MEMORANDUM

 To: Erika Mancha, P.E., Innovative Water Technologies, Texas Water Development Board (TWDB)
FROM: Eva Steinle-Darling, Carollo Engineers
SUBJECT: Progress Report No. 5 Testing Water Quality in a Municipal Wastewater Effluent Treated to Drinking Water Standards Quarterly Report
DATE: March 2015

CONTRACT: 1348321632

Recent Project Activities:

Task 1: Prepare for Sampling

- Testing protocol, including proposed MS2/Trasar RO challenge testing achieved approval from TCEQ. A final version of the protocol was submitted to TWDB on January 13, 2015.
- Approval by CRMWD to complete MS2-Trasar RO challenge testing is contingent upon manufacturer approval, which has not been given. TWDB approval of full protocol is contingent upon CRMWD approval
- Continued preparation work for sampling completed February 9-10, 2015 without proposed MS2/Trasar compound.

Task 2: Implement Testing Protocol

- Second testing event completed February 9-10, 2015
- Processing invoices from laboratories.

Task 4: Support CRMWD with Additional Sampling

- Support & coordination for *Cryptosporidium/Giardia* samples collected in December and January
- On-site for February sample collection.
- Provided results from previous sampling to CRMWD.

Issues Encountered:

- RWPF resumed operations this quarter. No further delays were encountered due to operational issues.
- As noted previously, approval by CRMWD to complete MS2-Trasar RO challenge testing is contingent upon equipment manufacturer approval. After further discussion directly with the equipment manufacturer and with CRWMD, approval for testing will not be given for at least an additional six months. That is an unacceptable delay for project partners and the project schedule, which has already encountered so many delays. We propose a contract amendment, in which additional scope and in-kind commitment is provided for sampling and analysis in exchange for the removal of the RO challenge testing.
- Due to the delays associated with the RWPF not operating, and in coming to the determination on RO challenge testing, an extension to the project schedule is also requested as part of the proposed contract amentment.

Items to be Addressed and Anticipated Project Activities:

- Scheduling of the next sample event must be coordinated. Sampling is planned for mid-May to early June.
- Contract amendment to address issues above.
- Revision of testing protocol to remove RO challenge testing
- Continued support for Task 4 components will be provided.