



DATE: March 27, 2024
TO: Waste Management Authority Board
FROM: Ben Cooper, Program Manager
SUBJECT: StopWaste Building Rooftop Heat Pump HVAC Upgrade

SUMMARY

The WMA owns and manages the Agency's office in downtown Oakland at 1537 Webster Street. The current rooftop HVAC equipment and gas hot water heater were installed in 2007 and are incurring increased maintenance costs. Commercial HVAC and water heating equipment typically last 15-20 years so the existing equipment is nearing the end of its useful life. The WMA put out a formal and public request for proposals (RFP) to replace the rooftop HVAC units and the water heater in February and received four bids. American Mechanical, Inc (AMI), was the lowest and most responsive bidder. At the March 27, 2024, WMA meeting, staff will ask the WMA Board to authorize the Executive Director to enter into a construction contract with AMI.

DISCUSSION

In 2007, the WMA completed the first in the nation LEED Platinum New Construction renovation of an existing building. It included installation of a new, energy efficient HVAC system served by four rooftop packaged units ventilating and heating/cooling the ~14,000 square foot building below and a hot water heater serving the needs of staff in the kitchens and bathrooms. The four existing package HVAC units are fueled by electricity for cooling and natural gas for heat, which was standard at the time. The water heater is fueled by natural gas, also standard at the time.

In recent years in the Bay Area and across the country, heat pumps have increasingly become an alternative to traditional packaged HVAC units with gas heating and gas water heaters. Used in Europe and Asia for decades due to their lack of domestic gas production, heat pumps efficiently move heat instead of creating it and can both heat and cool a space or liquid. In California, with our increasingly renewable grid electricity, heat pumps can reduce carbon emissions associated with heating by over 30-40 percent compared to natural gas heating systems. As we operate our HVAC and hot water systems during the day, this percentage is likely higher as we use these systems during work hours when grid renewable energy production (solar) is generally highest, and time of use rates are lowest. Because of this, newly installed heat pump HVAC and hot water systems will considerably reduce our GHG emissions while maintaining or reducing our utility bill costs. As the Agency administers or actively promotes multiple programs directly incentivizing installation of heat pump technology, this presents us with an opportunity to advance those systems ourselves by

replacing our aging gas equipment with efficient and clean heat pump technology.

The RFP included the construction contract and was publicly posted in mid-February. Four bids were publicly unsealed and read on Thursday, March 7, 2024. After a thorough review, a Notice of Intent to Award was publicly posted on Wednesday, March 13, 2024. No protests were received. AMI provided the lowest acceptable bid with the pricing listed below.

- Heat pump HVAC - \$397,844
- Heat pump water heater - \$14,300

Anticipating the need to replace the HVAC system, funding was secured through prior year encumbrances and the current year budget. As such, no increase in spending authorization is needed.

Pending Board approval and depending on equipment supply chains and resultant lead times, we expect to install the new equipment sometime between late summer and early fall.

RECOMMENDATION

That the WMA Board authorize the Executive Director to enter into a construction contract with American Mechanical, Inc. to install new heat pump HVAC and hot water equipment at the Agency office located at 1537 Webster Street, Oakland, CA 94612.

ATTACHMENT

[Alameda County Waste Management Authority Construction Contract](#)