



City of Grand Island

Tuesday, October 27, 2009

Council Session

Item G6

**#2009-277 - Approving Engineering Services for Uranium
Removal Methods Evaluation**

Staff Contact: Gary R. Mader

Council Agenda Memo

From: Gary R. Mader, Utilities Director
Wesley Nespor, Asst. City Attorney/Purchasing

Meeting: October 27, 2009

Subject: Uranium Removal Methods Evaluation Engineering Services – Request for Proposals

Item #'s: G-6

Presenter(s): Gary R. Mader, Utilities Director

Background

The City's municipal water system is supplied primarily from its Platte River Wellfield. This wellfield is comprised of 21 wells and a pumping station. Recent testing for state regulatory requirements has indicated composite uranium levels to be approaching the Maximum Containment Level (MCL) established by the EPA. Testing of individual wells for uranium has indicated some wells exceeded the MCL. To allow use of these wells during high water system demand periods, additional piping was installed in the past year to allow blending with lower uranium concentration wells.

As a proactive measure, in case uranium levels can not be controlled below the new MCL by well blending, the department recommends that more detailed investigation be undertaken to determine uranium removal methods and evaluate those best suited for the Grand Island system. Factors in the evaluation would include; the review of available technologies; amount of uranium removal; capital costs; operational costs; and waste disposal. This type of evaluation is best performed by engineering consultants with wide ranging experience in the design of water treatment systems and with expertise in treatment economics and water chemistry.

A Request for Proposals was developed and advertised in accordance with City Purchasing Policy. The Request for Proposal was based on firms providing a "not to exceed" price for a preliminary evaluation of uranium removal options. Should further evaluation of treatment processes, such as pilot testing, or actual implementation of treatment processes be required, billing rates were required as part of the proposals to allow the City to negotiate subsequent phases of a project should that be deemed necessary. Company and personnel experience in the field of water treatment were

required for evaluation of the proposals, including detailed design and construction management experience.

History:

In 2003, the new regulation placing a MCL on uranium in drinking water became effective. Uranium is a naturally occurring element in the aquifers of Nebraska and other states across the nation. Implementation of the new MCL began with the sampling of the state's municipal water systems in accordance with the EPA specified testing protocol. Samples of the Grand Island water supply for regulatory compliance were first taken in 2004. The sampling protocol requires testing for four consecutive quarters, with the average of the year long sampling results being the level by which system compliance is established.

Sampling and testing of the Grand Island water system thus far show full compliance with the EPA regulation. Uranium is naturally occurring in the aquifer in central Nebraska. Uranium is not an acute concern but rather is a concern over a lifetime of exposure. According the *Neb-Guide from the University of Nebraska*, "...uranium in water supplies produces very little radioactivity, the health effects from exposure to uranium are primarily thought to be associated with the chemical properties of soluble uranium. Studies suggest that ingestion of high levels of uranium may be associated with an increased risk of kidney damage...Exposure to soluble uranium in drinking water has not been shown to increase the risk of developing cancer."

Discussion

The Request for Proposals for engineering services for the evaluation of uranium removal methods for the City's municipal water system was publically advertised in accordance with the City Purchasing Code. Proposals from the following firms were received:

Company

Olsson Associates
HDR Engineering, Inc.
CH2M Hill

Using a matrix of the Department's established evaluation criteria, which included Company Experience, Personnel Experience, Proposal Responsiveness, Pricing and Commercial Terms, the proposals were reviewed by utility engineering staff. A tabulation of the evaluations factors indicated a consensus for HDR Engineering. A copy of the evaluation tabulation is attached.

Alternatives

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

1. Move to approve

2. Refer the issue to a Committee
3. Postpone the issue to future date
4. Take no action on the issue

Recommendation

City Administration recommends that the Council award the Proposal for the Uranium Removal Methods Evaluation-Engineering Services to HDR Engineering, Inc., of Lincoln, Nebraska.

Sample Motion

Move to approve the proposal from HDR Engineering, of Lincoln, Nebraska, for the Uranium Removal Methods Evaluation-Engineering Services as submitted.



Wes Nespor, Purchasing Agent

*Working Together for a
Better Tomorrow, Today*

**REQUEST FOR PROPOSAL
FOR
URANIUM REMOVAL METHODS EVALUATION ENGINEERING SERVICES**

RFP DUE DATE: October 8, 2009 at 4:00 p.m.

DEPARTMENT: Utilities

PUBLICATION DATE: September 22, 2009

NO. POTENTIAL BIDDERS: 4

SUMMARY OF PROPOSALS RECEIVED

CH2M Hill
Omaha, NE

Olsson Associates
Lincoln, NE

HDR Engineering, Inc.
Lincoln, NE

cc: Gary Mader, Utilities Director
Jeff Pederson, City Administrator
Dale Shotkoski, City Attorney
Pat Gericke, Utilities Admin. Assist.
Tim Luchsinger, Utilities Assist. Director

Bob Smith, Assist. Utilities Director
Mary Lou Brown, Finance Director
Wes Nespor, Purchasing Agent
Karen Nagel, Utilities Secretary

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RESOLUTION 2009-277

WHEREAS, the City's municipal water system is supplied primarily from its Platte River Wellfield; and

WHEREAS, recent testing for state regulatory requirements has indicated composite uranium levels to be approaching the Maximum Containment Level (MCL) established by the EPA; and

WHEREAS, additional piping was installed in the past year to allow blending with lower uranium concentration wells at the Wellfield; and

WHEREAS, in case uranium levels can not be controlled below the new MCL by well blending, the Utilities Department recommends that more detailed investigation be undertaken to determine uranium removal methods and evaluate those best suited for the Grand Island system by engineering consultants with wide ranging experience in the design of water treatment systems and with expertise in treatment economics and water chemistry; and

WHEREAS, a Request for Proposal was developed and advertised in accordance with City Purchasing Policy, providing a "not to exceed" price for a preliminary evaluation of uranium removal options; and

WHEREAS, the proposal of HDR Engineering, Inc., of Lincoln, Nebraska for the Uranium Removal Methods Evaluation Engineering Services was submitted in accordance with the terms and the specifications and all other statutory requirements contained therein at a not to exceed cost of \$79,704.00.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that the proposal of HDR Engineering, Inc., of Lincoln, Nebraska, is hereby approved.

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Adopted by the City Council of the City of Grand Island, Nebraska, October 27, 2009

Margaret Hornady, Mayor

Attest:

Approved as to Form ☐ _____
October 22, 2009 ☐ City Attorney

RaNae Edwards, City Clerk