

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 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 to the underground pipeline and into the storage facility in the coal yard. Some examples of locally generated materials that could thus 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, because if processed they would be mechanically sorted out and would ultimately still be transferred to the landfill. This additional equipment will allow Resource Recovery personnel to unload and transfer boiler-ready fuel with a 100% recovery rate to the Power Plant for combustion, and thus continue to reduce the amount of coal consumed.

This equipment was included in the 2010-15 Capital Improvements Plan (CIP) in the "Pre-Processed Material Handling Building and Truck Bay" project for FY 2012/13. Knowing of our need for this new equipment, the Iowa Department of Natural Resources (IDNR) proposed and has approved a Solid Waste Alternative Program (SWAP) Grant of \$24,950 for this project as a forgivable loan. This means that when the terms of the contract are met, the funds **do not** have to be repaid. The IDNR agreement identifies a total project budget of \$60,000. Of this, a credit of \$10,000 is given for existing equipment to be used, and a local match of \$25,050 is required.

The required matching funds of \$25,050 could be obtained from the \$59,000 savings in the Resource Recovery Recyclables Building and Staging Area project (Construction Phase I – Parking Lot) that was funded at \$120,000 from the Resource Recovery Fund. The cost for this project is estimated to be \$5,000 for engineering, \$15,000 for contractor equipment installation, and \$30,000 for the equipment.

ALTERNATIVES:

1. Approve the SWAP Grant agreement with IDNR for a forgivable loan in the amount of \$24,950, and authorize purchase and installation of the secondary feed system for pre-processed boiler fuel at the Resource Recovery Plant.
2. Defer additional landfill diversion using this equipment until FY 202/13, when it is scheduled in the CIP.

MANAGER'S RECOMMENDED ACTION:

Landfill diversion of pre-processed boiler fuel can begin as soon as the system is complete, reducing the expense of landfill tipping fees and transportation cost to the landfill. In addition, funding for nearly half the cost of this project is now available from the IDNR through a forgivable loan.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby approving the SWAP Grant agreement with IDNR for a forgivable loan in the amount of \$24,950, and authorizing purchase and installation of the secondary feed system for pre-processed boiler fuel at the Resource Recovery Plant.