

03/13/14 Occidental County Sanitation District Meeting Notes

Sonoma County Supervisor and Water Agency Director Efren Carrillo welcomed attendees and thanked the Union Hotel for hosting the meeting. Supervisor Carrillo noted that the North Coast Regional Water Quality Control Board has been patient and a good partner; but the Occidental County Sanitation District (District) needs to get upgrades done that will bring the District into compliance with its permit. The purpose of the meeting is to discuss options for compliance.

Supervisor Carrillo introduced Sonoma County Water Agency (Water Agency) deputy chief engineer Cordel Stillman.

Cordel explained the problem (referring to the handout, "Occidental County Sanitation District Summary of Responses to Request for Information"), describing the Request for Information (RFI) process; wastewater treatment processes (secondary and tertiary); and treatment technologies.

Question: What is advantage/disadvantage of package systems?

Response: Advantage: package systems have a small footprint, modular.
Disadvantage: Often they are labor intensive to maintain/operate; doesn't have a lot of buffer; still need storage.

Question: Where would a package plant be located?

Response: At the current plant location or possibly the booster pump station

Question: Why was the old package plant abandoned?

Response: Water Agency didn't operate the system at the time, but it was likely too small.

Question: Has the community supported the Inflow & Infiltration (I&I) replacement project?

Response: To date, we've received 19 applications

Question: What is I&I?

Response: Inflow and infiltration. This is a big issue in Occidental. Previously, in storms, the manholes, joints in pipes, etc, leaked, adding a lot more water into the system. In last few years, we've replaced 50% of the collection system. Now, we need to replace leaky laterals.

Question: How much H₂O comes into treatment plant?

Response: 20,000 gallons per day in summer; 140-150,000 gallons per day during large storms.

Question: Does inflow come from roof gutters to sewer?

Response: No. Several years ago we did a smoke test, which revealed any problems.

Cordel discussed advantages/disadvantages of options laid out in Summary Report:

Secondary, no discharge: Inexpensive; recycled water can be used for many different uses. Tertiary, no discharge: More people are supportive of tertiary-treated recycled water and it has more uses. The cost of testing is lower. The downside is that there are higher operations and maintenance costs.

- Tertiary, with winter discharge into Dutch Bill Creek: The upside is that we don't have to build additional storage. The downside is that there are still testing costs.
- Trucking (as a partial solution): There are minor capital costs and it would allow the district to be in compliance.

Comment: Trucking isn't sustainable for climate change. Concerns raised about the number of trucks and road conditions.

Cordel: Operations and Maintenance (O&M) are where the District's ongoing expenses are. By minimizing O&M, we help minimize rate hikes.

Next steps:

1. Contacting landowners in Harrison Grade area to gauge interest in using recycled water. This could possibly be an area where we store in winter to be used for irrigation in the summer.
2. Conduct an environmental review to analyze all options. Required to take environmentally sound option. Economics doesn't play into it. Described environmental process.
3. Look for money to actually build a project. Will seek grants/loans from both the state and federal governments.

Question: Is there a stigma to taking recycled water?

Response: It's used everywhere and highly valued in places like Sonoma Valley, but some people have concerns. We are trying to determine if a different level of treatment would make people feel differently about it.

Question: Can you use secondary on organic crops?

Response: Believes that secondary water is OK and that tertiary is OK.

Question: How many acres needed for irrigation?

Response: About 100 acres of vineyards are needed.

Question: What about for use on other plants? Quality?

Response: Recycled water can be used on many crops, depending on level of treatment. Santa Rosa treats to tertiary, and they have more demand for the water than they can fill.

Question: What is the 100 acres of vineyard with no discharge based on?

Response: Six inches of irrigation per acre, per year.

Question: Pasture land is only 1-2 inches per acre per year.

Question: What about subsurface discharge to forests?

Response: This was proposed 10-12 years ago. The regional board said that while you can use subsurface in wet weather, there are limitations to its application.

Question: So, we would need to develop an irrigation network?

Response: Yes.

Question: Should the community do hands on education? It seems like a mailer is impersonal

Response: We agree. The mailer is a first step. We are following up with phone calls.

Question: Has subsurface policy changed at the Regional Board?

Response: We will look into this. You still need to have acreage.

Question: Please also look into organic certification to determine whether recycled water is OK.

Comment: Secondary treated water is not allowed for frost protection.

Comment: Tertiary treatment provides lots more options? It's not much more expensive; only \$50,000 - \$500,000 additional capital and the water can be used instead of well water for irrigation.

Question: Why is no discharge allowed into creeks in summertime?

Response: This is a policy throughout the Russian River basin.

Comment: In Dutch Bill Creek, there are juvenile salmon in the summer.

Ann Maurice

- Described how citizens came together. Started calling small towns to determine how they treated wastewater. Discovered that Ferndale has a tertiary treatment system with ultraviolet that is inexpensive, easy to operate. Rio Dell putting in same technology. Ann checked with Regional Board, who was very pleased with Ferndale system and consider Ferndale a poster child. Contacted Aero-Mod and asked them to develop a proposal that included tertiary treatment with ultraviolet.
- \$960,000 for basic system + \$260,000 for tertiary + UV= \$1.3million and site preparation, etc equals \$2 million
- If you can create tertiary, why not?
- Keep ponds at treatment plant for storage but deepen them. No need for new land. Don't need to pump waste water 365 days to treatment plant, which would result in lower electrical costs. Discharge in winter to Russian River.
- Don't shackle ourselves with irrigation. Her calculations are summertime, the plant produces only 20,000 gpd, so you need only 10 acres; ½ inch per week in summertime.
- Could do immediately and irrigate on Loades property right now.

Question: Is this one of the plants we are looking at?

Response: (Ann Maurice) Yes. O&M of Aero-Mod costs \$350,000 annually at Ferndale. 1½ operators.

Comment: One of the problems is the high cost of testing/sampling costs at Dutch Bill Creek. This plan doesn't address that.

Question: What about ultraviolet? There are lots of concerns re-chlorine?

Response: We will include ultraviolet in the options studied.

Question: Can we meet the deadline?

Response: Yes, we don't have to acquire property; pipelines would be in existing roads. Access to existing roads would be critical path.

Question: How many acres are we currently irrigating?

Response: 14 acres

Question: Could we continue to do this?

Response: No. The property owners have asked us to find another location.

Question: Could we run a pipe down Morelli Lane?

Response: We will look at this.

Question: If we could reduce I&I, wouldn't need as much land?

Response: Yes. That's why we are trying to reduce I&I as much as possible.

Question: Why does it take three years?

Response: We need to go through an environmental and then engineering process. We will try to expedite by minimizing environmental impacts by reducing size, using roads for pipelines, etc.

Question: Next steps?

Response: (1) Look for irrigation (2) Start CEQA process.

Question: Will we identify a primary course of action?

Response: The environmental process will decide.

Question: What is the time it takes to do a Notice of Preparation for the CEQA process?

Response: We need to talk to staff and determine bandwidth for this.

Question: What about funding?

Response: We are looking for grants/loans. There may be drought funding or low-interest loans at.5%

Question: Could definition of tertiary change? Will we be trying to meet a moving target?

Response: Yes, at Russian River County Sanitation District we've had to make upgrades to address new standards. We have installed ultraviolet treatment and are building a bionutrient removal process. Other issues in

the future could be emerging constituents. We need to calculate this type of risk when we consider discharge.

Question: Why not contact anyone on south side of Occidental/Graton Road?

Response: Looked where most agriculture is taking place. I talked to Sonoma Vineyards and they don't irrigate, don't frost protect.

Cordel closed the meeting by promising to set another meeting when we have more information to share. Most likely, the next meeting would be a scoping meeting for the NOP.