

CITY COUNCIL
COMMUNICATION:

03-194

AGENDA:

APRIL 21, 2003

SUBJECT:

AUTOMATED
MUNICIPAL SOLID
WASTE CONTAINER
LEASE/PURCHASE

TYPE:

RESOLUTION
ORDINANCE
RECEIVE/FILE

SUBMITTED BY:

WILLIAM G. STOWE
PUBLIC WORKS
DIRECTOR

ITEM 73D

**OFFICE OF THE CITY MANAGER
CITY OF DES MOINES, IOWA**

SYNOPSIS —

On March 24, 2003, by Roll Call No. 03-683, the City Council received a recommendation to purchase 52,000 96-gallon carts at \$40.00 each and 3,000 64-gallon carts at \$36.70 each for a total cost of \$2,190,100. Staff recommends purchase of the carts under the contract entered into between the City of Des Moines and Toter, Inc., (Larry Boppe, President, 841 Meacham Road, Statesville, North Carolina 28677) as authorized by Roll Call No. 02-088 dated January 7, 2002. Procurement of the carts will enable automated automated/semi-automated solid waste collection throughout Des Moines.

FISCAL IMPACT —

Funding for procurement of the carts, which is estimated to cost \$2,190,000, will be arranged for under lease/purchase agreement, paid for out of the Solid Waste Enterprise Account. Funding for the purchase is contingent upon the projected fee increase and final approval of the finance mechanism for lease/purchase arrangements.

RECOMMENDATION —

Approval subject to the provisions of the City's master lease/purchase agreement.

BACKGROUND —

On April 2, 2001, automated solid waste collection began for approximately 4,000 households in Des Moines. The program expanded to approximately 11,500 households in 2002. Not only has this service been widely supported by our customers, but automation is the crucial component in containing future costs. The Public Works Department is recommending the purchase of 55,000 carts to support automating residential service. The terms of the contract between the City of Des Moines and Toter, Inc. were approved by Council Roll Call No. 02-088 dated January 7, 2002.

The contract has a ten year term and guaranteed prices for carts. Based on the negotiations with City staff, Toter has reduced their

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price from \$43.16 plus \$2.45 for assembly and delivery for a total of \$45.61 to \$40.00 each for 96-gallon carts assembled and delivered to Des Moines residents. In addition, a price of \$36.70 was negotiated for partially-assembled 64-gallon carts. Under the terms of the contract, Toter would commence delivery of carts late spring and residents would be allowed to commence using them upon delivery. Sixty-four gallon carts will be made available later to those residents desiring a slightly smaller unit. Absent a full fleet of automated trucks, the City's remaining rear load compaction trucks would be retrofitted with a device referred to as a "flipper" which would allow for the semi-automated handling of the carts until such time as the scheduled purchase of additional automated trucks is completed.

The Toter cart in use in the city of Des Moines is a rotationally molded unit produced using the same processes as that for liquid holding tanks, containers, boat hulls, and outdoor play equipment. In rotational molding, the motion of the mold distributes material under low force levels of gravity and centrifugal acceleration as the plastic material conforms to the geometric shape of the heated mold. This process creates moldings of low stress as opposed to other plastic processes such as injection molding where the plastic is driven under very high pressure through thin walls where the plastic is stretched under air pressure. The plastic used in rotational molding is low and medium density polyethylene, which has greater elongation and impact resistant qualities. This is important when using a hydraulic arm to grip and lift.

The alternate technology to rotational molding, injection molding, utilizes a high-density polyethylene wherein plastic is driven under very high pressure or blow molded wherein the plastic is stretched under air pressure. High-density polyethylene has less elongation capability. Based on the resin characteristics of low-density polyethylene, staff considers the rotational molded carts to be more compatible with current operations.

In summary, automation of the City's residential municipal solid waste collection is crucial to continued economic service. Through automation, staff efficiencies will be improved while employee injuries are reduced

