

Director Siegfried Questions May 2021

- p. 46: Are we covering our costs associated with sewer lateral permit and inspection?

Yes, we have been analyzing the costs and adjusting yearly. The last adjustment was July 2020.

- p. 53: Are explosion-proof receptacles provided on the portable GFCI units? If not, should they be?

Not required. There is no known scenario where workers would be required to enter an explosive environment and use power tools/equipment connected to a portable GFCI unit. If gases were suspected, the space would be tested, ventilated and cleared for entry before any work began. Also, in such a scenario the power tool itself, not the GFCI unit, would be the potential source of ignition.

- p. 55: Nice to see the ramp-up in microturbine production.

- p. 61: "Biobot samples are available upon request . . ." I hope not.

Funny, that should be sample data is available.

What is the purpose of the intensive sampling campaign?

Per Ed (refers to Biobot, first bullet): Once a week sampling for COVID-19 is continuing of the raw wastewater and shared with all CAWD Staff and other government entities. CAWD currently does not have 100 percent of staff vaccinated for various reasons and even with those staff members vaccinated it does not guarantee complete immunity. By continuing to sample the raw wastewater it gives management the data to determine whether to make changes to the "COVID-19 Exposure Control and Disease Preparedness Response Plan" based on Virus Concentrations and Variants. The Center for Disease Control still has not determined if the Virus can be transmitted or transmitted by aerosols in the collection and treatment of wastewater. Management staff would rather error on the side of caution as there is still so much unknown about the Virus and it is Variants.

Per Ray DeOcampo (refers to second bullet): The special project work was to evaluate plant loading demands throughout the day. There were fluctuations

with the DO demand to aeration tanks and to the EQ basin water when returning back to the headworks during the night. I believe Ed was making adjustments to air flow.

p. 77: At what TMP differential does Reclamation decide to invest in new membranes?

We have one full set of membranes in inventory now. The 20-21 Reclamation budget provides for the purchase of another full set. Surprisingly, we have a set of Carter Lake membranes that are still in use. Failure is generally when cleaning will not bring down the TMP – or at about 11 psi. When they fail, it tends to happen quickly.

Historically, the target TMPs were 11.3 set by the Operation Staff to change out modules even though the manufacture target is 12.3 TMPs. At 11.3 TMP there is net zero production of water as the MF cells are in continuous backwash cycles and using MF filtrate for backwash water. Which equates to irreversible fouling.

p. the 78: RCA0047996 is not the order number. It is the NPDES number. Please supply the order number and a copy of the TRE Work Plan.

My mistake it should read Order No. R3-2014-0012, NPDES No. A0047996. The work plan is attached to this reply.

p. 80: I would like to see an expansion of “to continually monitor.” There must be an optimal frequency of monitoring, and I’ll bet it is much less than continuous.

The system would provide a simple centralized interface for staff and supervisors to record and view progress as it occurs. The data would be reviewed weekly to see if any tasks completed that week applied to the goals.

How long does it take us to resurrect a compromised system?

For a server it would take 24-48 hours to restore from a backup. Part of the planning work will be to reduce the time to restore of any critical processes such as SCADA and file servers to less than 8 hours. Currently SCADA could be run off a laptop temporarily if the servers were compromised.

p. 83: How did the analysis arrive at the conclusion that 80-year old brick manholes that rated “poor” should be lined rather than replaced piecemeal? Should they

all be lined, should none be lined, or should only some be lined to hold them for awhile while others are replaced?

Many leak and structural problems can be more cost effective to fix with lining vs. replacement. Estimated replacement cost may end up 3-4 times that of the average cost to rehab a manhole. With the improvement in lining materials the rehab can easily add many years to the life of the manhole.

Ratings for condition of manholes are:

Excellent: new or no defects found (brick manholes do not see this rating, but because we rate concrete manholes as well, so this option is available to the inspector).

Good: there should be no brick visible only the mortar coat, these will eventually be rehabilitated but low on priority.

Fair: some brick showing through the mortar coat, low corrosive environment, low flow passing through the manhole, no roots visible, these will be rehabilitated but not the first priority.

Poor: bricks exposed with roots, rungs, high corrosive environment, no cracks in the walls of the manhole, top priority for rehabilitation.

Unsafe: bricks exposed with cracks in structure of manhole, these will be scheduled to be replace with concrete manholes.

Once all the data is gathered, projects will prioritize the manholes that are rated Poor to be rehabilitated (lining of manhole) first, then Fair and eventually Good. Manholes that are assessed as Unsafe will be a separate project for replacement.

P: 105: Will the feed pumps be located outside the containment walls?

The pumps will be located inside the containment walls. Also, any piping outside of the containment area will be double contained.

p. 122: "excessive cost"?

In this context, it means that connection fees are charged based on the current value of the treatment facility assets. The District uses the formula suggested by Kennedy/Jenks/Chilton in the mid 1980s. We may not add additional costs or use any "creative" accounting to create additional or "excessive" costs.

CAWD is not a built out district, judging from the projects that go before the County planning commission.

It is built out in the sense that there are a limited number of open lots available in the CAWD service area. The amount of revenue the District receives from connection fees is small, unless there is a multi-unit development (i.e. Rancho Canada). The last five years average income from connection fees is \$57K, a relatively small amount. Much of the District's growth has come through annexation. You are correct in that some of the annexed areas have considerable room for development – if development is allowed.

p. 123: What is the rationale for including Reclamation assets in the calculations?

All Reclamation tertiary assets are excluded because they are not paid for by CAWD ratepayers, therefore we should not recover cost through connection fee. Reclamation secondary facilities are included under the reasoning that the secondary plant is the “core” plant –these assets are shared with CAWD and would be difficult to separate from the secondary plant. I think an example might be the equalization basins (EQ) – they were built pre-Reclamation and are part of the secondary plant. We have excluded costs to modify the EQ basins made expressly for Reclamation. But the basins themselves remain in CAWD.

Director D’Ambrosio Questions May 2021

1. Reviewing the Project spread sheet, I was looking at the completed projects total cost. That did not strike me as the total actual aggregate costs for these projects from very start to finish. Could you provide me with an aggregate cost to date or completion for the Administration building entry project and for the CRFree project?

Administration building project = \$62,824

CRFree = \$217,963 paid by Coastal Conservancy grant through 5-23-21 And \$489,357 paid in prior years for repairs to outfall line and initial environmental work started under Drew Lander. I would not include repairs to outfall as part of CRFree, so I would estimate nearly \$200K of that amount to outfall repairs

2. Will the trimming project target all eucalyptus trees bordering the plant or just the row on the south side of the plant?

Eucalyptus trees will be trimmed on both the south and the north sides of plant.