

#7.1

Agenda Item
For Board Meeting of: September 19, 2019

CITY OF SANTA ROSA
BOARD OF PUBLIC UTILITIES

TO: BOARD OF PUBLIC UTILITIES
FROM: EMMA WALTON, DEPUTY DIRECTOR OF ENGINEERING
RESOURCES, SANTA ROSA WATER
SUBJECT: BIOSOLIDS PROGRAM UPDATE AND PREPARATION OF A
REQUEST FOR PROPOSALS

AGENDA ACTION: MOTION

RECOMMENDATION

It is recommended by the Water Department and the City Council/Board of Public Utilities Liaison Subcommittee that the Board of Public Utilities, by motion, approve issuing a Request for Proposals ("RFP") for the beneficial reuse of a portion of the biosolids produced at the City's Laguna Treatment Plant.

EXECUTIVE SUMMARY

The Laguna Treatment Plant produces and beneficially reuses approximately 32,600 wet tons of Class B biosolids annually. Historically, the City's biosolids program has primarily relied on land application and composting as the main options for biosolids reuse. With the high unit cost of biosolids composting and an aging compost facility that requires substantial near-term capital investment, staff would like approval to explore alternatives to biosolids composting.

BACKGROUND

The Laguna Treatment Plant produces approximately 32,600 wet tons of Class B biosolids annually through a process consisting of sludge thickening, anaerobic digestion, and dewatering. Of the biosolids the treatment plant produces, approximately:

- 65% is land applied to local farms,
- 24% is converted to a Class A, commercially-marketed compost,
- 10% is hauled to the landfill and used as alternative daily cover, and
- 1% is directed to the Lystek Organic Material Recovery Center.

Biosolids beneficial use costs, per wet ton, are approximately:

- \$40 for farmland application,

- \$142 for composting,
- \$54 for landfill application, and
- \$98 for Lystek processing.

Land application involves trucking material to local farms where it is used as fertilizer or soil amendment on fodder crops (i.e., animal feed and fiber crops). Land application is the City's most economical use of biosolids and increases crop yields for farmers; however, farmland application is not permitted year-round.

To beneficially reuse biosolids produced during the wet months (when land application is not permitted), the City operates a biosolids composting facility on Llano Road, adjacent to the treatment plant. At the compost facility, Class B biosolids are combined with green material to produce a Class A, marketable material approved for gardening and landscape application. Composting biosolids is the City's most expensive use option and the facility, which has been in operation since 1996, is in need of significant near-term capital investment (an estimated \$4M in the next 5-years).

Before the biosolids beneficial use program was introduced at the Laguna Treatment Plant in 1985, all the solids that passed through the plant went to the Sonoma County landfill. With stepped up land application and composting programs, an average of less than ten-percent of the biosolids generated at the treatment plant reach the landfill, where it is either buried or used as alternative daily cover. While landfill disposal is one of the City's least expensive options, landfill application is subject to landfill limitations which are continuing to become more restrictive with the passage of statewide mandates, goals, and initiatives.

In 2016, as a pilot effort, the City started working with Lystek International, Inc. a facility located at the Fairfield Suisun Sewer District. The Lystek process produces a Class A liquid biofertilizer and has proven to be a reliable use option for the City. Lystek processing provides the City with a regulatorily-predictable, low-cost, weather-independent option.

To explore alternatives to composting, the City's most expensive weather-independent option, and landfilling, an option which is becoming more restricted, staff recommends issuing an RFP to solicit proposals from parties interested in processing the portion of biosolids that the City currently composts and landfills.

PRIOR BOARD OF PUBLIC UTILITIES REVIEW

On October 18, 2018, staff provided a staff briefing to the Board providing an update on the Biosolids Program.

On October 15, 2015, staff provided a study session to the Board regarding biosolids processing, operational constraints and potential solutions.

ANALYSIS

With Board approval, Santa Rosa Water will issue an RFP to solicit proposals from parties interested in seasonally processing a portion of the City's biosolids. The RFP is anticipated to include a commitment to process approximately 11,000 wet tons of biosolids from October through May for a term in the range of approximately 10-15 years. The selection of the preferred proposer will be based on best value to the City and the final contract will be subject to Board approval. This type of mid-term contract could save the City money in the near-term as well as allow staff to explore and potentially participate in a long-term, regional solution to biosolids processing.

Additionally, if the City receives favorable proposals, the opportunity to lease the biosolids composting facility could be explored. Renewable Sonoma, the private company selected by Zero Waste Sonoma to provide future, county-wide municipal organics processing and composting services, is interested in leasing the City's biosolids composting facility. With Board approval, the City has entered into an Exclusive Negotiation Agreement with Renewable Sonoma for the purposes of locating an organic materials processing facility adjacent to the treatment plant, the City's biosolids compost facility could be the location of such a future facility.

FISCAL IMPACT

None at this time.

ENVIRONMENTAL IMPACT

This action is exempt from the California Environmental Quality Act (CEQA) because it is not a project which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, pursuant to CEQA Guideline section 15378.

BOARD/COMMISSION/COMMITTEE REVIEW AND RECOMMENDATIONS

On May 30, 2019, the City Council/Board of Public Utilities Liaison Subcommittee participated in a study session on the City's Biosolids Program.

On August 26, 2019, the City Council/Board of Public Utilities Liaison Subcommittee met and unanimously supported staff's recommendation to issue an RFP to solicit proposals for the beneficial use of a portion of the City's biosolids.

ATTACHMENTS

Not Applicable.

CONTACT

Emma Walton
ewalton@srcity.org
(707) 543-4516