



City of Grand Island

Tuesday, January 13, 2015

Council Session

Item G-11

#2015-8 - Approving Designation of Sole Source Provider for Trojan UV Disinfection Lamps at the Wastewater Treatment Plant

Staff Contact: John Collins, P.E. - Public Works Director

Council Agenda Memo

From: Marvin Strong PE, Wastewater Treatment Plant Engineer

Meeting: January 13, 2015

Subject: Approving Designation of Sole Source Provider for Trojan UV Disinfection Lamps at the Wastewater Treatment Plant

Item #'s: G-11

Presenter(s): John Collins PE, Public Works Director

Background

City of Grand Island Wastewater Treatment Plant Ultraviolet (UV) disinfection system is a Trojan system UV3000 Plus. In the system, there are a total of 4 UV banks. Each bank is equipped with 104 UV lamps, a total of 416 UV disinfection lamps. We are undergoing a project that replaces one bank of UV lamps annually starting FY 2013 and finishing by FY 2016.

Discussion

City of Grand Island UV disinfection is a Trojan UV3000 Plus system which is using the UV disinfection lamps to inactivate pathogens, such as *E. coli*, before discharging the effluent.

Disinfection efficiency and effectiveness decreases with time and use due to lamp aging. Since UV system was placed in service in 2006, different UV disinfection lamps were used to replace the old UV lamps. Currently, UV disinfection banks are a combination of Trojan and an off brand manufacturer.

Over the years, we have experienced operation and maintenance issues using non-Trojan lamps in the Trojan UV disinfection system. Different manufactured lamps have different life expectancy and intensity which is key to the UV disinfection process.

Any potential upfront savings by purchasing low price UV lamps does not result in an overall life cycle cost savings over the life of the lights.

MC² Inc. of Omaha, Nebraska is the secured territory vendor of Trojan UV disinfection lamps and providing service for Trojan UV system.

We are requesting that MC² Inc to be designated as the sole source provider for Trojan UV disinfection lamps. This would allow the plant to optimally operate and maintain the UV system.

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 pass a resolution designating MC² Inc as the sole source provider for Trojan UV disinfection lamps.

Sample Motion

Move to approve the designation of MC² Inc as the sole source provider for Trojan UV disinfection lamps.

December 16, 2014

City of Grand Island, NE
3013 E Swift Road
Grand Island, NE
68801

Ms. Jue Zhao:

RE: Trojan System UV3000Plus™ Replacement Parts

In the Engineered Submittal Package for the Trojan System UV3000Plus™, Trojan provided an equipment performance guarantee stating that the system will meet the required level of disinfection provided that the system is operated and maintained in accordance with recommendations made by Trojan Technologies.

In order for this equipment guarantee to be maintained, it is imperative that the appropriate components and replacement parts be used in the system. There are key replacement parts and system components that directly influence the performance and reliability of the system. Among these critical replacement parts are the UV lamps, sleeves, electronic ballasts, wiper seals, printed circuitry etc. Without using lamps, ballasts, and other components that are approved and validated by Trojan Technologies, we cannot guarantee that the system will provide the required germicidal output. Subsequently, we cannot guarantee that the required UV dose is being delivered, if lamp output, ballast efficiency and system programming is unknown.

In order to keep the equipment performance guarantee intact, it is recommended that specialized system components be purchased and contracted from MC² Inc who is the Trojan authorized representative for the state of Nebraska. Trojan purchases only validated system components (lamps, ballasts etc.) from our suppliers and only those components meeting our performance standards are passed on the customer.

If you have any questions regarding this matter, or require any additional information please do not hesitate to contact me.

Best regards,
TROJAN TECHNOLOGIES

Judy Georgijev

Judy Georgijev
Municipal Territory Representative

RESOLUTION 2015-8

WHEREAS, the City of Grand Island Wastewater Treatment Plant (WWTP) uses Trojan UV disinfection system at the plant; and

WHEREAS, MC² Inc of Omaha, Nebraska is the secured territory vendor of Trojan UV disinfection lamps; and

WHEREAS, it is recommended that MC² Inc of Omaha, Nebraska be designated as the sole source provider for Trojan UV disinfection lamps.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that the MC² Inc of Omaha, Nebraska is hereby designated as the sole source provider for Trojan UV disinfection lamps.

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Adopted by the City Council of the City of Grand Island, Nebraska, January 13, 2015.

Jeremy L. Jensen, Mayor

Attest:

RaNae Edwards, City Clerk

Approved as to Form	☒ _____
January 9, 2015	☒ City Attorney