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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 10, 2025

Mr. George E. Johnson III
Ecological Tanks, Inc.
2247 Highway 151 N
Downsville, LA 71234

Re: Approval of proprietary OSSF treatment system for:
Ecological Tanks, Inc.
Aqua Aire AA840-4290 Model

Dear George E. Johnson III:

We have received your request for a Texas Commission on Environmental Quality (TCEQ) review of the above-referenced proprietary system, with supporting documentation, on January 23, 2025. Cindy Rojas Annicchiarico of the TCEQ Technical Programs Team conducted the review, as required by 30 Texas Administrative Code (TAC) §285.5(b)(3). After reviewing your request and supporting documentation, TCEQ has determined that the AA840-4290 model treatment product meets the applicable technical requirements. **This letter serves as notification of approval for use in the State of Texas as an approved proprietary system.** Please be advised, the review of individual OSSF applications is a separate action and this letter is not an authorization to install an individual OSSF.

The Gulf Coast Testing (GCT) Supplemental Report SPE525 covering model AA840-4290, November 15, 2024, analyzes the proposed scale-up of Model AA500T to treat 840 gallons per day pursuant to Section 1.4 of the NSF/ANSI Standard 245 and NSF/ANSI Standard 40. The proposed Model AA840-4290 is proportionally equivalent to the tested unit, constructed of the same material, and has an equivalent flow system. This approval for the model AA840-4092 product is based on the GCT authorization that it and its performance conform with NSF Standard 40 for Class 1 residential wastewater effluent. Important conclusions from the provided GCT report are as follows:

- Gulf Coast Testing, LLC fully evaluated the Model AA500T residential wastewater treatment system under the criteria established by Standard 40 and certified the Model AA500T to meet the requirements established in Section 8.5 of Standard 40. The Model AA500T was also evaluated under the criteria for Standard 245 and certified to meet the requirements established in Section 8.4 of Standard 245.
- The compartment volumes of the proposed Model AA840-4290 are proportionately equivalent to the tested Model AA500T.
- The Jefe Air 500 (the privately labeled Hiblow HP-120) delivering 4.4 cfm at 2.2 psi was shown to allow the proposed Model AA840-4290 to meet the requirements of Section 5.11 of the Standards.

The system is designed to achieve treatment through a flow-through process consisting of pretreatment, aeration, and clarification. The shape and flow design of the proposed model is geometrically similar to the evaluated model. All other components, including the aerator alarm, air piping, aeration assembly, and recirculation assembly, will remain the same as the

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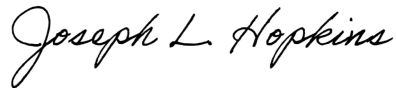
tested Model AA500T. Table 1 illustrates the compartment volume comparison between the AA500T and AA840-4290.

	AA500T		AA840-4290		
	500 gallons/day		840 gallons/day		
Compartment	Volume (Gallons)	HRT (Hours)	Volume (Gallons)	HRT (Hours)	Change %
Pretreatment	325	15.6	425	12.1	-22.2
Aeration	533	25.6	858	24.5	-4.2
Clarification	181	8.7	297	8.5	-2.3

Table 1. Compartment Volume comparison, as cited in the Gulf Coast Testing (GCT) Supplemental Report for Model AA840-4290, November 15, 2024

If you have any questions, or if we may be of assistance to you, please contact Cindy Rojas Annicchiarico in the TCEQ Technical Programs Team at (512) 239-5146 or via e-mail at Cindy.Annicchiarico@tceq.texas.gov.

Sincerely,



Joseph L. Hopkins, P.G.
Technical Programs Team Leader
Texas Commission on Environmental Quality

JLH/CRA