

COUNCIL ACTION FORM

**SUBJECT: SECONDARY FEED SYSTEM FOR PRE-PROCESSED BOILER FUEL
AT RESOURCE RECOVERY PLANT**

BACKGROUND:

The City's Resource Recovery Plant annually processes 50,000 tons of municipal solid waste (MSW), recovering approximately 72% of all materials received. As the MSW travels through the processing system, several rotary disc screens intended to remove sand, glass, dirt, and grit also sort out smaller burnable material. In an effort to reclaim as much refuse derived fuel (RDF) as possible and reduce the amount of waste that is landfilled, staff identified a location for a secondary feed system to bypass traditional processing. This system would feed pre-processed, boiler-ready fuel directly from a truck into the underground pipeline that leads to the storage facility in the Power Plant's coal yard. Some examples of locally generated materials that could be inserted are sawdust or wood chips, shelled corn, and crumb rubber.

In the past, these smaller preprocessed materials were sent directly to the Boone County Landfill, since if they were processed through the Plant, they would mechanically be sorted out and ultimately still be transferred to the landfill. This additional feed system will allow Resource Recovery personnel to unload and transfer boiler-ready fuel with a 100% recovery rate to the Power Plant for combustion; thereby reducing both the amount of coal consumed and the amount of material sent to the landfill.

Plans and specifications were prepared by Brown Engineering with an estimated cost of \$94,000. On February 28, 2012, City Council authorized preliminary approval of these plans and specifications and Notice to Bidders.

On March 20, 2012, bids were opened for this project. A summary of all bids follows:

Bidder	Bid Amount
A-Lert Construction Services	\$62,040.00
PMI Iowa, LLC	\$78,584.00

Council previously approved a Solid Waste Alternative Program (SWAP) Grant of \$24,950 from the Iowa Department of Natural Resources for this project as a forgivable loan. This means that when the terms of the contract are met, the funds will not need to be repaid. The Resource Recovery budget currently has \$23,056 remaining for construction of this project. The required additional funding of \$14,034 for this project will come from savings in the FY 2011/12 Capital Improvements Plan (CIP) Resource Recovery System Improvements account, bringing total available funding to **\$62,040**.

Resource Recovery is planning to execute the CIP project Scale Platform Replacement as soon as possible. In order to reduce multiple outages where customer service would be disrupted in the course of increased seasonal tonnages, Resource Recovery would like to perform these projects concurrently and is requesting expedited approval of contract and bond with the award of bid for the Secondary Feed System project.

ALTERNATIVES:

- 1a. Accept the report of bids for the Secondary Feed System for Pre-processed Boiler Fuel.
 - b. Approve the final plans and specifications for the Secondary Feed System for Pre-processed Boiler Fuel.
 - c. Award the Secondary Feed System for Pre-processed Boiler Fuel to A-Lert Construction Services of Fredonia, Kansas, in the amount of \$62,040 and authorize the use of \$14,034 in savings from the Resource Recovery Improvements Program in the 2011/12 CIP.
 - d. Approve contract and bond simultaneously with the award of bid to A-Lert Construction Services to enable the Scale Project and Secondary Feed System projects to run concurrently and minimize any outage required or reduction in customer service at the Resource Recovery Plant.
2. Reject bids and do not award contract at this time.

MANAGER'S RECOMMENDED ACTION:

The installation of a secondary feed system will reclaim more refuse derived fuel (RDF) and reduce the amount of waste sent to the landfill. Staff has identified a location within the Plant for a secondary feed system to bypass traditional processing. This system will feed pre-processed, boiler-ready fuel directly from a truck to the underground pipeline and into the storage facility in the coal yard. Funding for this project will come from a forgivable DNR loan and from savings identified within the existing budget.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby accepting the report of bids, approving the final plans and specifications, and awarding the contract to A-Lert Construction Services of Fredonia, Kansas, in the amount of \$62,040 while authorizing the use of \$14,034 in savings from the Resource Recovery Improvements Program in the 2011/12 CIP to help finance this project.