TZA Water Engineers
a Lamp Rynearson Company

12596 W. Bayaud Ave., Ste. 330
Lakewood, Colorado 80228
303-971-0030
tza4water.com

GREATROCK NORTH WATER AND SANITATION DISTRICT
ENGINEER'S REPORT
NOVEMBER 24, 2014

Concentrate Disposal and Stream Reclassification

I recently met with Ron Falco, the interim Director of the Water Quality Control Division, to revisit the District's concentrate disposal quandary. Mr. Falco suggested researching the Water Quality Control Commission's Policy 13-1 for a discharger specific variance. This policy intended to make the discharger specific variance adoption and implementation process more transparent and understandable to all interested parties, while providing appropriate flexibility.

The Durango West Metropolitan District No. 2 recently applied for a discharger specific variance for ammonia and chlorine standards. This District sought relief of severe ammonia and chlorine discharge standards for aerated lagoons that discharge to a dry creek. The lagoon effluent does not reach the stream segment upon which the standards are based.

The Commission's administrator has provided a link (ftp://ft.dphe.state.co.us/wqc/wqcc/34_AF13bRMH_2014/) to the entire administrative record for Durango West Metropolitan District No. 2's request. I am in the process of reviewing the records and will present more information to the Board at a future meeting.

Curb Stops

TZA Water Engineers conducted a site visit to Box Elder Creek Ranch on November 6 in an effort to locate the remaining curb stops. District Manager Lisa Johnson and Director John Wyckoff were in attendance. We were unable to locate any additional curb stops, largely because they are likely buried under landscaped improvements. In addition, at two of the properties we were unable to locate the water meter pits. Finally, at one property, we learned that the residence in on a private well that proceeds the development of the subdivision. I have drafted two form letters to be considered at the December Board meeting.

Greatrock North Pump Station Improvements

On November 14, TZA Water Engineers conducted an initial site walk for the proposed Greatrock North Pump Station Improvements. An addendum to the Independent Contractor Agreement is included in this month's Board packet for consideration. I will present a conceptual floor plan for the improvements to the Board at the December Board meeting.

Engineer's Report
November 24, 2014
Page Two

Reverse Osmosis Condition Assessment

TZA Water Engineers has scheduled Pure Water Solutions to conduct a condition assessment on the Box Elder Creek Ranch Water Treatment Plant's reverse osmosis unit on November 25, 2014. Pure Water Solutions will collect water quality samples for analysis on that date. I will present a summary to the Board at the December Board meeting.

Well, Pump, and Motor Replacements

The District has recently initiated efforts to better understand its well infrastructure and the potential need for replacement of pumps and motors, as well as the well structures themselves. As a part of that effort, TZA Water Engineers is compiling the historical aspects of the wells constructed, the pumps installed, and any other improvements (i.e. water level measuring devices) integrated at each site. TZA is evaluating the benefits of a pump, motor, and well maintenance program to detect changes in well performance. Early detection of deterioration in well performance will allow less expensive repairs, rehabilitation, or treatment procedures in order to maximize production capacity. This preventative maintenance program will be discussed with the District's Manager, and a formal proposal will be brought to the Board if deemed appropriate.

Other Activities

Warranty Inspections – Ramey Environmental Compliance is tracking the 11-month warranty inspections for the following projects:

- Rocking Horse Farms Pump Station – The warranty inspection was conducted by Jeff Rabas on July 18, 2014.
- Box Elder Creek Ranch Pump Station – The improvements were placed into service on March 13, 2014.
- Rocking Horse Farms Tank Repainting – The improvements were inspected and accepted on June 11, 2014.

Utility Billings and Energy Costs – TZA is now tracking the United Power utility bills and associated water operations. An updated review will be presented for 2014 at the January 2015 Board meeting.

Draft Storage Tank Rule – The Water Quality Control Division has drafted a Storage Tank Rule (https://docs.google.com/file/d/0B0tmPQ67k3NVUzAyd2dEekt5Tnc/edit) that will be considered by the Water Quality Control Commission in January of 2015 and will become effective January of 2016. In addition to quarterly periodic (visual) inspections, this rule will require comprehensive inspections to be scheduled at least every five years.

Engineer's Report
November 24, 2014
Page Three

Greatrock North Flow Meter – TZA Water Engineers is supporting Ramey Environmental Compliance with the procurement of a magnetic flow meter to replace the suspect meter to the Greatrock North subdivision distribution system.

Meeting with Mr. Kirwin – On November 14, I met with Mr. Ken Kirwin and Director Wyckoff at the Box Elder Creek Ranch Water Treatment Plant and discussed the history of the District, its water system, the looping project, and our current efforts to improve upon the quality of the potable water.