

ENGINEERS

SURVEYORS

PLANNERS

September 19, 2022

06496-0012

Mr. Adam Steurer, PE Utilities Engineer City of Hendersonville 305 Williams Street Hendersonville, NC 28792

RE: Sole Source Justification for WWTF Ultraviolet Disinfection Improvements Project

Mr. Steurer:

A Basis of Design Report for the WWTF Ultraviolet Disinfection Improvements project was completed in March 2022. In this report, alternatives to expand the existing ultraviolet (UV) disinfection system capacity were evaluated, alternative UV disinfection systems were analyzed, and recommendations for expansion and basis of design equipment selection were provided. The recommendation was made for the installation of a Trojan UVSigna disinfection system, parallel to the existing Trojan UV4000 disinfection system which is to remain in service for redundancy. The Trojan UVSigna disinfection system was recommended as the basis of design equipment for the following reasons:

- 1. Compatibility with the existing Trojan UV4000 disinfection system, allowing complete integration of UV disinfection system controls between the new and existing systems, and a single point of contact for UV disinfection equipment maintenance
- 2. Smaller site footprint versus comparable UV disinfection equipment, resulting in fewer impacts to the existing utility building adjacent to the existing disinfection system
- 3. Lowest 20-year net present value versus comparable UV disinfection equipment

Per NC G.S. § 143-129(e)(6), the compatibility of the new UV disinfection system with the existing Trojan UV4000 disinfection system is an overriding consideration for this project. Compatibility between the new and existing systems is required to ensure WWTF effluent is adequately disinfected to meet the facility's NPDES permit requirements prior to discharge under all possible operating conditions. The Trojan UVSigna system is the only system that is able to address this concern and achieve the project objectives. Therefore, McKim & Creed recommends the direct purchase of the Trojan UVSigna disinfection

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equipment by the City of Hendersonville. Per the attached letter from Trojan Technologies, EW2 Environmental is the sole provider of the Trojan UVSigna disinfection equipment in North Carolina.

Please do not hesitate to contact our office at (704) 841-2588 if there are any questions regarding these recommendations.

Sincerely,

McKIM & CREED, Inc.

Digitally signed by Zachary Trammel, PE Location: Charlotte, NC Contact Info: zframmel@mckimcreed.com Date: 2022.09.19 16:58:54-04'00'

Zachary Trammel, PE Project Manager

cc: Lee Smith – Utilities Director Brent Detwiler, PE – City Engineer

Attachments:

1. Trojan Technologies Sole Source Letter





September 14, 2022

Zachary Trammel, PE Project Manager McKim & Creed, Inc.

Dear Mr. Trammel,

This letter certifies that EW2 Environmental located at 7245 Pineville-Matthews Rd #10, Charlotte, NC 28226 is the sole provider of Trojan Technologies: Municipal Disinfection UV Systems, UVAOP Environmental Contaminant Treatment Systems and Salsnes Filter/Systems in North Carolina and South Carolina.

If you need any addition information I can be reached at 519 457 3400 ext. 2235 or by email at mshortt@trojantechnologies.com

Best regards,

Michael Shortt Regional Manager – US South East and Eastern Canada Team Leader – Municipal Designers North America