

COUNCIL ACTION FORM

SUBJECT: WATER POLLUTION CONTROL FACILITY BIOSOLIDS DISPOSAL

BACKGROUND:

The City's Water Pollution Control (WPC) Facility is an advanced secondary treatment plant. The solids removed by the treatment process go through an extensive digestion operation that converts it into a nutrient-rich by-product called biosolids. The digestion operation stabilizes the waste, making it suitable for beneficial re-use by land application to agricultural ground. The material provides essential crop nutrients and also acts as a soil conditioner. The Ames facility produces an average of four million gallons of treated biosolids each year. Biosolids are stored in the facility's 3.1 million gallon lined lagoon and 925,000-gallon secondary digester. Historically, biosolids have been removed from the lagoon and digester storage by City staff with a lagoon dredge and were land-applied on City-owned farm ground located directly adjacent to the Ames WPC Facility.

The existing lagoon dredge and land application equipment were purchased when the WPC Facility was constructed in 1988. Significant repairs to this equipment are needed, and the City's Fleet Services Department has suggested that, even with major maintenance, the equipment likely has less than five years of remaining useful life. Replacement of this equipment would require a significant capital investment. Additionally, since biosolids disposal is currently performed by WPC Facility maintenance staff, maintenance issues must be put on hold for four to six weeks every fall until disposal is completed.

The WPC Facility is now over twenty years old. Maintenance needs are increasing, and delaying these maintenance repairs can create operational difficulties. Additionally, a recent study performed by Howard R. Green Company revealed that contracting of biosolids hauling and disposal would be more cost-effective than investing significant funds into replacing equipment and continuing to use City staff for primary hauling and disposal of the biosolids.

Requests for Proposals to dispose of biosolids were issued on July 26, 2010 with proposals due on August 17. A copy of the bid tabulation is attached. Eight proposals were received with Nutri-Ject Systems, Inc of Hudson, Iowa, submitting the lowest bid in the amount of \$46,200.00 to dispose of an estimated 2.5 million gallons of biosolids each fall. The engineer's estimate for this work was \$62,500.

Should this contract be awarded, City staff will continue to apply smaller quantities each spring. The 2010/11 operating budget includes \$150,000 for biosolids hauling and disposal, providing a reserve if additional quantities need to be applied by the

contractor. This contract is renewable annually for up to a total of three years, depending on successful performance by the contractor each year.

ALTERNATIVES:

1. Award a contract for biosolids disposal to Nutri-Ject Systems, Inc. of Hudson, Iowa for year one of a three-year contract in the amount of \$46,200.00.
2. Do not award a contract at this time, and direct staff to pursue equipment replacement and to continue performing this operation using City employees and equipment.

MANAGER'S RECOMMENDED ACTION:

The existing WPC Facility biosolids disposal equipment has reached the end of its useful life and will require a significant capital investment to replace. In the past, WPC Facility maintenance staff performed biosolids application, which required them to put maintenance issues on hold until application was completed. However, since the WPC Facility is now over 20 years old, maintenance needs have increased and require more staff attention. Additionally, a study performed by Howard R. Green Company determined that contracting of biosolids hauling and application would be a more cost-effective alternative to the City than investing significant amounts of money in new equipment and continuing to use City staff to dispose of biosolids. The current year operating budget includes \$150,000 for contracted biosolids disposal. The lowest responsive, responsible bid is below the engineer's estimate and within the approved budget.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby awarding a contract to Nutri-Ject Systems, Inc. of Hudson, Iowa in the amount of \$46,200.00 for year one of a three-year biosolids disposal contract.

CITY OF AMES, IOWAPh: 515-239-5125 * Fax: 515-239-5325
Mike Adair, Procurement Specialist II**Bid No. 2011-021****Water and Pollution
Control Department****Three-Year Biosolids
Disposal Operation**

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BIDDERS						
Nutri-Ject Systems, Inc.	\$2,500.000	\$0.01748	\$43,700.000	\$46,200.000	\$0.01748	
United Liquid Waste Recycling	\$1,200.000	\$0.0195	\$48,750.000	\$49,950.000	\$0.0195	
Wulfekuhle Injection & Pumping	\$2,500.000	\$0.02	\$50,000.000	\$52,500.000	\$0.02	
Neese Inc.	\$1,000.000	\$0.0269	\$67,250.000	\$68,250.000	\$0.021	
Chamness Technology, Inc.	\$12,200.000	\$0.0259	\$64,750.000	\$76,950.000	\$0.0259	
Terra Renewal LLC	\$13,500.000	\$0.027	\$67,500.000	\$81,000.000	\$0.027	
Merrrell Bros., Inc.	\$9,500.000	\$0.039	\$97,500.000	\$107,000.000	\$0.035	
DRT Biosolids	\$500.000	\$0.048	\$120,000.000	\$120,500.000	\$0.048	
Synagro	No Bid					