

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

December 17th, 2020

Video Conference Meeting

The meeting was called to order at approximately 6:35pm by Jeff Mason.

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

**Guests:** Gabby Begeman (ORC), Janet Grey, Stephen Sangdahl, Ken Sheldon

**County Staff:** Mark Ruzzin, Jon Adam

**Approval of Minutes:** Jeff Mason made a motion to accept last month's (November) meeting minutes. Vija Handley seconded the motion to accept the minutes.

### **Invoices and Budget**

Jon Adam shared the invoices with the committee on his screen. The invoices were combined into one document in order to reduce the number of different attachments in an email. There were no questions from the committee regarding the invoices for November.

Jeff asked county staff if the county has been collecting PIFs for recent residential upgrades in the Eldorado Community. Both Jon and Mark replied that they will ask the County Planning department if those PIFs have been added to the district budget.

Jon shared in the Budget to Actual that he had canceled the LID Century Link account as we haven't been utilizing their services for many months and we will continue with Mission for the alarm systems.

### 261, 267, 277 Eldorado Springs Drive

Cathy pointed out that the lien placed on the property owner was for half of the total amount for the pump replacements and investigations paid for by the LID. The original letter sent to the property owner indicated the property owner would be charged the full cost if not paid before going to lien. Cathy requested that the lien amount be changed to the full amount. Jon replied that he will look into having the lien amount changed to reflect the full amount instead of half.

### **New/Old Business**

#### Alternatives Analysis update by Wayne Lorenz Wright Water Engineers

Wayne started off by expressing that time is of the essence in getting the Alternatives Analysis(AA) report done and starting negotiations with CDPHE. The goal is to get the draft AA report done, possibly in two weeks with additional information that Wayne will outline

later in the meeting this evening. Wayne indicated he has a call scheduled the next day with Bret Icenogle of CDPHE to discuss some of the details of the AA.

Wayne gave a summary of the AA. He stated that the Eldorado Springs WWTF as designed has limitations in lowering the Total Inorganic Nitrogen (TIN) any further than current levels and that Gabby has been doing a great job of optimizing that process over the last year. The variability of the flows and temperature of the flows to the treatment plant makes it challenging to meet the current 10mg/L TIN. The plant can achieve below 10 mg/L some months but not every month due to these variabilities. Wayne expressed the fact that small systems like the WWTF as designed is operating at its limit. Wayne indicated that he wanted to present to Bret Icenogle that the technological limit of small systems like the WWTF and the upcoming permitted TIN limit are not the same and should be in order to take into account variations in temperature and loading that the WWTF currently functions under. The point will also be made in the AA.

Wayne stated that the upcoming antidegradation limit of 1.5 mg/L TIN is not feasible with the current system biologically and that the LID would have to invest in costly upgrades (like ion exchange and reverse osmosis) to come close to meeting those requirements along with complications of waste disposal from these processes. Kevin stated that he has been impressed in the past with Bret Icenogle's support of the LID's efforts but wants to make sure in the meeting tomorrow to determine what the State engineering department can do to discuss these issues with the permitting department. It seems like the two groups don't ever get together and talk about reality in these situations. Hopefully Bret will be able to help and it's critical to have him on our side in negotiations with the permitting people. Wayne concurred with Kevin and that will be his main goal in the meeting.

David Levin asked if WWTF was in non-compliance at this moment in time. Wayne responded that he would refer to Gabby, for that answer. David also asked how much the contract with Wright Water to do this analysis is costing the LID. Mark replied that before David was seated on the board the LID contracted Wright Water Engineers through an existing contract with Bolder County Public Health to perform the AA for \$15,000.

Wayne continued with addressing the stream flow in the South Boulder Creek. CDPHE previously determined zero low flow in the South Boulder Creek during the Winter months which was the driver for having a 1.5 mg/L TIN antidegradation limit. Wayne provided that everyone realizes, including CDPHE, that the South Boulder Creek presents a complicated flow history, especially with the FRICO diversion ditch upstream of the plant. Another goal of the AA will be presenting the actual flow that occurs in the South Boulder Creek through the establishment of a permanent stream gauging station at the Barber Lane bridge with the City of Boulder. The dimensions of the stream bed at the Barber Lane bridge are such that calculating the stream flow is straightforward and makes it an ideal location for the gauge. Wayne acknowledged that part of the stream gauge has been installed and that members of the committee have been taking a daily record of measurements. Wayne indicated that the discharge permit states additional stream gauging will address the question of flow

throughout the year in the South Boulder Creek. CDPHE will not tell us what to do to show them a record of flow and they never do, so we will have to go ahead and move forward on our stream gauging efforts as planned with the City of Boulder. Wayne will seek in the AA a compliance schedule with CDPHE to provide us time to demonstrate more stream flow data. Wayne mentioned a discussion about adding more permanent instrumentation to the existing stream gauge with the City of Boulder. Wayne reiterated that the stream gauge efforts will be addressed in the AA to help redetermine a new higher TIN limit that reflects the reality of the flow in the creek. Wayne explained that the more stream flow the South Boulder Creek has the higher the discharge limit can be from the WWTF in the permit due to dilution.

Jeff Mason asked Wayne if the work we are doing now taking daily readings of the staff gauge and photo documentation is worth our effort. Wayne indicated that it is very worthwhile as data is what we need to submit to the CDPHE on the issue of flow in the stream.

Vija Handley asked if there are other wastewater systems in the county and state that are experiencing the same issues and if it would be possible to have a giant leach field that we could run the discharge through before it gets to the stream. Wayne replied that there are a number of plants in Colorado with similar issues right now. The state has been doing a lot to address more stringent nutrient limits in streams and we are caught up in this change. Cathy Proenza asked what the response would be from CDPHE to ask for more time to accumulate more flow data. Wayne hopes that CDPHE would be able to grant a compliance schedule that would allow us to do that as long as we present a good technical argument. Cathy asked how long that new schedule would be and Wayne responded 3-5 years. Cathy also asked what flow was needed in the creek to reach a TIN of 1.5 mg/L. Wayne responded that with the current flow in the creek based on preliminary calculations from the City of Boulder Water Resources staff that plant effluent could have a TIN of 15mg/L, which is slightly above what we are doing now.

## **ORC Operations**

ORC Operations was moved after the Alternatives Analysis update.

Gabby documented all the work from the vandalism and is reviewing all the invoices from subcontractors to provide the LID an invoice for the repair work. Gabby went back to an earlier question from David about current compliance. She answered that some months we meet the current 10mg/L TIN limit and some months we don't and that is because we are operating at the plant's design limits along with a lot of oversight. Wayne asked Gabby to comment on the particular factor(s) that effects TIN the most. Gabby replied that it is hard to denitrify a plant that does not have dissolved oxygen control, which the plant currently doesn't have, but she has received an estimate from Fluidyne for such a system, about \$30K. However, Fluidyne has reported that a dissolved oxygen system still would not be able to get the plant to a 1.5 mg/L TIN.

Kevin asked if we report these TIN violations to the state. Gabby replied that yes, we do report them to the state and that she has been told by the state that if there are more than 3 months in a row with the same violation, that the state could issue a letter. So far, the violations at the plant don't occur often enough to require such a letter from the State. Kevin replied to Wayne that we need to do everything we can to get to a TIN limit of 15mg/L in a permit modification. David asked how much it would cost the LID to meet the 1.5 Mg/L standard. Gabby replied that the LID wouldn't be able to afford it and Wayne replied that he has added that cost as an argument in the AA, which he estimates costing \$1.5 to \$2 million. Mark Ruzzin reported that the plant was only over the current TIN limits in April and November of this year.

Wayne did say that he added to the AA the improvement to the health of the South Boulder Creek when the town switched from individual leach fields to the WWTF. A single leach field effluent typically has a TIN level of over 100mg/L, which no doubt was getting into the South Boulder Creek. Furthermore, when the plant was designed, there was no such limit of 1.5 mg/L TIN and that the LID is still paying for a permitted design that didn't include that limit.

Gabby did want some clarification on using an auto sampler at the new pool. Kevin replied that having an auto sampler was the better option to help keep a better gauge of what's coming from EAS. Gabby asked where the sampler would be kept and Kevin replied that the auto sampler could be put in the manhole. Kevin also indicated that the flow metering would be automatic.

Kevin asked Mark and Jon to make sure the LID can review the connection infrastructure. Mark replied that Jon has already reached out to EAS and are awaiting a response. Once we get that response that we will work to facilitate review of EAS's plans.

### Tree Management

David indicated that he has only found trees and no stumps in the proposed removal area and he agrees that we need to take care of the roots infiltrating the underground tanks. Jon indicated that the quotes from both contractors included full tree and stump removals around the plant. He walked with both contractors to point out the remaining trees and stumps that surround the plant. He said that the quote from Urban Tree care would include the use of concentrated Epsom salts as an herbicide to kill off trees he couldn't remove with a stump grinder and that Mountain Tree care didn't include the potential use of a more traditional herbicide in their quote because they would have to contract that out. Jeff agreed that we should go with Urban Woods to limit the use of more powerful herbicides. Jeff made a motion to go with Urban Woods to remove the trees and stumps. Cathy seconded the motion. The committee agreed unanimously. Cathy wanted to make sure there were no pesticides being used other than Epson salt solution.

## LID Security

Jon shared that ORC was able to get the current motion sensor light above the door fixed and working. He also stated that ORC requested work lights be installed on a simple switch on the East side of the plant to do any night work at the plant on East side infrastructure. Cathy supports work lights that are switched, but she wants to make sure the lights that are installed are code compliant. Jeff and Cathy wanted to make sure we'd be removing the temporary lights and Jon relied yes, we can take them down whenever we want to at this point. Jeff also requested that an additional set of motion sensor security lights be added to the North East side of the plant to illuminate where the vandal broke into the plant. Jon agreed to adding those additional lights as well. Cathy agreed that lights on the North East corner of the plant will keep people from triggering the lights as they walk by.

Jeff added that we shouldn't install a camera at this time and that the maintenance of the camera would not be worth the effort. Cathy did raise there is a strong argument to be made to install a camera because we didn't get proof of the vandalism last time and a camera would have done a better job of that. Jon added that one of the cameras he did email to the committee is camouflage colored, has a supposed 8 month battery life and with a large enough SD card we could store a lot of photos over time before needing to empty the data on the card.

Vija added that the camera was not needed but that the motion sensor lights were enough. David agreed. Ken Sheldon liked the idea of having human sensing technology on the lights would be good. Steven Sangdahl added that adding lights might actually help a vandal see where they are and since there are no houses around to see the lights going on and off. He also pointed out that the State Park has a trail camera that is secured and would be difficult to remove. David added that we should start with lights. Jeff made a motion to approve the additional lights only and continue to look at cameras in the future. Vija seconded the motion and the committee agreed unanimously with the motion. Cathy still holds that we need to bring up the camera in the future.

Jon asked the committee about keeping the access gate locked at this point. David replied that he didn't see the need to keep the gate locked. Jeff Mason replied that he liked having the gate locked. Cathy can see the value of both sides of the issue. Most people can get around the gate easily, but there are some who are having trouble doing so. Previously the committee talked about having a pedestrian access around the gate for when the gate is locked, but nothing came of it then. She supports looking into the possibility of creating a walkaround access on either side of the access gate. Kens Sheldon also likes the idea of having a walk around on the North Side of the gate away from adjoining properties. Jeff suggested we talk to adjoining neighbors about a walkaround either side of the gate. Jon said he will find out what the property boundaries are on either side of the access gate.

David asked why we are even considering locking the gate. Jeff replied that in the past we had problems with people driving back and even camping and we should at least prohibit

unauthorized car access. Stephen Sangdahl added that the owner of the property on the South side of the gate is upset about people trespassing now that the gate is locked. He also said that he believes the North side of the gate is Neil Cannon's property. He does think keeping the gate closed is a good idea.

Cathy suggested that we could lock the gate differently, i.e. locking the gate more loosely as the chain is currently long enough to do so. Therefore, people could simply step over the chain. Vija was concerned about the wind blowing the gate ajar when it's loosely locked as Cathy suggested and it may be noisy for the neighbors.

### By-Laws

Jeff expressed his approval of the new By-laws draft and looks forward to implementing them. Vija wanted to know if there was interest in adding additional members to the Board for a total of 7 due to the lack of quorum from time to time. Jeff replied that it may be harder to get things done with additional members. David asked how easy it would be to add additional members to the By-Laws. Mark replied that we should ask the county attorneys when they come to the January meeting. We should also seek clarity on communications between committee members and County staff during that conversation. Vija said that the By-laws state that communications with the commissioners and other county staff about ESLAC issues need to go through the County staff. Mark further stated that the by-laws are amendable, but there is a process. Cathy expressed that she was in favor of the By-laws. She also asked if emails between committee members and County staff is considered open record to the public. Mark said we should bring that up to the attorneys at the next meeting. Jon asked the committee that if there is anything they would like to see changed in the By-Laws to email him and he can pass it along to the attorneys.

### Public Comment

No further public comments.

The meeting was adjourned by Jeff Mason.