



# Santa Clara Valley Water District

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**File No.:** 18-0274

**Agenda Date:** 4/24/2018

**Item No.:** 3.6.

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## BOARD AGENDA MEMORANDUM

### **SUBJECT:**

Update on the Condition of the Almaden Valley Pipeline Inspection and Rehabilitation Project, and Determine that the Condition of the Almaden Valley Pipeline Continues to Constitute an Emergency (San Jose, Los Gatos, Unincorporated Santa Clara County) (Districts 4 and 7).

### **RECOMMENDATION:**

- A. Receive an update on the Almaden Valley Pipeline Inspection and Rehabilitation Project; and
- B. Determine by a four-fifths vote of the Board, that there is a need to continue the emergency action declared by the Chief Executive Officer (CEO) on December 5, 2017, pursuant to California Public Contract Code §22050, to repair the Almaden Valley Pipeline (San Jose, Los Gatos, Unincorporated Santa Clara County) (Districts 4 and 7).

### **SUMMARY:**

According to Public Contract Code §22050, in order for the emergency action to remain in place, the Board must determine, by four-fifths vote at every regularly scheduled Board meeting until the emergency action is terminated, that there is a need to continue the emergency action; this agenda item recommends the Board make such a finding.

On December 5, 2017, the CEO declared that the condition of the Almaden Valley Pipeline (AVP) constituted an emergency condition pursuant to California Public Contract Code §22050, and that District staff may repair such pipeline, take any directly related and immediate action required by that emergency, and procure the necessary equipment, services, and supplies for those purposes, without giving notice for bids to let contracts. This declaration was continued by the Board at all regularly scheduled board meetings held since the emergency was declared. The emergency condition continues to exist as the Almaden Valley Pipeline is returned to service and the integrity of the pipeline is monitored.

The AVP consists of approximately 12 miles of 72-inch to 78-inch diameter Prestressed Concrete Cylinder Pipe (PCCP) and welded steel pipe (WSP). The pipeline was constructed in two major segments: AVP Unit 1 was constructed in the 1960's, and AVP Unit 2 was constructed in the 1980's. The AVP is used to supply raw water to the District's water treatment plants and groundwater recharge facilities.

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As part of the 10-Year Pipeline Inspection and Rehabilitation Program, AVP inspection and rehabilitation work was initiated on October 27, 2017. Because of the AVP shutdown, the Santa Teresa Water Treatment Plant (STWTP) was also taken offline. Following three weeks of dewatering, inspection activities were performed on November 21-22, 2017. Preliminary investigation results for Unit 2 indicated a large number of distressed PCCP sections between the Santa Teresa Force Main and Calero Reservoir. The District could not return the AVP to safe and reliable service unless significantly distressed pipe sections were repaired, and an analysis was conducted to understand why such degradation of the pipe had occurred. Failure to return the pipeline to safe and reliable service would pose a significant risk to the District's ability to provide sufficient water to meet minimum water supply demands as the District's contractual obligations for water delivery increase from winter to spring.

District staff and contractor personnel performed an emergency inspection, detailed forensic analysis, formulated a repair strategy, and the District awarded a public works contract to the Structural Group, Inc. to perform the repair of the pipeline. The Santa Teresa Water Treatment Plant remained offline to allow the necessary AVP repairs to be completed.

Repairs to the facility have been completed and the pipeline has been returned to service. The STWTP was restarted on March 19, 2018. The pipeline has been operated to minimize pressure fluctuations while staff monitors its condition, including any additional reinforcing wire breaks, to ensure it can safely be operated before ending the emergency action. The newly installed acoustic fiber optic cable has continued to record reinforcing wire breaks along the pipeline since the pipe was placed back into service. Staff and consultants continue to evaluate the wire break data to evaluate and identify any threats to the pipelines structural integrity. Additional time is needed to determine if the rate of wire breaks has reduced and to correlate the rate of wire breaks to specific operational activities. Staff is therefore recommending that the Board determine, by a four-fifths vote, that there is a need to continue the emergency action declared by the CEO to enable timely procurement of necessary construction contract services, and other public works and non-professional services, supplies and essential equipment, without a competitive procurement process should they be needed.

#### **FINANCIAL IMPACT:**

The total cost of the emergency repairs of the Almaden Valley Pipeline is estimated to be in the range of \$10 and \$15 million. All expenditures supporting this effort are being charged to the 10 Year Pipeline Inspection and Rehabilitation Program (95084002) which also funds annual planned pipeline inspection and rehabilitation work. The Board approved a budget adjustment on January 23, 2018 transferring \$4,523,942 into the Program to partially fund this unplanned emergency work. Staff will be bringing forward a second budget adjustment request to provide the remaining funds needed in the FY 18 budget to fund the emergency work.

#### **CEQA:**

Impacts associated with the repair and maintenance activities of the Almaden Valley Pipeline were evaluated by the Pipeline Maintenance Program and the Programmatic Environmental Impact Report

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(PEIR), certified and approved by the Board on November 13, 2007. The California Department of Fish and Wildlife and the Regional Water Quality Control Board were properly notified to address the issued permits for the Project. The permits have been modified to address work associated with the repair of the emergency conditions. All work will be performed deploying the Valley Habitat Plan conditions and avoidance and minimization measures to prevent impacts to sensitive habitat in the Project vicinity.

**ATTACHMENTS:**

Attachment 1: Emergency Declaration

**UNCLASSIFIED MANAGER:**

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