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Jose Cortez
Water Resources Control Engineer
California Regional Water Quality Control Board
Colorado River Basin
73-720 Fred Waring Drive, Suite 100
Palm Desert, California 92260

Subject: Addendum No. 2 to *Interim Measures No. 3 Injection Well Operation and Maintenance Plan*, PG&E Topock Compressor Station, Needles, California

Dear Mr. Cortez:

Enclosed is Addendum No. 2 to *Interim Measures No. 3 Injection Well Operation and Maintenance Plan*, submitted to the Colorado River Basin Regional Water Quality Control Board on April 8, 2005. This addendum is intended to address Comment No. 2 in the Board's May 16, 2005 letter requesting clarification on how the treatment plant will respond in the event of a power failure at the injection wells. If you have any questions on the enclosed addendum, please call me at (925) 974-4079.

Sincerely,

John Eaton for Rich McCurdy

Cc: Liann Chavez/RWQCB
Norman Shopay/DTSC
Kate Burger/DTSC

Interim Measures No. 3 Injection Well Operation and Maintenance Plan Addendum No. 2

This Addendum No. 2 to the *Interim Measures No. 3 Injection Well Operation and Maintenance Plan* (O&M Plan) has been prepared to address Comment No. 2 of the May 16, 2005 letter from Regional Water Quality Control Board Colorado River Basin Region (CRBRWQCB):

> *Please clarify how the treatment plant will respond in the event of a power failure at injection wells (flow measurement instruments).*

Background

It is possible, though unlikely, that the injection well area could experience a power failure while the remainder of the Interim Measures No. 3 (IM3) facility continues to operate. This possibility exists because the injection area is powered by a battery pack connected to a photovoltaic solar panel, while the treatment area and extraction wells are powered by a City of Needles overhead power line. However a power outage is considered unlikely because the battery pack is rated at a 10-day life under the area's power demand, which should provide time to observe and correct power problems (e.g., replacement with a back-up battery pack) before a power failure occurs. The voltage on the battery pack will be monitored weekly.

Events in Case of Power Failure at Injection Area

In the event of a power failure at the injection area, defined as the battery pack losing ability to power local equipment, the following responses will occur:

- Treatment plant operation: Will continue unaffected, and effluent will continue to be pumped to the injection wells.
- Discharge to the wells: The valves that control the flow split between the two injection wells will fail in the last position. In other words, water will continue to flow as directed by the automatic and manual valves. Therefore, a power outage will not affect the flow of water.
- Flow measurement instruments: The flow meters at the injection wellheads will lose power and stop reporting flow locally and as a signal back to the treatment plant control system. In this event, flow recorded by a new flow meter being installed at the treatment plant on the line to the injection area (immediately downstream of Treated Water Pump P-700) will be used to monitor flow to the injection wells. This meter will be powered by the treatment system power source and will not be affected by power failure at the injection area. During normal operation, the meters at the wells will be used as the primary flow measurement for discharge monitoring under the Waste Discharge Requirements (WDRs); the meter at the treatment plant will be used for flow

measurement reporting only in the event of power failure. It is expected that minor discrepancies in flow readings between flow meters at opposite ends of the pipeline to the injection wells could occur.

- Water level sensing elements in the injection wells: The water level elements will lose power and stop reporting levels to the treatment plant control system. This information is not required in the WDRs, and is not essential for treatment plant operations. If the power outage is prolonged, manual water level measurements can be taken periodically.