



November 29, 2016

Christopher Johnson, President
KW Resort Utilities Corp.
6630 Front Street
Key West, Florida 33040

RE: Rehabilitation of Existing Evoqua WWTP Trains

The two existing Advanced Wastewater Treatment (AWT) units at KW Resort Utilities Corporation (KWRU) are packaged treatment units that combine the following treatment processes into a single integrated circular tank:

- Influent equalization
- Aerobic treatment, including nitrification
- Anoxic treatment, including denitrification
- Re-aeration
- Effluent clarification with scum removal and sludge rakes
- Return/waste activated sludge pumping system
- Aerobic sludge digestion

Treatment systems of this kind are frequently called "package plants" since the entire treatment process is provided by a single supplier, with all necessary treatment processes included in a single "package". The design of both the mechanical and the biological processes is provided by the supplier, with all the components integrated into a single treatment system. The two existing treatment units each have a treatment capacity of 0.250 MD AADF and were provided with a process warranty, guaranteeing that the systems would meet AWT standards. The systems were designed and constructed by Evoqua (formerly Siemens).

Weiler Engineering has inspected the two existing AWT treatment trains at the KWRU facility. As with all wastewater treatment systems manufactured with coated steel, these units need periodic treatment and rehabilitation for corrosion, including replacement of corroded components, as well as enhancements to treatment components.

It is my professional opinion that Evoqua should be considered a Sole Source provider of the needed work for the following reasons:

- The treatment units rely on the steel members for structural support. Detailed structural drawings are not available. Fabrication of substitute components could result in inadequate structural strength and potential structural failure.
- Evoqua provided the existing two treatment units designed specifically for the Stock Island service area and the specific raw wastewater characteristics associated with the system.
- Each treatment unit was designed with specific hydraulic detention times, oxygen transfer efficiencies, biological uptake rates and sludge settling characteristics necessary to achieve AWT treatment. Any modifications to the flow characteristics or oxygen transfer rates may negatively impact the systems' abilities to meet the AWT treatment requirements.
- Evoqua provided a process warranty, guaranteeing the ability of the systems to meet AWT treatment standards. Modifications to the treatment systems by others would void the process warranty.
- The treatment units are unique mechanical systems comprised of numerous interconnected components that must function as a whole. Detailed dimensional drawings of the numerous individual components are not available. Fabrication of substitutes would likely result in improper fit without detailed dimensional drawings.

For the above reasons, Evoqua should be considered a Sole Source provider and the only viable option for the rehabilitation of the two existing treatment units.

If you have any questions or need further information, please let me know.

Sincerely,



Edward R. Castle, PE
Weiler Engineering Corporation