

MONTHLY REPORT

To: David Dickson, General Manager
From: Joe Guistino, Superintendent of Operations
Agenda: February 9, 2010

Report
Date: February 3, 2010

Monthly Highlights

Denniston Filter Media Breakdown

The cause for the underdrain failure was found to be a corrosion hole in the header of #3 filter. Staff and a 3rd party observer recommends replacement of the original carbon steel headers with stainless steel.

Storm Damage

Nearby lightning strikes from the January storms may have contributed to the failure of two outdated Rugid brand computers running the Crystal Springs operating system. A power surge may have contributed to the failure of Crystal Springs pump #2 soft starts.

Coastside County Water District (CCWD) vs Arrowhead

Comparative testing of District water and a popular delivered water brand indicates that CCWD water is of higher quality.

Source of Supply

Crystal Springs Reservoir and the Pilarcitos Wells were the major source of supply for the month of January. Source of supply was switched to Pilarcitos Reservoir (with wells) on Wednesday, 27 January.

Systems Improvement

Beautification

- Crews cleaned up around treatment plants for DPH inspection.
- Pressure washed top deck at Nunes Water Treatment Plant (WTP)
- Replaced fluorescent light fixtures in chemical feed room with modern, more efficient units.
- Crews graded the Denniston Road that was damaged by the heavy rains.
- Cleaned in and around the meter vault at the Harbor District.

New Well Feasibility

We have started a study to determine the feasibility of installing a new well in Pilarcitos Canyon outside of the coastal zone. We would abandon 2 low producing wells that would need refurbishing in the upcoming years.

Nunes WTP Filter Drains

The crews have installed a filter drain system that allows us to drain the filters without taxing the septic system or allowing water to flow off-site. This new system recycles water to the backwash holding ponds. Kudos to John Davis, Steve Twitchell, Jack Whelen, Sean Donovan, Ray Winch, Dustin Jahns, and Matt Damrosch

Update on Other Activities:

Unidirectional Flushing Program

Crews have completed the valve exercising phase of the Unidirectional Flushing Program.

Denniston Filter Media Breakdown

ERS was hired to remove the media from the Denniston WTP pressure filters to investigate the occurrence of media in the underdrain system. They found a hole in the carbon steel header in filter #3 which allowed the media to populate the underdrain system with the resultant back-clogging during backwash. We have elected to go with their recommendation to install stainless steel headers in all three filters to prevent this from occurring again. The new header will penetrate the shell of the filter to attach to the existing flange. See Staff Report on Denniston Filter Repairs in the consent calendar. Mike Price, our third party observer and an expert in filtration process, concurs with this approach.

Storm Damage Events

Crystal Springs Power Outages

On Tuesday, 5 January, we lost power to the Crystal Springs Pump Station (PS). The Nunes WTP was immediately shut down. District Crews stood by to bring the station back up until PG&E (Pacific Gas and Electric) informed them that the power would not be up until late morning. One operator remained at Nunes through the night to maintain the hydropneumatic system. The power was back on at 10:30 and the Nunes WTP was restarted only to be shut back down to wait for the Cahill Tank to reach operating level. The plant was restarted 45 minutes later but an operator error during shutdown resulted in a very high chlorine residual in the clearwell. The operator backwashed 3 filters to bring the residual down to acceptable levels before sending it to the distribution system. We experienced higher than normal chlorine residuals in the system the next day but only received 3 complaints. Crews flushed the area around Poplar Street near the ocean to bring down the chlorine residual in response to a local customer complaint.

Another power failure during a storm event on 19 January resulted in damage to our computer telemetry systems at Crystal Springs and Cahill Tank. These computer components (Rugid) are old and not supported anymore and our Instrumentation Contractor Calcon could not bring them back up. A crew manned the plant through the night, one person at Crystal Springs and another at Cahill Tank. We pulled the computers from Miramar Tank (out of service for repairs and coating) and Denniston

WTP (out of service for filter problems) to get the Crystal Springs PS on line. Calcon has been instructed to install a modern computer operating system at Crystal Springs and Cahill Tank. We have also purchased an extra Rugid on eBay to keep as a stand by.

Downed Tree

The storm of 5 January downed a tree and some power lines in Pilarcitos Canyon, blocking access to our Crystal Springs PRV (Pressure Reducing Valve) vault. PG&E secured the downed lines and District crew removed the tree.

Nurserymen's Exchange Water Test

In an attempt to remove the bottled water usage from Nurserymen's Exchange, Mr. Don Mendel asked us to collect some samples from 3 locations to determine potability of water from their sinks (District supplied water) and their Arrowhead water cooler. Testing on 13 January indicated that the sinks had a chlorine residual of 0.9 mg/l (approximate), no Total Coliform, no E. coli, and only 1 cfu (colony forming unit) of Heterotrophic Plate Count (a test to determine sanitary conditions). The Arrowhead dispenser had no chlorine residual, 1 Total Coliform (a violation if it was a public water system), no E. Coli and over 5,000 cfu of Heterotrophic Plate Count. Mr. Mendel will use these results to have his workers move away from bottled water and to trust the water provided by Coastside County Water District (CCWD).

Crystal Springs P2 Soft start

The soft start for pump 2 at Crystal Springs failed in January, most likely from one of the power surges caused by the electrical storms. We purchased and had installed a new and much better (but cheaper) unit.

Safety/Training/Inspections/Meetings

Meetings Attended

5 January - Tour of District facilities with Director Donovan and Dave Dickson.

8 January - Met with Rick Langlois of ERS Industrial Services to discuss the underdrain failure at Denniston WTP. Twitchell, Donovan and Dickson also in attendance.

13 January - Met with Coastside Safety Committee. Discussed training schedule for the year.

13 January - Safety Training on Confined Spaces.

14 January - Met with Van Tsang of California Department of Public Health (DPH) to discuss District issues and the annual inspection. Twitchell also in attendance.

19 January - Met with Crosno Construction, Jim Teter and Steve Twitchell at the Miramar Tank site to discuss repairs.

19 January - Met with Jim Teter on Miramar Tank repairs and Alves Tank out of service strategy.

22 January - Quarterly lunch with farmer Dave Lea to discuss issues common to both of our interests.

26 January - All employee meeting.

27 January – Met with John Haaf of Joint Powers Insurance Association (JPIA) to discuss and conduct annual tour of facilities.

28 January – Maintenance Worker Ray Winch annual review.

29 January – Met with Aaron Levinson to discuss AT&T cell tower site at El Granada Tank 1. Dickson also in attendance.

Safety Meeting and Training

This month's training was on Confined Space. Twitchell, Winch, Whelen, Duffy, Damrosch and I were in attendance.

Training

Maintenance Worker Logan Duffy has been training at Nunes WTP in preparation for taking his T2 Certification and advancing to the Treatment/Distribution Operator pool.

Last Day

Temporary Maintenance Worker Dustin Jahns's last day of work was 26 January. He was the finest and best temporary worker that we have employed here and we really hated to see him go. Best of luck to him in his future endeavors.

Department of Public Health (DPH)

Interim Distribution Evaluation Survey (IDES)

The IDES report is part of the Stage 2 Disinfectant/Disinfectant Byproducts Rule which will go into effect in 2013. DPH accepted our report with minor alterations as to sample location and scheduled months for sampling. They are a little concerned about one site up in the El Granada Highlands but I assured them that we will be making operational changes that will allow that station to comply.

Annual Inspection

Van Tsang of DPH conducted her annual evaluation of our facilities on 14 January. She was very pleased with our facilities and had only minor criticism of some tank internal ladders, hatches and screens, which we will endeavor to repair in the next year. We have solicited a few contractors for some quotes on specific repairs and expect to hear back from them in February.

Projects

Tank Recoating Projects

Miramar Tank – The contractor will be repairing the floor in February. Thickness analysis of the floor periphery at the walls indicates that the steel is still good so we opted out of installation of an annular ring.

We had an issue with sediment control during the latest rains and the road to our neighbor above was temporarily inaccessible. The contractor fixed the problem and we added a little extra rock as a courtesy to the neighbor who has been very patient for the duration of this project.

Alves Tank- Preliminary testing of fire flows while the tank is off-line indicated that we will need to boost the pressure south of town if we take this tank out of service. We may postpone doing the inside coating of this tank, especially since the latest inspection of Half Moon Bay Tank 1 shows that it's internal lining has completely failed in a few spots.

Denniston Treatment Improvements

Presently in design phase.

Church Street Mainline Extension

All services have been switched to the new main. The old main will be abandoned in February.

Nunes Filters 3&4 Media Replacement

Contractors have removed the media from filter 3, inspected the underdrain and added new gravel and media. Treatment staff will be cleaning the filter of fines and disinfecting on the first week of February. Filter 4 will be complete by 1 March.

Cell Tower Sites

Verizon – There are drainage and sediment issues associated with this project that Verizon must address before this project can be accepted as complete by CCWD. These issues will be addressed in February.

AT&T/Team Mobile – We have started preliminary site design with AT&T at the El Granada Tank 1 site. In the process, we have discovered that our neighbor has encroached on to our property and his access road is not within the designated easement. We will be petitioning for a lot line adjustment to eliminate the encroachment as well as redescribing the easement. We will be proposing that the access road be available for ours and the cell tower owner's vehicles also. AT&T agreed to fence that part of our property that is not currently fenced. We will also be making improvements to the fence to bring it more up to Department of Homeland Security standards.

Nunes Short Term Improvement Project

The contractors, K.G. Walters, have made some site visits in January and will be proposing a change to schedule in our first meeting on 4 February.

Avenue Cabrillo Project

Presently in design phase by Mr. Teter.



MARK B HORTON, MD, MSPH
Director

State of California—Health and Human Services Agency
California Department of Public Health



ARNOLD SCHWARZENEGGER
Governor

February 1, 2010

Mr. David Dickson
General Manager
Coastside County Water District
766 Main Street
Half Moon Bay, CA 94019

Dear Mr. Dickson:

WATER SYSTEM SANITARY SURVEY FINDINGS
Coastside County Water District, Water System No. 4110011

This letter confirms the findings of the January 14, 2010 inspection of the Coastside County Water District (CCWD) water system. Ms. Van Tsang of the Department of Public Health (DPH) conducted the inspection in the presence of Mr. Joe Guistino and Mr. Steven Twitchell. During the inspection, system facilities including the Nunes Water Treatment Plant (Nunes WTP), the El Granada Tank 1, 2, and 3, Half Moon Bay Tank 1, 2, and 3, Alves Tank, Mira Montes Tank, Hazens Tank, and the Pilarcitos wells were visited.

The Department is pleased that CCWD continues to make significant improvements to the water treatment plants and distribution system to produce and protect the high quality supply of water served to your customers. Such improvements include the installation of the magnetic flow meter and automatic control valves on the backwash return pipeline at the Nunes WTP to limit the return flow to less than 10 percent of the plant flow rate, the removal of gas chlorine and replacement with sodium hypochlorite, replacing all the filter media at the Nunes WTP within the past four years, and repainting and recoating many of the storage tanks.

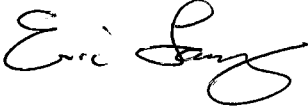
However, the internal ladders and walls, hatch covers and sections of the roofs on the El Granada Tanks 1, 2, and 3 and Half Moon Bay Tanks 1, 2, and 3 are severely rusted. Please explore options to correct this problem to prevent further damage to the storage tanks and potentially impact water quality. The screens on the Hayes Tanks are also loose. Please secure the screens to the tank to prevent animals or other sanitary hazards from entering the reservoir.

With the knowledgeable and conscientious team of staff at CCWD, the Department is confident that CCWD can provide a safe, reliable and high quality supply of water for current and future needs of your community. The Department appreciates the assistance provided by Mr. Guistino and Mr. Twitchell during the inspection.

Mr. David Dickson
February 1, 2010
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If you have any questions regarding this letter, please feel free to contact Ms. Van Tsang at (510) 620-3602.

Sincerely,

A handwritten signature in black ink, appearing to read "Eric Lacy". The signature is fluid and cursive, with the first name "Eric" written in a larger, more prominent script than the last name "Lacy".

Eric Lacy, P.E.
District Engineer
Santa Clara District
Drinking Water Field Operations Branch
Department of Public Health

cc: San Mateo County Environmental Health Department