## STATE OF NEVADA



Department of Conservation & Natural Resources

Brian Sandoval, Governor Leo M. Drozdoff, P.E., Director David Emme, Administrator

June 19, 2015

Robert W. Gensemer, Ph.D. Senior Ecotoxicologist GEI Consultants, Inc. 4601 DTC Boulevard, Suite 900 Denver, CO 80237

RE: Proposal to Support the Use of Biotic Ligand Model for Copper Aquatic Life Criteria in Nevada

Dear Dr. Gensemer,

Thank you for the March 27, 2015 letter in response to the Nevada Division of Environmental Protection (NDEP) 2015 water quality standards triennial review. A similar letter was submitted to NDEP on February 21, 2011. In both, you request that NDEP consider adopting the freshwater Biotic Ligand Model (BLM) for copper as recommended by the U.S. Environmental Protection Agency (USEPA 2007).

A critical step in the standards adoption process is assessing if a proposed standard can be met. As you point out in your letter, the copper BLM accounts for multiple factors including dissolved organic carbon (DOC), alkalinity, pH and temperature. Currently there is insufficient DOC data to allow NDEP to assess compliance as the Nevada State Health Laboratory, which provides analytical services for the NDEP water quality monitoring program, did not have the capability to analyze for DOC until 2014. Since that time, NDEP has collected DOC data and once we have data for a 3-4 year period, NDEP will initiate a detailed review and determine if it is appropriate to adopt the USEPA 2007 criteria.

You also indicate that BLMs are available for other metals including zinc, lead, nickel and cadmium. Due to our limited staff resources, NDEP does not have the capacity to propose standards revisions for these metals until such time as USEPA issues recommended criteria.

We appreciate your offer of possible assistance and look forward to further discussions once we start the detailed review process for the copper BLM. Please contact me at (775) 687-9449 if you have any questions.

Sincerely,

John O. Heggeness, Supervisor Water Quality Standards and Monitoring Branch Bureau of Water Quality Planning

Enclosure: GEI Consultants, Inc. March 27, 2015 letter to NDEP