

are talking about wanting to move TLWWTF's discharge point, or have another discharge point, to facilitate the water reuse plant it is considering building with WWSD, they should apply to the JUC for permission. However, no such communication or application has come from the town. He also said the JUC ought to be informed about the town's plans for treating radium in its drinking water, since several alternatives have been discussed that could affect TLWWTF. "Being in the dark is not fun," he said.

The only time a town representative came to a JUC meeting since the radium or water reuse issues (which surfaced in August and September), was in December when Jonathan Moore of Forsgren Associates, the town's water engineers, attended the JUC meeting just to listen. He did not present any information. See www.ocn.me/v16n10.htm#mbot0910, www.ocn.me/v16n11.htm#mbot1003, www.ocn.me/v16n11.htm#mbot1017, www.ocn.me/v17n1.htm#tlwtffuc.

Strom said that he assumed that Wicklund, as district manager of the Monument Sanitation District, would take the responsibility to be the lead interface with the town. See www.ocn.me/v17n1.htm#tlwtffuc, www.ocn.me/v17n2.htm#tlwtffuc, www.ocn.me/v17n3.htm#tlwtffuc.

Wicklund said that was partially right, but that MSD alone could not commit to what TLWWTF would do, since facility co-owners PLSD and WWSD would also need to agree.

The consensus was that MSD would invite representatives from the town to meet with MSD representatives, with the goal of also having the town present its intended plans at a JUC meeting in the near future. "And (all three owners) get to say whether or not you agree with it," said Jim Kendrick, MSD Environmental Compliance coordinator.

Considerations for potential new discharge point

Wicklund said he wanted the JUC to be aware of a potential problem with the Town of Monument's and WWSD's possible indirect potable water reuse project. He said, "If we allow the town to put a pipeline from this facility up to discharge in Crystal Creek, which would change this facility in a very big way. Colorado has rules about chlorophyll a and disinfectant byproducts (DBPs)."

Background: The town and WWSD are brainstorming about teaming up on a water reuse plant. They might pump TLWWTF effluent upstream to Crystal Creek, north of Monument Lake, and then withdraw water from Monument Creek downstream of Monument Lake, at Arnold Avenue, and treat it to drinking water standards using chlorine and other treatments. See www.ocn.me/v17n3.htm#mbot0206.

While TLWWTF's effluent is well below the current Nutrients Management Control Regulation 85 limit for total inorganic nitrogen (TIN) according to the facility's discharge permit, this new discharge point would increase the overall amount of total inorganic nitrogen (TIN) in Monument Lake. "We would definitely have an impact," Burks said. If levels of a nutrient like nitrogen get too high, it would be considered a pollutant, because it could encourage the overgrowth of algae, measured in terms of chlorophyll a.

And when chlorine is used to remove harmful microorganisms from the water to bring it to safe drinking water standards, it also interacts with the algae to create disin-

fection byproducts (DBP), which can be harmful to humans, Wicklund said. The state of Colorado limits chlorophyll a in lakes and reservoirs because of these concerns, he said. <http://www.denverwater.org/WaterQuality/WaterSafety/DisinfectionByproducts/>

Note: Regulation 31, The Basic Standards and Methodologies for Surface Water, sets an interim numeric value for chlorophyll a in direct use water source (DUWS) lakes and reservoirs of 5 micrograms per liter ($\mu\text{g/l}$) and 150 milligrams per square meter in warm water rivers and streams in Nutrients section 31.17 (d).

Wicklund's concern was that TLWWTF and its three owner districts (WWSD, MSD, and PLSD) would be responsible to the state for that upstream discharge point and the nutrients entering a direct use water source, rather than the Town of Monument. Monument Lake is regulated by CDPHE's "lakes and reservoirs" regulations, which are separate and different from "streams and rivers" regulations.

Note: Downstream of TLWWTF, the situation is different. The effluent TLWWTF discharge pipe is the first point-source discharge on Monument Creek, downstream of the Monument Lake reservoir. It includes TIN concentrations of 4 to 6 milligrams per liter (mg/l), which is well below the state's Regulation 85 TIN discharge limit of 15 mg/l for streams and rivers.

Once the TLWWTF treated effluent enters Monument Creek south of the Arnold Avenue bridge, its TIN concentration is further reduced by dilution because the creek's ambient TIN concentration level is less than 1 mg/l. TIN is also consumed by the aquatic life in the creek. By the time this flow reaches the new Baptist Road bridge, the in-stream TIN concentration is already significantly less than TLWWTF effluent TIN concentrations. Ongoing periphyton sampling efforts by Arkansas River/Fountain Creek Coalition for Urban/Rural River Evaluation (AF CURE) demonstrate that chlorophyll a is not a problem in Monument Creek downstream from TLWWTF to the Baptist Road bridge. See www.ocn.me/v16n10.htm#tlwtffuc.

Facility manager's report

Burks said that Aslan Construction still had a list of unfinished items included in the construction documents that Aslan needed to complete on the TLWWTF

total phosphorus (TP) chemical removal clarifier expansion. "They missed quite a few things," he said.

After 30 days of operation, the TP clarifier is removing phosphorus down to the 0.5 mg/l range now, Burks said. This is already below the new 1 mg/l facility

discharge permit requirement that starts on Nov. 1, 2019. This 1 mg/l limit is for a rolling annual median. Because it will take a full year to calculate the first rolling annual median under this permit's TP compliance schedule, the first report of an annual median to the state and EPA in the

NEVER RISK FALLING AGAIN!

- Avoid the nasty and dangerous gutter cleaning chore
- Keeps leaves, needles and debris out year round
- Installs over new or existing gutters
- Backed by a triple lifetime 'no clog' warranty



Without Gutter Helmet



With Gutter Helmet

\$300 OFF
A Gutter Helmet System

LIFETIME WARRANTY
Covers Labor, Materials
and Performance.

Offer expires 4/30/17. Call now. Prior sales do not apply. Not valid with any other offer. Certain restrictions apply. See sales consultant for details. Coupon must be presented at time of estimate. Credit cards accepted.

How It Works:

PermaLife™ Finish - Anti-corrosive, multi-layer paint finish protects against fade and rain.

Textured Surface - Increases tensile strength to handle heavy rainfall, snow load and extreme winds

Nose Forward Design™ - Precise engineered opening (water enters, debris and animals stay out)

Premium Engineered Bracket - Reinforced aluminum alloyed for load bearing systems.

GUTTERHELMET.COM

Gutter Helmet
NEVER CLEAN YOUR GUTTERS AGAIN™



Never Clean Your Gutters Again
CALL NOW!
FREE Consultation and Estimate

719.495.2673

GutterHelmetColoradoSprings.com

Pikes Peak
Home Team

PikesPeakHomeTeam.com

Experience the Peak of Real Estate Service



Sun Hills Sendor!

Over 8000 s.f. custom home on 5.25 acres
with awe-inspiring Pikes Peak and Academy views.
SD 20. Needs updating.
Unbeatable value - only \$695,000 - Hurry!



Exquisite Elegance!

Former Parade of Homes Winner with ALL the bells and whistles including main level master retreat and spectacular kitchen. \$1,150,000.
Call for your private showing today!



Coming Soon in Wissler Ranch!!

Call us to learn more about this immaculate, move-in ready rancher with fully finished walkout basement on 3.2 pristine, treed acres.
Priced to sell at \$575,000.



Kim Rossbach
Phone: (719) 398-1999
Kim@PikesPeakHomeTeam.com
Visit PikesPeakHomeTeam.com



RE/MAX Properties
1761 Lake Woodmoor Drive Monument, CO 80132

Let me put my 20-plus years of experience to work for you! We are your one-stop source for real estate services from Colorado Springs to Castle Rock!