



CITY OF SANTA BARBARA

COUNCIL AGENDA REPORT

AGENDA DATE: March 28, 2017

TO: Mayor and Councilmembers

FROM: Water Resources Division, Public Works Department

SUBJECT: Authorization For Sole Source Purchase Order For A Zero Discharge Water Distribution System Flushing Truck

RECOMMENDATION: That Council

- A. Authorize the General Services Manager to execute a Sole Source Purchase Order with No-Des, Inc., as authorized by Municipal Code Section 4.52.070 (k), in the not-to-exceed amount of \$466,232.64 for a zero discharge water distribution system flushing truck;
- B. Approve the addition of No-Des filter bags to the Water Resources Standard Equipment list, which was approved by Council on September 3, 2016; and
- C. Increase appropriations in the Water Operating Fund by \$475,000 from the transfer of \$475,000 of appropriations in the Water Capital Fund, for the purchase of a zero discharge water distribution system flushing truck and related equipment.

DISCUSSION:

Background

The Water Resources Division maintains approximately 307 miles of water distribution mains that are located in 17 separate pressure zones. Standard industry practice is to annually clean the water mains by flushing the system to remove sediment and biofilm that naturally builds up in the system. An effective water main flushing program is fundamental to maintaining water quality in the water distribution system and helping to ensure customer satisfaction.

The Water Resources Division has historically conducted an annual flushing program using conventional methods, whereby water is systematically flushed from fire hydrants and de-chlorinated before being sent to the storm drains. The flushing program was suspended in 2013, because of the ongoing drought. As a result, many water customers in the downtown area in recent years have experienced water quality issues such as off-

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colored and/or poor tasting and smelling water. While the water was safe to drink, these aesthetic water complaints were the result of not regularly flushing the distribution system.

Staff investigated effective water-conserving technologies for flushing the water distribution system and found ValveTek Utility Services, Inc. (ValveTek), which offers the patented truck-mounted No-Des technology as a unique solution for flushing water mains that can be done with minimal wasted water. The process involves filtering water at a scouring velocity of five feet per second through a mobile filtration unit, and returning the water back into the water distribution system. ValveTek is the only domestic certified company authorized to flush water mains using the No-Des water filtering technology.

On April 19, 2016, Council authorized the General Services Manager to execute a Sole Source Purchase Order with ValveTek, as authorized by Municipal Code Section 4.52.070 (k), in the not-to-exceed amount of \$498,952 to flush the City's water mains in the "Low Zone" (the City's lower elevations), which had the greatest need for flushing. The Low Zone is comprised of approximately 140 miles of water main and is the area that has received the greatest number of water quality complaints. Additionally, the Low Zone needed to be flushed in advance of reactivating the Charles E. Meyer Desalination Plant.

For public outreach, various forms of public notification were used to inform water customers, including: press releases, individual residential/business postcards and/or door hangers, Next Door posts, City website announcements, and City News in Brief articles. As a result, the "Low Zone" was successfully flushed using the No-Des technology, which conserved millions of gallons of water, and caused minimal disruption to water service and neighborhoods. Staff received no customer complaints related to the work, and water quality complaints subsided after the flushing effort was completed.

Proposed Purchase

The City contracted with ValveTek for \$498,952 to flush the "Low Zone," which equated to flushing 45% of the City's water mains. Rather than again contracting with ValveTek to flush the remaining 55% of water mains, and repeating this task annually as prescribed by the American Water Works Association, it would be more cost-effective for the City to purchase a No-Des water distribution system flushing truck (No-Des truck). Considering the ValveTek contract work required three City staff to assist one ValveTek staff, it is believed that if the City were to purchase a No-Des truck, no additional staff would be needed for the flushing work. Additionally, owning a No-Des truck would enable City water crews to respond more timely to water quality concerns in the distribution system, without wasting significant amounts of water.

The patented No-Des water filtering technology is only available through No-Des Inc. Staff recommends that Council authorize the General Services Manager to execute a Sole Source Purchase Order with No-Des, Inc., as authorized by Municipal Code Section 4.52.070 (k), in the not-to-exceed amount of \$466,232.64 to purchase a No-Des truck. Staff also recommends that Council approve adding No-Des filter bags to the Water

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Resources Standard Equipment list, which was approved by Council on September 3, 2016. No-Des filters bags are standard equipment necessary to operate the No-Des truck.

BUDGET/FINANCIAL INFORMATION:

The No-Des truck will be dedicated to maintaining the City's water mains. Therefore, staff recommends that Council increase appropriations in the Water Operating Fund by \$475,000 from the transfer of \$475,000 of appropriations in the Water Capital Fund under Water Main Replacement, for the purchase of a No-Des truck and No-Des filter bags.

SUSTAINABILITY IMPACT:

The No-Des technology provides a sustainable water distribution system flushing alternative to conventional methods, which waste hundreds of thousands of gallons of water, and can improve the taste, odor and appearance of the City's drinking water.

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SUBMITTED BY: Rebecca J. Bjork, Public Works Director

APPROVED BY: City Administrator's Office