



Matthew Rodriguez
Secretary for
Environmental Protection



Department of Toxic Substances Control

Barbara A. Lee, Director
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Edmund G. Brown Jr.
Governor

Via Electronic Mail

July 20, 2015

Ms. Yvonne Meeks
Topock Project Manager
Pacific Gas and Electric Company
4325 South Higuera Street
San Luis Obispo, CA 93401

CONDITIONAL APPROVAL OF PROPOSAL TO MODIFY INTERIM MEASURE 3 (IM3) EXTRACTION WELL PUMPING AT PACIFIC GAS AND ELECTRIC COMPANY, TOPOCK COMPRESSOR STATION (PG&E), NEEDLES, CALIFORNIA (EPA ID NO. CAT080011729)

Dear Ms. Meeks,

The Department of Toxic Substances Control (DTSC) has reviewed and considered PG&E's May 28, 2015 proposal to reduce or eliminate pumping at PE-1 while increasing pumping from TW-3D and/or TW-2D and TW-2S. PG&E's intended objective is to increase chromium mass removal by utilizing existing infrastructures while maintaining landward hydraulic gradients required by IM3. DTSC is agreeable to PG&E's proposal with the specific condition identified below.

DTSC's February 14, 2005 letter indicates that the objective of IM3 is to prevent further movement of the chromium plume towards the Colorado River and ensure the plume margin within the floodplain is under control. DTSC specifies that hydraulic control of the plume near the Colorado River is accomplished by net reversal of groundwater gradient to at least 0.001 foot/foot (ft/ft) at prescribed gradient well pairs. This is to be accomplished by extracting the maximum rate designed for the IM3 treatment system of 135 gallons per minute (gpm).

Although PG&E's May 28, 2015 proposal indicates that the pumping rate will remain at 135 gpm, the extraction will be accomplished solely by well TW-3D. If TW-3D cannot produce the 135 gpm, then TW-2D and/or TW-2S may be pumped to supplement and

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achieve the total flow. PG&E also indicates that PE-1 will be utilized as an extraction well if the gradient criteria of 0.001 ft/ft cannot be maintained by pumping from the other wells. PG&E assumes that this may be needed during low river stages during some months in the fall and/or winter.

DTSC concurs that additional mass removal from the existing system is beneficial to the overall hexavalent chromium plume clean-up. However, DTSC cannot negate the objective of the IM3. Therefore, DTSC approves PG&E's proposal to modify the extraction scheme as long as PG&E alerts DTSC of individual floodplain monitoring wells within approximately 800 feet of TW-3D¹ that exhibit chromium concentrations greater than maximum detected chromium concentrations from 2014 (or most recent year if a well was not sampled in 2014). If any of these wells exceed the 2014 maximum concentration, PG&E shall notify DTSC of the results in writing within 40 days after completion of the field sampling event to assist DTSC in determining if PE-1 pumping should be reinitiated. This condition is necessary because increasing well concentrations near the river or along the floodplain in general may not represent an optimal control measure to meet the objective of IM3 and protect the Colorado River.

If you have any questions regarding this letter, please contact Chris Guerre of DTSC at (714) 484-5422.

Sincerely,



Aaron Yue
Project Manager
Geological Services Branch
Department of Toxic Substances Control

aky: 071501B

cc: PG&E Topock Consultative Workgroup Members
PG&E Topock Geo/Hydro Technical Workgroup Members
Tribal Representatives in PG&E Project Contact List
Technical Review Committee

¹ Wells within approximately 800 feet of TW-3D include: MW-20-70, MW-20-100, MW-20-130, MW-26, MW-27-20, MW-27-60, MW-27-85, MW-28-25, MW-28-90, MW-30-30, MW-30-50, MW-31-60, MW-31-135, MW-32-020, MW-32-035, MW-33-40, MW-33-90, MW-33-150, MW-33-210, MW-34-55, MW-34-80, MW-34-100, MW-36-20, MW-36-40, MW-36-50, MW-36-70, MW-36-90, MW-36-100, MW-39-40, MW-39-50, MW-39-60, MW-39-70, MW-39-80, MW-39-100, MW-42-30, MW-42-55, MW-42-65, MW-44-70, MW-44-115, MW-44-125, MW-45-95a, MW-46-175, MW-46-205, MW-47-55, MW-47-115, MW-51, PE-1, TW-4