

## **Eldorado Springs LID Advisory Committee Minutes**

September 28, 2017

Rocky Mountain Fire District Station 6

4390 Eldorado Springs Drive

Eldorado Springs

The meeting was called to order at approximately 6:30 pm.

**Members Present:** Vija Handley, Cathy Proenza, Jeff Mason, Kevin Tone

**Guests:** Gabby Begeman, ORC; David Levin

**Staff:** Mark Ruzzin

### **Approval of Minutes:**

Kevin moved to approve the minutes of the August 24, 2017 meeting. Jeff seconded the motion and it passed 3-0, with Cathy abstaining as she was not in attendance at the meeting.

### **Plant Operations:**

The board reviewed the operations report with Gabby Begeman of ORC.

The board discussed the history of pump problems at 81 Eldorado Springs, which is located directly across the street from the Sept. 2015 line break. Problems associated with this address have been ongoing for six years, per the records pulled together by ORC. David will put a counter on the pump at 81 Eldorado Springs to assess the pump's run time moving forward. ORC will vacuum out the pump pit the next time they are working at this address, and will continue to track the issues with this pump.

The board reviewed the pump data supplied by ORC, and discussed in detail pump DH313880. ORC has been communicating with Ambiente H2O about this pump. This pump has a long history of problems, and Ambiente is suggesting that a full rebuild of this pump would be helpful. ORC will get a quote on the cost of a full rebuild. Kevin suggested that the LID should look to either rebuild or replace problem pumps so that they can be utilized by the system with the reasonable expectation that they will work.

ORC will continue to provide the board with information regarding individual pumps as issues arise.

Gabby discussed the work she has been doing with the pump data that ORC is collecting. For example, in regards to annual pump replacements, there were 7 replacements in 2010, 17 in 2011, 8 in 2012, 18 in 2013, 5 in 2014, 13 in 2015, 10 in 2016, and 8 to date in 2017. This averages out to about 11 pump replacements per year, which is not too far off from what one should expect from typical pump performance, per the conversation with Ambiente at the August board meeting.

Gabby and the board discussed the Mountain States quote for the replacement actuator valve. The spare was used during the spill event in March; the quote is to replace the spare valve so that the plant again has a spare. This is a critical piece of equipment. The board supported purchasing the valve.

Gabby and the board discussed the issues surrounding the alarm system protocols associated with the actuator valve. From ORC's analysis of the situation, there appears to be some kind of glitch in the Fluidyne protocol – either the system is not programmed to include the protocol, or it is programmed incorrectly. Gabby also noted that all Fluidyne alarms go into a general alarm protocol, which means ORC is getting alarm notices that are part and parcel of normal plant operation or not serious alarms. There is some work that can be done here in regards to the Fluidyne alarms. Kevin suggested that the LID get a quote from Fluidyne for addressing these issues. ORC will reach out to Fluidyne.

Gabby and the board discussed the water report, and specifically, the TIN (total inorganic nitrogen) value, which was a bit on the high side in July (over 10). Gabby discussed the use of carbon as a strategy for reducing the TIN number. She would like to try carbon as a strategy for ensuring the TIN numbers meet the requirements. The TIN number is a 30-day test. Carbon is fed to the system as a tool to uptake nitrogen. The plant has a system in place for utilizing carbon, so it's an easy step to take.

Gabby clarified that back-up chemicals for the UV system will be stored at ORC's shop, where they will be easily accessible.

Gabby outlined an upcoming concern regarding the new permit requirement to meet a 2-year rolling average for TIN of 1.5. This generated some conversation about the possibility of achieving this permit requirement. Gabby, Kevin and Mark will work with CDPHE to problem solve this issue.

The board raised chemical expenses as a concern. Gabby explained that when ORC began operating the plant, they needed to make adjustments to chemical dosages to ensure that the plant was in compliance with the operating permit. The use of magnesium chloride for pH balancing is

the issue. pH was a problem when ORC started, as was chlorine. Today, because of the adjustments ORC has made, the plant is no longer sending e-coli to the creek.

Kevin asked that we be clear that the permit requires e-coli to be at 126.

Regarding the UV system, while this system will use more electricity than the current system, it will use fewer chemicals, which should result in a reduction in overall operating expenses for the plant. The board is interested in seeing an estimate of the potential savings.

In December 2017 CDPHE needs a report from the LID explaining how the plant will meet the new TIN limit, per the new permit and compliance schedule. This speaks to the importance of clarifying the TIN limit that is included in the permit, as described above. ORC will prepare the report, which will be a letter.

Gabby mentioned that in October ORC will need to purchase temperature monitoring equipment to begin reporting effluent temperature in November. CDPHE will collect this data for two years in order to determine if a temperature requirement should be added to the WWTP permit. ORC is planning to put a submersible temperature probe / data logger in the effluent basin. Cost for two units (in case one fails) and an interface for data collection will be approximately \$1000. The board approved this expenditure.

The board thanked Gabby for the detailed report and discussion.

#### **Invoices and Budget Update:**

The board briefly reviewed the monthly invoices and year-to-date budget spreadsheet. Mark pointed out that the annual CDPHE permitting fees came in this month. There were also fees for permitting the UV system. Cathy asked about the SDMS monthly charge. Mark explained the RFP process that Pete ran to solicit bids for a new billing contract, and the recommendation from staff to continue working with SDMS.

The permitting process for the UV system through CDPHE is nearly complete. Kevin is the point person for the LID on the system approval. In terms of a schedule for plant construction, the board suggested an open-ended bid approach as a strategy to reduce costs. The process should plan for installation and hook-up of the system in the spring, and should try to balance the delivery of the system with construction of the plant addition in order to reduce costs as much as possible.

The board discussed potential contractors for building the addition to the plant that will be necessary to house the UV system. Gabby provided contact information for several contractors. Mark will work with Kevin to create a bid document so that contractors have information to use

to provide an accurate bid. It may be appropriate to meet the contractors at the plant site if they are interested.

Upon completion of the addition and installation of the UV system, staff should work with county maintenance staff to improve the plant driveway.

Mark pointed out the budget reserve document for the board to discuss. There is interest in having a clear accounting of the money available in capital reserves.

The board asked about the recent PIFs, and had a wide-ranging conversation about EQRs and when PIFs are applied. Mark will get answers regarding PIFs for the November meeting.

**New Business:**

Mark provided the board with an update on the hiring process in place to fill Pete's position.

The board discussed the meeting schedule for the rest of 2017, and agreed to meet on November 16 and December 21. The board will discuss its 2018 meeting schedule at the November meeting.

**Public Comment:**

There was no public comment and the meeting was adjourned at 8:15 p.m.