



August 20, 2012

Ms. Mary Siders
Bureau of Corrective Actions
Nevada Division of Environmental Protection (NDEP)
901 S. Stewart Street, Suite 4001
Carson City, Nevada 89701

RE: **PROPOSAL FOR CHANGES TO THE PROPOSED PILOT TESTS – ADDITIONAL VERTICAL DELINEATION**
MARYLAND SQUARE PCE SITE; 3661 SOUTH MARYLAND PARKWAY; LAS VEGAS, NEVADA
FACILITY ID No. H-000086

Dear Ms. Siders:

Based on preliminary review and assessment of vertical delineation and aquifer test data collected in July and August 2012, Tetra Tech, proposes changes to the Work Plan for Bench and Pilot Tests (included as Appendix C of the Draft Corrective Action Plan [CAP] for Groundwater dated June 14, 2011, and the Addendum to the CAP for Groundwater dated August 25, 2011). Both documents were approved by the Nevada Division of Environmental Protection (NDEP) in 2011.

Vertical delineation work completed at the Boulevard Mall confirms tetrachloroethene (PCE) contamination in groundwater at 60 feet below ground surface (bgs). Therefore, as we discussed, Tetra Tech proposes additional investigation to determine the presence of PCE at greater depths and evaluate hydraulic communication across the clay layer encountered at 60 feet bgs. This will aid in the selection and design of a remedy to treat groundwater. Tetra Tech proposes the following changes to the groundwater pilot study for your consideration:

- Install a deep nested well near MW-6 in the western parking lot of the Boulevard Mall. If the Boulevard Mall does not grant access, this well may be installed in the sidewalk west of the Boulevard Mall. The total depth of the well will be the lesser of: 1) the depth at which the PCE concentration in three consecutive groundwater samples is below 100 micrograms per liter ($\mu\text{g/L}$); or 2) a depth of 200 feet bgs. Groundwater samples will be collected every 10 feet bgs, with changes in lithology or in more permeable layers if they are present. If the sample at 200 feet has a PCE concentration greater than 1,000 $\mu\text{g/L}$, NDEP will be contacted and the pilot study will be reassessed.
- Increase the total depth of the two nested monitoring wells (MW-P1 and MW-P2) proposed for the pilot tests in the eastern parking lot of the Boulevard Mall. The total depth of the wells will be the lesser of: 1) the depth at which the PCE concentration in three consecutive groundwater samples is below 100 $\mu\text{g/L}$; or 2) a depth of 100 feet bgs. Groundwater samples will be collected every 10 feet bgs, with changes in lithology, or in more permeable layers if they are present. Depending on the conditions encountered during the installation of these wells, the pilot tests may be modified to target zones deeper than 60 feet bgs. In this event, the ozone-hydrogen peroxide pilot test may require additional planning and re-design.
- Install two deep wells in the Paradise Palms neighborhood. The total depth of the wells will be the lesser of: 1) the depth at which the PCE concentration in three consecutive groundwater samples is below 100 $\mu\text{g/L}$; or 2) a depth of 100 feet bgs. Groundwater samples will be collected every 10 feet bgs, with changes in lithology, or in more permeable layers if they are present. Tetra Tech requests NDEP collaboration to determine the best locations for these new wells within the Paradise Palms neighborhood.

Should you have questions or require additional information, please do not hesitate to contact us or Robert Manriquez, Program Manager, at 619.321.6748. Thank you for your time and consideration in this matter.

Regards,



Tamara Pelham
Project Manager
CEM No. 1537, Exp. Sept. 11, 2012
Class A 60505



Lisa M. Medve, PE
Project Engineer

Dist: 1/Addressee
1/Maryland Square Shopping Center, LLC, Herman Kishner Trust, c/o Mr. Tom Vandenburg of Dongell Lawrence Finney LLP
1/General Growth Properties, Inc., Attn: Ms. Lynne Stella