Reactive Zone (IRZ), and to ensure its long-term operability. The specifics are described below and included in the attached figure and illustration.

A. Justification for restoring operation of well IRZ-39

On July 30 and September 10, 2024, PG&E discussed the observed exceedances of the trigger level for nitrate, a Constituent of Potential Concern (COPC), at monitoring well MW-71-35 with DTSC and DOI. Validated data shows an increase in concentration of nitrate at this well, see table below.

Monitoring Well ID	Sample Date	Sample Type	Nitrate (as Nitrogen) (mg/L)
MW-71-035	01/11/24	Normal (N)	1.3
MW-71-035	01/11/24	Field Duplicate (FD)	1.3
MW-71-035	02/08/24	N	1.6
MW-71-035	02/08/24	FD	1.7
MW-71-035	03/14/24	N	2.7
MW-71-035	04/11/24	N	2.4
MW-71-035	05/10/24	N	3.5
MW-71-035	06/13/24	N	2.9
MW-71-035	07/18/24	N	5.1
MW-71-035	07/18/24	FD	5.5

Per the approved 2015 Basis of Design (Section 2.3.1) and nitrate trend data obtained to date at MW-12 and MW-21 (see below), nitrate can be removed in groundwater within the IRZ. The closest IRZ well to MW-71-035 is IRZ-39. Therefore, PG&E proposed to DTSC and DOI to restore operation of IRZ-39 for the treatment of nitrate in groundwater on September 10 and again, on October 3, 2024.



Work Variance Request Form (Continued)

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B. Proposed Relocation of In-Vault Power and Controls Equipment to Aboveground Panels on Stanchion with Sunshade at IRZ-39 to Ensure Long-Term Well Operability

Past storm events at the site had flooded the IRZ-39 well vault and damaged certain equipment (e.g., flow meter, flow control valve, pressure switch, and in-well components) inside the vault. To restore the operation of IRZ-39 for nitrate treatment, in addition to replacing the damaged equipment, PG&E proposes to relocate the in-vault power and controls equipment to aboveground panels located on a 7-foot tall stanchion. The new stanchion will be approximately 15 feet north/northwest of the existing well vault, in an area already disturbed by previous grading and is within the current designated work area (as defined by the Programmatic Biological Agreement for Groundwater Remedy).

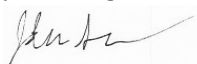
Figure 1 shows the approximate location of the new stanchion. To aid with visualization, Figure 2 illustrates the proposed new equipment. Additional details are below:

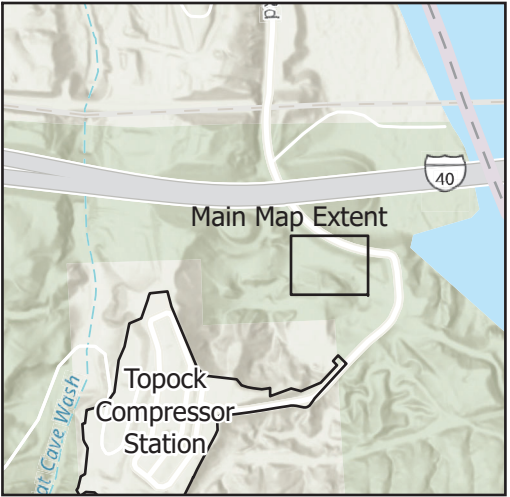
- Two new panels will be mounted on the new aboveground stanchion, one to house the relocated electrical components and one to house the relocated control equipment. A new sunshade (approximately 7 feet tall, 7 feet wide and 1ft 4inches deep) will be provided to protect the new panels.
 - A sunshade detail is included in the approved 2015 BOD, Drawing E-00-67, Detail 6. The proposed sunshade at IRZ-39 will, however, be installed without a rubber mat and hinge assembly over the panel door and with concrete posts rather than a larger concrete pad shown in Detail 6.
 - In compliance with 2018 Subsequent Environmental Impact Report (SEIR) mitigation measure AES-1, the color of the sunshade will be consistent with the surrounding natural color palette.
- New conduits (2-inch in diameter) containing electrical and communication/fiber optic wires will be installed aboveground from the panels to 2-feet wide belowground trenches that connect to the well vault and the electrical pull box. Approximate total length of new conduits is 50 feet and new trench is 15 feet.

The estimated volume of soil to be displaced from installation of the new stanchion/sunshade and trenching is up to 5 cubic yards. Excavated soils and/or site soil currently stored at the Soil Processing Yard will be used for back fill. No import fills will be required. Excess soil, if any, will be managed in accordance with the approved Soil Management Plan for the Groundwater Remedy.

Based on recent field recon, PG&E plans to complete the aboveground construction without having to remove any protected plants or impacts to known cultural resources. PG&E plans to tie back or minimally trim, as needed, the large blue palo verde tree to the north of the IRZ-39 vault. Trimming, if occurs, would be less than 20% of the tree canopy. Therefore, there are no additional impacts to biological, historical, and cultural resources associated with the new infrastructure not already evaluated in the 2018 SEIR.

Approval Signatures:

	10/30/2024	Christopher Ioan	10/15/2024
PG&E Project Manager	Date	Approving Agency	Date
		Veronica Dickerson	10/16/2024
		Approving Agency	Date



- LEGEND**
- IRZ-39
 - New 7' Stanchion with Sunshade
 - New Belowground Communication and Controls Conduits
 - New Belowground Electrical Conduit
 - Maximum Construction Footprint
 - New Aboveground Communication Panel
 - New Aboveground Electrical Panel

Esri Community Maps Contributors, California State Parks, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS, Esri Community Maps Contributors, California State Parks, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS, Esri, NASA, NGA, USGS, FEMA, Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

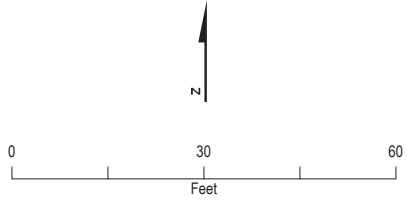


FIGURE 1
Proposed Relocation of Power/Control Equipment to Aboveground at IRZ-39
 Work Variance Request #13
PG&E Topock Compressor Station
Needles, California

Legend

- New 480V Power
- New Communication/Fiber Optic
- New Controls and Control Power

Dashed lines are belowground conduits, Solid lines are aboveground conduits

Note:

Not to scale

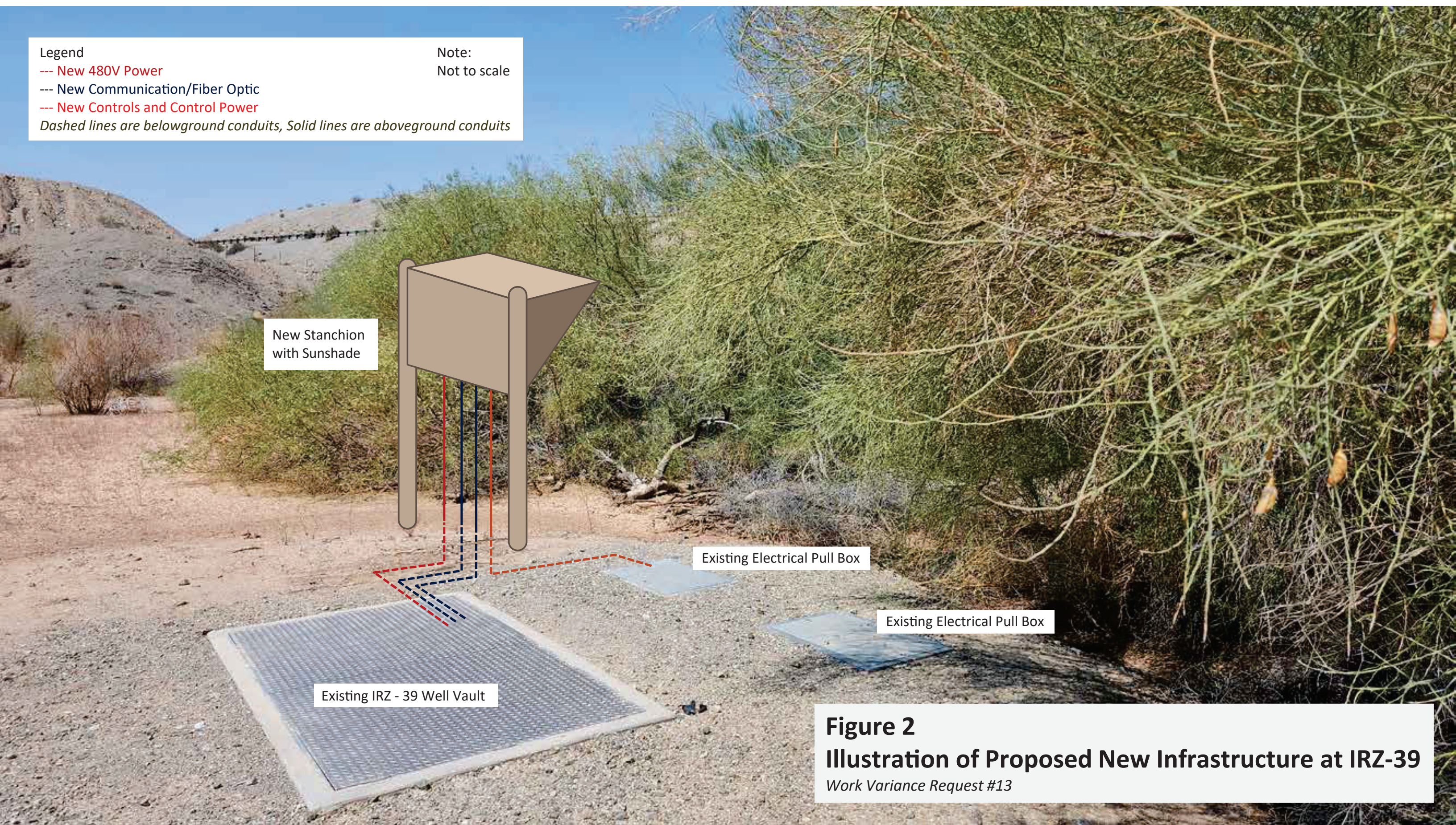


Figure 2
Illustration of Proposed New Infrastructure at IRZ-39
Work Variance Request #13

Future Activity Allowance Determination Matrix for Work Variance Request (WVR)

Work Variance Request No. 13 Date: 10/15/2024

Future Activity Allowance is an activity that is not considered in the remedy design but necessary to support the project objectives. Future Activity Allowance 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 **NOT APPLICABLE**

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

Future Activity Allowance Determination Matrix
WVR No. 13

ground, existing design jeopardizes health and safety, modification to avoid archaeological resource, existing design does not conform to engineering standards, etc.)?

☒ Yes (Stormwater Intrusion) ☐ No

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

Conclusion: WVR No. 13

☐ is not a FAA ☒ is a FAA

Signature of DTSC reviewer: Christopher Jean Date: 10/15/2024