

TO: Norma J. Camacho
Chief Executive Officer

FROM: Nina Hawk
Chief Operating Officer
Water Utility Enterprise

SUBJECT: Emergency Declaration to Repair
Almaden Valley Pipeline Pursuant to
Public Contract Code §22050

DATE: December 23, 2019

The purpose of this memorandum is to formally request that you as the Santa Clara Valley Water District (Valley Water) Chief Executive Officer (CEO) immediately declare an emergency pursuant to California Public Contract Code §22050 and Valley Water Resolution 05-67 to enable immediate repair of the Almaden Valley Pipeline (AVP) in the City of San Jose, California. This emergency declaration will exempt Valley Water from undergoing competitive bidding requirements to procure the necessary equipment, supplies, non-professional services, and public works to attend to the emergency action described in this memorandum.

The current condition of the AVP poses an emergency condition as it cannot be safely returned to service prior to significant repairs. Per California Public Contract Code §1102, an emergency is "a sudden, unexpected occurrence that poses a clear and imminent danger, requiring immediate action to prevent or mitigate the loss or impairment of life, health, property, or essential public services."

Background

The AVP consists of approximately 12 miles of 72-inch to 78-inch diameter prestressed concrete cylinder pipe (PCCP) and welded steel pipe, operating under pressure. 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 Valley Water's treatment plants, groundwater recharge facilities, and service connections. When this pipeline is out of service, Valley Water does not have access to the San Luis Reservoir (Central Valley Project), Anderson and Calero Reservoir supplies. The South Bay Aqueduct must be relied upon as the sole source and supply of raw water to all Valley Water treatment facilities.

AVP planned inspection and rehabilitation work was performed in 2007, 2008, 2011, and 2017. On December 5, 2017, Valley Water's CEO declared an emergency and a contractor repaired multiple damaged sections of PCCP identified during inspection at risk of imminent failure. Based on the information gathered, before and after the 2017/2018 repairs, the nature of damage to the pipe was correlated to embrittlement of the PCCP reinforcement wires.

On March 18, 2018, an acoustic fiber optic (AFO) system was brought on-line to monitor the AVP for events that correlate to additional distress of PCCP sections. This AFO system has detected numerous events since installation. Staff has reviewed this information in combination with other pipeline records, including operation and maintenance data, to analyze changes in failure risk and remaining service life of PCCP in AVP. Results of this analysis indicate a particular PCCP section of the AVP, between Shannon Line Valve and Calero Valve Yard, is significantly distressed and at risk of imminent failure.

Potential Consequences

Potential consequences of a pipe failure in this location include:

- a. Physical damage to adjacent area;
- b. Negative impact to endangered species habitat (e.g., steelhead fish) due to excessive raw water discharge into Alamos Creek, along with substantial erosion; and
- c. Significant risk to Valley Water's ability to provide sufficient water to meet minimum water supply demands due to prolonged pipeline outage to repair a pipe break.

Potential consequences of a prolonged outage to isolate and repair the pipeline in this location include:

- a. Inability to meet contractual water supply agreements, which restrict planned outages between November and March;
- b. Inability to meet treated water allotment obligations to retailers beginning May 2020; and
- c. Valley Water treatment facilities must rely solely on the South Bay Aqueduct for raw water supply.

Based on the current condition of significantly distressed pipe sections and associated risks, Valley Water cannot return the AVP to safe and reliable service unless repair of significantly distressed pipe sections is performed. The planned return to service date for AVP in this location is February 27, 2020. Failure to return the pipeline to service by the prescribed date will pose a significant risk to Valley Water's ability to provide sufficient water to meet minimum water supply demands, as Valley Water's contractual obligations for water delivery increase.

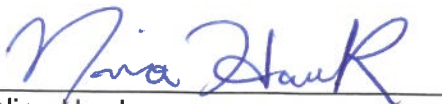
Recommendation

Staff recommends a Declaration of Emergency be issued so that immediate action can be taken to complete all work activities related to the repair of structurally distressed pipe on the Almaden Valley Pipeline. Based on the substantial evidence detailed above, I recommend that you officially declare that an emergency situation exists as defined by the California Public Contract Code §1102. If you agree with this recommendation, please indicate concurrence by signing below.



Aaron Baker
Deputy Operating Officer
Water Utility Enterprise
Acting for Nina Hawk
Chief Operating Officer
Water Utility Enterprise

Concur:



Nina Hawk
Chief Operating Officer
Water Utility Enterprise
Acting for Norma J. Camacho
Chief Executive Officer

District Counsel:

 12-23-19

Leslie Orta
Senior Assistant District Counsel