



EAST VALLEY WATER DISTRICT

LEADERSHIP • PARTNERSHIP • STEWARDSHIP

ENGINEERING AND OPERATIONS COMMITTEE

September 23, 2019 - 2:30 PM

31111 Greenspot Road, Highland CA 92346

AGENDA

CALL TO ORDER

PLEDGE OF ALLEGIANCE

PUBLIC COMMENTS

NEW BUSINESS

1. Approve the July 22, 2019 Engineering & Operations Committee meeting minutes
2. Reservoir Inspections
3. Engineering Updates for September 2019

ADJOURN

PLEASE NOTE:

Pursuant to Government Code Section 54954.2(a), any request for a disability-related modification or accommodation, including auxiliary aids or services, that is sought in order to participate in the above-agendized public meeting should be directed to the District Clerk at (909) 885-4900 at least 72 hours prior to said meeting.

Subject to Approval

**EAST VALLEY WATER DISTRICT
ENGINEERING AND OPERATIONS COMMITTEE MEETING**

July 22, 2019

MINUTES

Ms. Duran called the meeting to order at 2:30 p.m. and Mr. Noelte led the flag salute.

PRESENT: Directors: Morales, Goodrich

ABSENT: Patrick Milroy, Operations Manager

STAFF: Jeff Noelte, Director of Engineering & Operations; Martha Duran, Sr. Administrative Assistant; Brenda Van Meter, Administrative Assistant; Jason Wolfe, Senior Engineer

GUEST(s): 2

PUBLIC COMMENTS

There being no written or verbal comments, the public participation section was closed.

APPROVE THE MARCH 25, 2019 ENGINEERING AND OPERATIONS COMMITTEE MEETING MINUTES

There being no objection to the minutes, the March 25, 2019 minutes were approved as submitted.

OPERATIONS REPORT FOR JUNE 2019

Jeff Noelte presented the Operations and Maintenance reports. He reviewed the fact that we have a dedicated staff member that manages the USA program and walked the Directors through the report. Mr. Noelte discussed that we have an annual goal to service hydrants, which is higher some months based on staff availability. Mr. Noelte discussed the Operations Report and pointed out that due to the hydro-generation that we can turn out water and use it to recharge the ground water. He explained that the reason that the sewer was not videoed in March was due to staff being pulled to manage other areas.

ENGINEERING UPDATES

Sterling Natural Resources Center (SNRC):

Mr. Noelte presented the SNRC time lapse picture to show the progress of what is happening at the site. He discussed the concrete walls that are going up and how the walls are being built. Over a thousand yards of concrete have been poured to date. The picture presented

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was one of three aeration basins. Mr. Noelte illustrated that baffles will be installed to ensure the water flows through properly. He said by installing the baffles now we can avoid a retrofit later. The membranes will be housed in a separate tank that will allow the water to be housed separately from the pollutants.

Plant 134:

Mr. Noelte reviewed the changes taking place at Plant 134. He said that sludge builds up on the lagoons. Staff keeps up with it now, but when we expand the amount of water, we produce we will need to find a better way to manage it. We know a lot of people use press management to deal with sludge. Mr. Noelte stated that we need to investigate our options in order to find the best solution, and that a contractor has been secured to do this for us. The contractor will take about four months to evaluate the best solution for dealing with the sludge. Mr. Noelte presented how we are also dealing with TTHM's at the plant. We do not have the chemistry and the purity at this plant to deal with this. East Valley Water District hired a consultant to help us establish an appropriate treatment plan. Mr. Noelte specified that we want the best fit for our rate payer to find a good effective solution for EVWD. He described how organics come through the water change over time and that other surface water treatment plants also deal with organics. Many use radio activated carbon, but that may not be the best option for us, which is why we are working with a consultant to find the best options for us.

Water Source Tank Rehabilitation:

Mr. Noelte provided Operations and Engineering's plan for tank rehabilitation. He said most of our tanks are more than 20 years old. A routine asset management strategy is that you get in and drain in and recoat it, replace things that need to be replaced. East Valley Water District is in the process of securing a contract to begin routinely updating, evaluating, and replacing tanks on an annual basis. Mr. Noelte offered that with the nature of our system, we would want to do this when we are not in high demand. The idea is to increase storage capacity. Director Morales asked about earthquake retrofitting. Mr. Noelte responded and said that the retrofitting is part of the process.

ADJOURN

The Meeting adjourned at 3:18 p.m.

James Morales
Governing Board Member

Phillip Goodrich
Governing Board Member



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STAFF REPORT

Agenda Item #2.
Meeting Date: September 23, 2019
Discussion Item

To: ENGINEERING AND OPERATIONS COMMITTEE

From: General Manager/CEO

Subject: Reservoir Inspections

RECOMMENDATION:

This report is provided to the Engineering and Operations Committee for its information only.

BACKGROUND / ANALYSIS:

The Production Department is responsible for all maintenance and inspection activities of approximately 40 different plants that host wells, booster pumps, valves and reservoirs. These plants require a daily visit and visual inspection of equipment to ensure accurate water production, water storage, proper chemical dosing, calibrations and security. Minor maintenance or repairs of equipment are completed during daily rounds and extensive repairs are planned and budgeted.

One important preventative maintenance activity for the Production Department is reservoir inspection. The District's reservoirs store a total of 30 million gallons of water. These reservoirs are monitored daily to ensure adequate water supply. Inspecting the outside of a reservoir is easy, requiring an operator to simply walk around the reservoir, be observant and take notes. Inspecting the inside of a reservoir, however, is a little more challenging and requires the operator to climb up to the top of the reservoir and look inside of the access hatch.

To get a better look and properly inspect the inside of a reservoir, a certified SCUBA diver is required to get in the water. These efforts are contracted out by the District. After getting disinfected and sprayed down with chlorine, the SCUBA diver can enter the reservoir. The diver uses an under-water camera recording and inspecting all interior surfaces of the reservoir then provides the District with a report and recommendation. The District recently completed a five-year diving inspection which will provide us with information on tank rehabilitation.

Reservoir inspections are critical for water quality purposes, monitoring useful life of the reservoir and planning rehabilitation efforts. The District takes pride in inspecting infrastructure and plans on continuing an aggressive reservoir inspection program.

AGENCY GOALS AND OBJECTIVES:

Goal and Objectives IV - Promote Planning, Maintenance and Preservation of District Resources

- b) Enhance Planning Efforts that Respond to Future Demands
- c) Dedicate Efforts Toward System Maintenance and Modernization

REVIEW BY OTHERS:

This agenda item has been reviewed by the executive management team.

FISCAL IMPACT

There is no fiscal impact associated with this agenda item.

Recommended by:

Patrick Milroy
Operations Manager



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STAFF REPORT

Agenda Item #3.
Meeting Date: September 23, 2019
Consent Item

To: ENGINEERING AND OPERATIONS COMMITTEE

From: Director of Engineering & Operations

Subject: Engineering Updates for September 2019

RECOMMENDATION:

This report is provided to the Engineering and Operations Committee for its information only.

BACKGROUND / ANALYSIS:

Updates are provided below for three items that Engineering staff are working on.

Sterling Natural Resource Center:

- Concrete continues to be placed for the influent pump station and aeration basins. Concrete work has recently started on the headworks and the membrane tank.
- With the approval of the project enhancement to include anaerobic digestion, the design team will be advancing the 60% design for the associated systems to 100% design.

Master Service Contracts for Water Tank Rehab:

- An RFP was issued to engage qualified contractors for upcoming water tank rehabs. Eight proposals were received, and the proposal evaluation committee selected three contractors to initiate master contracts with for as needed tank rehab services.
- The design package for the rehab of Reservoir 39-1 is being completed to allow for rehab work to be done during the winter.

Disinfection Byproduct Investigation:

- The District's consultant, Trussell Technologies, is conducting bench-scale testing using Plant 134 water to assess the impact of various factors on disinfection byproduct formation (e.g., TTHM). The findings of this effort will be presented in a report intended to inform District decisions on managing disinfection byproducts and complying with the Corrective Action Plan that came out of the 2017 TTHM violation.

AGENCY GOALS AND OBJECTIVES:

Goal and Objectives I - Implement Effective Solutions Through Visionary Leadership

- a) Identify Opportunities to Optimize Natural Resources

Goal and Objectives IV - Promote Planning, Maintenance and Preservation of District Resources

- a) Develop Projects and Programs to Ensure Safe and Reliable Services
- c) Dedicate Efforts Toward System Maintenance and Modernization

REVIEW BY OTHERS:

This agenda item has been reviewed by the executive management team.

FISCAL IMPACT

There is no fiscal impact associated with this agenda item.

Respectfully submitted:

Jeff Noelte
Director of Engineering & Operations