OFFICE OF THE NEVADA ENVIRONMENTAL RESPONSE TRUST TRUSTEE

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October 19, 2015

Mr. Weiquan Dong Bureau of Industrial Site Cleanup Nevada Division of Environmental Protection 2030 E. Flamingo Rd, Suite 230 Las Vegas NV 89119

RE: Nevada Environmental Response Trust Groundwater Extraction and Treatment System Infrastructure

Audit; Data Accessibility and Secondary Containment Improvements

Conference Call Meeting Minutes Nevada Environmental Response Trust

Henderson, Nevada

Dear Mr. Dong:

Thanks for meeting with the Nevada Environmental Response Trust (NERT) to discuss the infrastructure audit of the groundwater extraction and treatment system (GWETS), options for GWETS data accessibility and recommended GWETS secondary containment improvements. The documents discussed have been included with this distribution and this letter provides the minutes from the conference call and also memorializes the path forward on various items as discussed.

Missing As-Built Drawing for GWETS

As part of the infrastructure audit and evaluation NERT reviewed existing design documents when available; however, very few as-built drawings exist for the groundwater extraction and treatment system (GWETS) currently in-place. In addition, numerous enhancements were made to the system by Kerr-McGee and Tronox over the years which are poorly documented. NERT's evaluation of the GWETS was largely completed by inspecting the system and verifying equipment performance expectations with the manufacturers (pumps, pipelines, tanks, and treatment systems). Based on our conversation with NDEP, all parties agreed that all reasonable attempts to obtain as-built drawings had been exhausted and no further work will be required.

Well, Pipeline, and Pump Capacity

The Infrastructure Audit Report relied primarily on inspecting existing pumps, tanks, and pipelines and determining their capacity based on manufacturers specifications. In some cases assumptions were made regarding pump construction. For the pipelines, engineering calculations were completed to calculate the maximum flow and safety factors were applied to ensure the pipelines would not be over stressed. NERT did not complete an extensive historical review of flows in the evaluation as the focus was on evaluating the existing infrastructure system capacities and chokepoints. Based on our conversation all parties agreed that additional historical research was not necessary for purposes of the Infrastructure Audit Report.

Deployment of Variable Frequency Drives

As part of the Infrastructure Audit Report, a cost benefit analysis was performed to determine if the use of Variable Frequency Drives (VFDs) would yield acceptable energy cost savings to justify their installation throughout the system. Although the cost benefit analysis yielded mixed results regarding energy savings, NERT

recognizes that there are many other benefits to integrating VFDs throughout the GWETS, and this is stated in the Infrastructure Audit Report. After discussion regarding the merits of deploying VFDs throughout the GWETS, all parties agreed that integrating this technology would yield greater flexibility for system optimization and NERT will develop a plan to integrate VFDs in a systematic manner.

Data Accessibility

NERT presented a variety of options for remote access to GWETS performance. As the level of detail increases there is also an increase in cost. However, all parties agreed that the incremental cost between Tier 1 and Tier 3 reporting is not substantial and the wealth of information that is captured in Tier 3 reporting is worth the investment. As such, NERT will move forward with the implementation of Tier 3 reporting.

Well Management Program

Concern was raised over whether the current monitoring program is capturing and evaluating data necessary to make decisions regarding well rehabilitation. NERT will perform a detailed review of the current well evaluation techniques and will collect total well depth data on an annual basis to determine if excessive silt is accumulating in any monitoring or extraction well. If the silt is blocking more than 10% of the well screen the well will be redeveloped. In addition, NERT will monitor groundwater extraction rates for wells in the IWF, AWF, and SWF. If extraction flow rates have decreased greater than 10% over a 12 month period the well will be inspected to determine the nature of the change. This evaluation may include the use of a high definition camera survey to determine what maintenance activities are required to return the well to normal operating conditions. Well evaluation data and any well maintenance activities will be reported in the Annual Remedial Performance Report beginning in October 2016.

Installation of New Flow Meters/GW-11 Pond Level Measurements

NERT proposed the installation of additional flow meters and a stilling well in GW-11 in order to capture additional data to aid in water balance calculations. During the discussions the value of the stilling well was discussed. With all parties in agreement, NERT will move forward with the implementation of the flow meters and stilling well.

Secondary Containment

It was discussed that all parties are in agreement with the proposed plan provided in NERT's August 24, 2015 submittal. NERT will move forward with the implementation of the various secondary containment enhancements.

Closing

NERT will begin preparation of budgets to implement the agreed upon infrastructure and secondary containment improvements. If you have any questions or concerns regarding this matter, feel to contact me at (702) 686-9611 or at steve.clough@nert-trust.com.

Office of the Nevada Environmental Response Trust

Stephen R. Clough, P.G., CEM

Stephen R. Clough

Remediation Director

CEM Certification Number: 2399, exp. 3/24/17

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Attachments (via ShareFile Distribution):

Infrastructure Audit and Data Accessibility Report, August 2015 Secondary Containment Improvements Letter and Report, August 24, 2015