

MONTHLY REPORT

To: David Dickson, General Manager
From: Joe Guistino, Superintendent of Operations
Agenda: April 10, 2012

Report
Date: April 4, 2012

Monthly Highlights

Denniston Treated Water Booster Station

Testing with a temporary pump shows that we can achieve 650 gpm from Denniston Water Treatment Plant (WTP) once it comes back on line.

Miramontes Point Road Main Breaks

There were two breaks on this 10" Ductile Iron (DI) line one week apart.

April Torrential Rains and Electrical Storm

Damage to District assets include some slumping on the hill adjacent to the access road to Miramontes Tank, Denniston WTP access road flooding, Nunes WTP power outages and shutdowns, and a burnt out process recorder at Nunes WTP.

Source of Supply

Pilarcitos Lake was the main source of supply for the month of April.

Systems Improvement

Beautification

- Weed abatement at Nunes WTP and Pilarcitos Canyon
- New flagpole rope and flags.
- Bushes removed that were in front of the board room windows facing the carport.
- Carport housekeeping.
- National Fire Prevention Association (NFPA) signage at Nunes repainted
- Lichen and moss removed from Nunes WTP clearwell and washwater tank roofs.

Sample Stations

Our bacteriological testing sample stations were upgraded with stainless steel petcocks for ease of use and corrosion prevention.

Chlorine Residual Analyzers

Crews are upgrading our distribution system chlorine residual analyzers at our storage tanks to improve reliability and to prevent any off site discharges of spent analyzer water.

Update on Other Activities:

Sinkhole

A sinkhole was discovered on Denniston dam in the area above the lower intake line. We had Erler & Kalinowski Inc. (EKI) investigate with their geotechnical engineer and it was determined that a break in the intake line caused displacement of soil around the break which led to the formation of the sinkhole. Staff will make repairs this summer once the flows in Denniston Creek subside and the reservoir can be lowered to below the intake. We will coordinate lowering the lake in accordance with the needs of the farmer.

Miramontes Point Road Main Breaks

Two main breaks occurred on the 10" main running up Miramontes Point Road near the Alves Tank. The breaks were about 100 feet apart and were caused by external corrosion. On both occasions, there were about 80 homes out of water for approximately 3 hours. We will be investigating the possibility of stray currents as the possible cause.

Backflow Compliance Program

Crews installed backflow devices with protective cages at District Headquarters. Staff has been working on updating the District's backflow ordinance.

April Torrential Rains

The torrential rains and thunderstorms of 12 April left the Nunes WTP without power on at least 3 occasions. Treatment/Distribution Operator Don Patterson responded and made sure that all systems were functioning properly after each power outage. We did not experience any water quality issues. The Honeywell monitoring device failed during the lightning storm and could not be brought back on line. The unit was swapped out with the Denniston device the next day.

Crews inspected all District sites after the rainstorms and found the Denniston Canyon access road flooded and significant slumping of the hillside adjacent to the access road up to Miramontes Tank. We are in the process of procuring bids to clean up the slide and shore up the hillside to prevent further damage. This work will be done once the rainy season is over.

The Denniston Road will be graded and rocked to lessen the severity of future flooding. I have filed an amended CDP request to improve the channel upstream of the reservoir to allow for better water quality and to prevent future flooding of the access road.

Safety/Training/Inspections/Meetings

Meetings Attended

2-5 April - Attended California/Nevada Section American Water Works Association (Cal/Nev AWWA) annual Spring Conference in Santa Clara.

12 April – Met with EKI and District Crews at Denniston Dam to discuss the sinkhole.

16 April – Met with CalCad to discuss Geographic Information System (GIS) mapping system.

17 April – Met with farmer Dave Lea to discuss intake repairs and dredging of Denniston

20 April – Met with Brennan and Dickson on backflow ordinance development.

23 April – Met with Director Reynolds and General Manager (GM) Dickson on backflow ordinance development.

Safety Meetings and Training

-Safety Committee met on Wednesday, 11 April. Treatment Supervisor Twitchell was in attendance. Topics of discussion included: vehicle accidents, cell phone usage in vehicles, annual safety inspections, and proper signage.

-Safety training took place on 11 April at Sanitary Authority Midcoast (SAM). The topic this month was Personal Protective Equipment (PPE) and Environmental Hazard (toxic plants and animals). Twitchell, Whelen, Winch, Patterson, Duffy and Bruce were in attendance.

Tailgate safety sessions in January

6 April – Setting Up a Safe Traffic Control Zone

9 April – Know What’s Below: Call 811 Before You Dig!

16 April – Safely Cutting Metal Pipe

23 April – C-O Could Spell D-E-A-T-H

Training

Maintenance Worker Logan Duffy passed his California Distribution Operator II test. He now possesses a Treatment Operator II and Distribution Operator II certification and will be promoted to Treatment/Distribution Operator once he receives his certificate in the mail. He has been placed in the On Call Operator rotation.

Treatment/Distribution Operators Matt Damrosch and Jon Bruce attended a class on Cla-Valve operation and design in Santa Cruz on 4 April.

Treatment/Distribution Operator Don Patterson attended the Cal/Nev AWWA Spring Conference in Santa Clara on 4 April.

Treatment/Distribution Operators Jon Bruce and Jack Whelen attended a class on Department of Transportation (DOT) rules and regulations on 19 April.

Treatment Supervisor Steve Twitchell passed the test and received his Distribution Operator Grade IV certification.

Regulatory Agency Interaction

California Department of Public Health (DPH)

There were no interactions with DPH in April

County of San Mateo

Submitted the Notice of Exemption for the Avenue Cabrillo Project. We also discussed the amendment to our Coastal Development Permit (CDP) for Denniston Dredging to better define the Denniston stream channel. We await their review and reply.

Projects

Tank Recoating Projects- Half Moon Bay (HMB) Tank 1

Topcoat complete on both tanks and internal lining touched up on HMB Tank 2.

Denniston Water Treatment Improvement Project

- Sloped floor of the wash water clarifiers complete.
- Kennedy/Jenks (K/J) assigned to make design improvements on the existing wash water return pump system and the Treated Water Booster Station.
- Solids contact clarifier washwater tank site relocated away from the main power feed for the facility.
- Change order request from District to install anti climb door for the above mentioned washwater tank ladder and to procure and install an effluent flow meter.
- Treatment Staff is working with K/J and Roberts Filter to design new Denniston WTP operation manuals and daily inspection sheets.
- Staff seeking quotes to replace the deteriorated inspection hatches on the existing alum tank and pressure filters.

Cahill Tank Ladder Replacement

Crews prepared foundation for Cahill Tank ladder replacement project. The present ladder is made of fiberglass which has severely deteriorated since installed in the mid 90s.

Crystal Springs Alternative Intake Project

The divers have capped the second intake to Crystal Springs Pump Station (PS) and Bay Valve is scheduled to remove the operating valves in the tunnel on the week of 7 May.

Avenue Cabrillo Project

The Notice Of Exemption was filed for this project with San Mateo County Planning Department on 24 April. Mr. Teter is preparing bid specs for this project.

Denniston Treated Water Booster Station

Undersized piping in the Clipper Ridge neighborhood of El Granada has staff concerned as to the discharge capacity of Denniston WTP. In order to assess the capacity of the piping in this neighborhood, District crews, under the guidance of Jim

Teter, conducted a test using the District's portable pump that was temporarily installed on the treated water booster piping constructed by District crews over the last year. We conducted a test on 18 April to derive maximum flow and pressure changes in the Clipper Ridge neighborhood of El Granada. The system was able to handle a flow of 650 gpm and the pressure in the neighborhood increased 10 psi to a maximum of 150. Funds have been allotted in the Capital Improvement Plant (CIP) for a number of years now for pipeline improvement to achieve the desired flow rate to be designed and constructed over Fiscal Year (FY) 17 and 18. There were no water quality complaints resultant from this testing.

Pilarcitos Canyon Blending Station

Crews are coordinating with Andreini Bros. construction to replace the present hydro valve on the Crystal Springs Pipeline with the specially designed pressure reducing valve (PRV) purchased last year for this project. They will also be installing a vault on the Pilarcitos Pipeline that will contain a flow meter and ancillary instrumentation.

Other Projects in Queue

-El Granada Tank 2 Repair and Recoating Project. District Engineer Jim Teter is in the planning stage for this project which will commence next fiscal year.

-Alves Tank Recoating Project. District Engineer Jim Teter is designing a temporary pump station that will allow us to take this tank off line during repairs and coating.

-Pilarcitos pipeline crossing. The District presently has an 8" cast iron pipeline that crosses directly under Pilarcitos Creek behind the Strawflower Plaza Shopping Center. It is not buried very deep and is a vulnerable point in our distribution system. Mr. Teter is considering an above creek pipe crossing.

-Nunes WTP Hydro pneumatic System. The utility water system at Nunes WTP is controlled via an outdated and deteriorating relay system. I am presently preparing a Request For Proposal (RFP) to replace this system with one that is digitally controlled by a Programmable Logic Controller (PLC) and that can dovetail with the Supervisory Control and Data Acquisition (SCADA) system presently in design.

-Railroad Avenue Pipeline Replacement Project. Mr. Teter is preparing bid specs for this project.