

June 20, 2024

06496-0015

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

RE: Sole Source Justification for WWTF Biosolids Thermal Dryer Equipment

Dear Mr. Steurer:

A Basis of Design Report (BODR) for the City of Hendersonville WWTF Biosolids Thermal Dryer project was prepared by McKim & Creed, Inc. and is attached to this letter. The BODR established the performance criteria for the biosolids thermal dryer equipment required for this project, identified the compatibility criteria required for biosolids thermal dryer equipment applicable to the implementation of this project, and evaluated biosolids thermal dryer equipment alternatives to identify equipment that met the performance criteria and compatibility requirements. The evaluation of equipment alternatives included a comparison of capital and life cycle costs for each alternative considered. The BODR determined that the Model 1050 direct-fired medium-temperature belt dryer manufactured by Gryphon Environmental is the only biosolids thermal dryer equipment available that can meet the performance and compatibility criteria, and it was found to result in the lowest capital and life cycle costs as shown in Table 1 below.

Table 1 – Equipment Alternatives Cost Comparison

	Gryphon Belt Dryer	Huber Belt Dryer BT	LCI Thin Film Dryer
Equipment Cost	\$3,328,500.00	\$5,700,500.00	\$4,376,800.00
Project Capital Cost	\$15,725,200.00	\$25,079,500.00	\$19,361,100.00
Total Life Cycle Cost	\$21,132,872.98	\$28,975,453.98	\$22,999,186.77

8020 Tower Point Drive

Charlotte, NC 28227

704.841.2588

Fax 704.841.2567

www.mckimcreed.com

The statutory requirements for the purchase of equipment using public money are described in NC G.S. § 143-129. Per this statute, competitive bidding is required for any purchase of equipment requiring an expenditure of public money in an amount equal to or more than \$90,000, unless the purchase is exempt from the requirements of this statute as outlined in G.S. § 143-129(e). Per McKim & Creed's interpretation of this statute, the following exemptions to the

requirements for competitive bidding outlined in G.S. § 143-129(e)(6) apply to, and justify the need for sole source procurement for, the City of Hendersonville's purchase of the Biosolids Thermal Dryer equipment for the Hendersonville WWTF Biosolids Thermal Dryer project.

- (i) performance or price competition for a product are not available;
- (ii) a needed product is available from only one source of supply;
- (iii) standardization or compatibility is the overriding consideration.

Per the findings of the BODR, the quality of the dried biosolids product generated by the biosolids thermal dryer equipment is a critical performance requirement of the equipment to ensure the marketability of the dried biosolids. The Gryphon Environmental belt dryer was found to be the only equipment alternative that is expected to meet the performance criteria without considerable additional expense to further process the dried biosolids product. Based on this, the Gryphon Environmental biosolids thermal dryer equipment qualifies for the exemption outlined in G.S. § 143-129(e)(6)(i) due to a lack of performance or price competition.

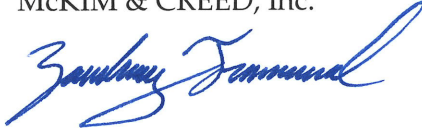
The biosolids thermal dryer equipment manufactured by Gryphon Environmental is highly specialized wastewater treatment equipment that is only manufactured by Gryphon Environmental, therefore G.S. § 143-129(e)(6)(ii) applies to the purchase of this equipment.

In addition, the biosolids thermal dryer equipment manufactured by Gryphon Environmental is the only equipment capable of meeting the performance criteria outlined in the BODR that can also be installed within the existing Covered Storage Shelter at the Hendersonville WWTF due to dimensional compatibility requirements. The existing Covered Storage Shelter at the Hendersonville WWTF is intended to be modified to enclose a portion of the shelter to house the new biosolids thermal dryer equipment, while the remainder of the existing Covered Storage Shelter will be used to store the dried biosolids product generated by the equipment. The Gryphon Environmental biosolids thermal dryer is the only equipment that can fit within the existing structure, while also leaving sufficient dried biosolids storage area available to meet permit requirements for biosolids storage capacity. The reuse of the existing Covered Storage Shelter avoids significant capital cost that would otherwise be incurred to construct a new facility to house the new biosolids thermal dryer equipment. Therefore, G.S. § 143-129(e)(6)(iii) also applies to the purchase of this equipment.

Therefore, McKim & Creed recommends that the City of Hendersonville proceed with the direct purchase of the Model 1050 direct-fired, medium-temperature

belt dryer as manufactured by Gryphon Environmental, per the procedures outlined in NC G.S. § 143-129(e)(6)(i) through (iii).

Sincerely,
McKIM & CREED, Inc.



Zachary Trammel, PE
Regional Manager

cc: Brent Detwiler, PE – Public Services Director
Devin Owen, PE – Utilities Engineer
Garrett Demoss – WWTF Manager

Attachments:

1. City of Hendersonville WWTF Biosolids Thermal Dryer – Basis of Design Report