
Los Angeles Regional Water Quality Control Board

October 26, 2018

Mr. Tao Wu
Remediation Manager
Honeywell International, Inc.
111 South 34th Street, M/S 158
Phoenix, Arizona 85034

AUTHORIZATION FOR USE OF ADDITIONAL INJECTION MATERIALS – FORMER HONEYWELL EL SEGUNDO FACILITY (OFFSITE), 850 SOUTH SEPULVEDA BOULEVARD, EL SEGUNDO, CALIFORNIA (FILE NO. 15-166, ORDER NO. R4-2014-0187, SERIES NO. 052, CI-10202, GLOBAL ID. WDR100026618)

Dear Mr. Wu:

On February 3, 2016, the California Regional Water Quality Control Board, Los Angeles Region (Regional Board) enrolled Honeywell International, Inc. (Discharger) under General Waste Discharge Requirements (WDR) Order No. R4-2014-0187 with a Monitoring and Reporting Program (MRP) No. CI-10202 for injection of pH buffer, organic substrates, tracer, and bioaugmentation culture for the enhanced reductive dechlorination (ERD) treatment of volatile organic compounds impacted groundwater at the subject site.


The Discharger submitted the *Second Injection Plan* (Plan) dated August 15, 2018 to propose an additional injection of amendments to enhance the ERD system performance. It is estimated that 1,249,000 gallons of amendment solution containing 182,400 pounds of sodium carbonate and 127,400 pounds of emulsified vegetable oil, 82 gallons of tracer (Rhodamine WT), and 62 gallons (236 liters) of bioaugmentation culture (*Dehalococcoides sp.*) will be injected into 21 injection wells (SIW-05 through SIW-25) at depths approximately from 87.5 to 168 feet below ground surface.

The Plan also requests to temporarily recirculate groundwater between selected injection wells during the injection of amendments to enhance the distribution of amendments within the plume core. The temporary recirculation of groundwater will increase the zone of influence around the selected injection wells by inducing flow between injection wells while amendments are being injected. Temporary recirculation will also make it possible to inject a greater volume of amendments without excessive hydraulic mounding. It would allow for groundwater extraction, amendment additions, and reinjection of amended groundwater. The Regional Board Site Cleanup staff approved the Plan in the letter dated October 12, 2018.

Based on the review of the information submitted, the Discharger is authorized to implement additional injection of amendments with recirculation approach for in-situ remediation purposes. The injection points are at the same locations as specified in the subject WDR permit. Therefore, there is no modification needed for groundwater monitoring network. All requirements prescribed in the WDR Order No. R4-2014-0187 and MRP No. CI-10202 remain in effect.

If you have any questions, please contact the Project Manager, Dr. Ann Chang at (213) 620-6122 (ann.chang@waterboards.ca.gov), or the Chief of Groundwater Permitting Unit, Dr. Eric Wu at (213) 576-6683 (eric.wu@waterboards.ca.gov).

Sincerely,


Deborah J. Smith
Executive Officer

cc: Mr. Alan Hodges, Jacobs