

FOR COUNCIL MEETING OF:
AGENDA ITEM NO.:
PUBLIC WORKS FILE NO.:

January 23, 2012
3.3 (g)

TO: MAYOR AND CITY COUNCIL
THROUGH: LINDA NORRIS, CITY MANAGER
FROM: ROBERT D. CHANDLER, PH.D., P.E.
INTERIM PUBLIC WORKS DIRECTOR
SUBJECT: OPPORTUNITY FOR GENERATING ADDITIONAL REVENUE AT
WILLOW LAKE WATER POLLUTION CONTROL FACILITY

ISSUE:

Shall Council approve conducting pilot studies at Willow Lake Water Pollution Control Facility to evaluate the potential for using the available excess treatment capacity to generate revenue from hauled waste?

RECOMMENDATION:

Staff recommends Council approve conducting pilot studies at Willow Lake Water Pollution Control Facility to evaluate the potential for using the available excess treatment capacity to generate revenue from hauled waste.

BACKGROUND:

The Willow Lake Water Pollution Control Facility (Willow Lake) has been modified during the life of the facility to process and treat seasonally large organic and hydraulic loads. Over time, the organic loads have diminished because of food processor closures and business relocations. The design maximum hydraulic capacity is only used during extreme rainfall events. Staff believes the available excess capacity could be used to serve additional customers, generate additional revenue and, if feasible, provide secondary benefits related to alternative fuels.

Public Works has been approached by a number of entities interested in working in partnership with the City under different scenarios that would use the excess capacity for treatment of hauled waste. Sufficient authority exists in the *Salem Revised Code* (SRC) Section 74, Pretreatment Requirements, to allow the use of the capacity. SRC 74.180 specifically allows hauled industrial wastewater to be discharged into the City's system, provided a permit is issued by the Director. A separate staff report details the code changes required to expedite this process. Staff is requesting Council approval to conduct pilot studies and to develop an appropriate rate structure. If the pilot is approved, staff will work to develop an agreement with the entities wishing to discharge into the City's system and bring the agreement to Council for approval.

Pilot studies will be conducted when the City seeks an evaluation period prior to granting a new industrial pretreatment permit or amending an existing permit. An evaluation period is necessary when the City does not have direct experience in treating

a specific type of waste. Pilot studies will be used to determine the impact of the load on the plant, how much testing is required, and whether or not the waste can be treated at the price a customer is willing to pay. A pilot study will allow the City to limit volume and duration of waste disposal and to terminate the arrangement at any time.

One of the pilot studies currently anticipated will consist of directly injecting the residual from the production of biodiesel into the digestion process. A local company that currently transports its residual to Portland is interested in participating in the pilot study. If the pilot study is successful, the treatment of the residual would generate additional methane gas that would supplement methane currently produced and would be used for power and heat generation. This concept was identified during the Sustainable Cities Initiative as a part of the Industrial By-Products Component. The results of the pilot study will be used to evaluate the potential costs and benefits of using the available excess treatment capacity at Willow Lake to treat directly injected residual by-product.

In addition to the hauled industrial wastes being considered for a pilot study, several municipal treatment facilities have approached Salem to gauge the City's interest in accepting and treating hauled domestic sewage sludge when the capacity of their facilities is reduced during construction projects. It may be necessary to conduct a pilot study before establishing a full-scale program to treat hauled domestic municipal sewage sludge. If the results of the pilot study indicate that such a program would result in positive net revenue, the program will be established and conducted through Intergovernmental Agreements.

FACTS AND FINDINGS:

- Excess treatment capacity exists at Willow Lake.
- Sufficient authority exists in the SRC 74, Pretreatment Requirements, to allow the use of the capacity.
- Multiple opportunities have been identified for using this capacity and providing additional revenue to the City.
- Regulations and safeguards exist in SRC 74 to ensure protection of the facility; to comply with City, state, and federal regulations; and to protect the environment.
- Staff will work to develop agreements with user customers wishing to discharge hauled waste into the City's system and bring the agreement to Council for approval.
- Agreements with the user customers would be submitted to Council for approval and would contain language allowing immediate suspension of any pilots or other use of the City's facilities at Salem's request.
- Rigorous monitoring and scientific evaluation will be conducted to ensure regulatory compliance.

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- Municipalities around the U.S. and in Oregon are currently using excess treatment capacity to treat hauled wastes.
- Staff will return to Council with an amended Fee Resolution allowing negotiation of fees for pilot projects.
- Individual fees would be contained in agreements to be approved by Council.

Ward All
January 17, 2012