

MEMORANDUM

To: Erika Mancha, P.E., Innovative Water Technologies, Texas Water Development Board (TWDB)

FROM: Eva Steinle-Darling, Carollo Engineers

SUBJECT: **Progress Report No. 10**
Testing Water Quality in a Municipal Wastewater Effluent Treated to Drinking Water Standards Quarterly Report

DATE: June 2016

CONTRACT: 1348321632

Recent Project Activities: March - May 2016

Task 1: Prepare for Sampling

- This task is complete.

Task 2: Implement Testing Protocol

- Coordinated the collection of additional samples in coordination with monthly (Task 400) samples. These included more particle size distribution samples for analysis by Carollo and an additional *Giardia* and *Cryptosporidium* sample in the MF filtrate (RO Feed) due to elevated concentrations in RWPF Influent. No protozoa were found in the filtrate even when higher concentrations were measured in the influent.
- The Data Report consists of data tables and graphical representations of data with a short explanatory preamble. It was included as an appendix of the Final Report discussed below and submitted for TWDB review on May 31, 2016.

Task 3: Monitoring Guidance Report

- This report has been consolidated with the Final Report into one deliverable.
- A full draft of the Final Report was written. It includes a chapter on monitoring guidance. Results from the last sample event in May were not available as of the compilation of the draft report, but placeholders for these data were included in the draft to help reviewers to anticipate the format of the finished report.
- This full draft was reviewed by subject matter experts within Carollo and project partner at Trussell Technologies and Hazen, and revised in accordance with the reviews
- The draft Final Report was submitted for TWDB review on May 31, 2016.

Task 4: Support CRMWD with Additional Sampling

- Support & coordination for *Cryptosporidium/Giardia* samples collected in March, April, and May.
- Coordinated results with CRMWD.
- An invoice from CRMWD for the cost of their first two monthly sample events, (for which the CRMWD was paid), is included in this invoice packet. The CRMWD invoice is dated 2016.

Also, progress was made on development of the Texas-specific version of the IT³PR advanced treatment train toolbox, a task which is supported with outside (in-kind) funding from WaterReuse Texas and is thus not related to any of the task budgets discussed above. A supplement to the draft final report containing an updated version of this tool will be submitted for review when this is complete.

Issues Encountered:

- No issues encountered.

Items to be Addressed and Anticipated Project Activities:

- Incorporate results from May 2016 sampling event under Tasks 200, 300 and 400.
- TWDB review of Final Report
- Carollo team response to comments and edits to report as needed
- Submit draft IT³PR toolbox for TWDB review.
- On dates to be determined, but anticipated in late summer (August or September), the Carollo team will conduct:
 - A webinar on the project, "hosted" (moderated) by TWDB staff, and
 - A live presentation on project results hosted by TWDB in Austin, in coordination with CRMWD staff