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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 12, 2024

Mr. Derrick Scoggins Enviro-Flo, Inc. 151 Custom Drive Flowood, Mississippi, 39232

Re: Approval of proprietary OSSF treatment system for:

Enviro-Flo, Inc.

Enviro-Flo Model NuWater B-840 and Maxx Air M-840

Dear Derrick Scoggins:

We have received your request for a Texas Commission on Environmental Quality (TCEQ) review of the above-referenced proprietary system, with supporting documentation, on May 13, July 17, August 6, and August 7, 2024. 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 NuWater B-840 and Maxx Air M-840 models treatment products meet 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 for Model NuWater B-840 and Maxx Air M-840 is dated May 1, 2024. This report details how the Enviro-Flo Model NuWater B-500 gallon-per-day system, previously approved by TCEQ on June 14, 2019, is scaled up to an 840 gallon-per-day system. The proposed Model NuWater B-840 and proposed Model Maxx Air M-840 are proportionally equivalent to the tested unit, constructed of the same material, and have an equivalent flow system. This approval for the Models NuWater B-840 and Maxx Air M-840 product is based on the GCT authorization that it and its performance conform with NSF Standard 40 for Class 1 residential wastewater effluent. Selected conclusions from the provided GCT report are as follows:

- Gulf Coast Testing, LLC fully evaluated the Enviro-Flo Model NuWater B-500 (formerly BioRobix Model B-500) residential wastewater treatment system pursuant to the guidelines established by Standard 40 and certified the Model NuWater B-500 to meet the criteria established in Section 8.5 of Standard 40. Gulf Coast Testing, LLC currently lists the Model NuWater B-500 and Model Maxx Air M-500 on GCT's website as approved to Standard 40.
- The material used to construct the Model NuWater B-500 is identical to the material for the proposed Model B-840 and Model M-840 and will meet the requirements of Section 4 of Standard 40.
- The construction process, design, and compartment volumes of the tested Model NuWater B-500 are proportionally equivalent to the proposed Model B-840 and Model M-840.
- The Model NuWater B-500 was tested and evaluated with a HiBlow HP-40 aerator. To satisfy the requirements of Section 5.11 of Standard 40, the aerator used on the

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proposed Model B-840 and Model M-840 must deliver 2.5 cfm. The Hiblow HP-80 will deliver 2.5 cfm at 2.4 psi, meeting the requirements of Section 5.11.

• The Models NuWater B-840 and Maxx Air M-840 will meet the requirements of Section 8.5 of Standard 40 and are approved pursuant to Section 1.4 of Standard 40.

The system achieves treatment by a flow through process. Wastewater enters into the pretreatment chamber which has a hydraulic capacity of 500 gallons. Wastewater moves from the pretreatment chamber into an aeration chamber through a three-inch collar opening located below the flow line. The aeration chamber has a hydraulic capacity of 807 gallons. Aeration is provided by a Hiblow Model HP-80 operating on a continuous cycle. The air is pumped through a fine bubble diffuser. Following treatment in the aeration chamber, settling is accomplished in a clarification chamber with a hydraulic capacity of 342 gallons. Table 1 illustrates the compartment volume comparison between the NuWater B-500 and NuWater B-840.

	B-500		B-840		
	500 gallons/day		840 gallons/day		
Compartment	Volume (Gallons)	HRT (Hours)	Volume (Gallons)	HRT (Hours)	Change %
Pretreatment	310	14.9	500	14.3	-4
Aeration	430	20.6	807	23.1	11.7
Clarification	155	7.4	342	9.8	31.3

Table 1. Compartment Volume comparison, as cited in the Gulf Coat Testing (GCT) Supplemental Report for Model NuWater B-840 and Maxx Air M-840, May 1, 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) 239-4156 or via e-mail at Cindy.Annicchiarico@tceq.texas.gov.

Sincerely,

Joseph L. Hopkins, P.G.

Technical Programs Team Leader

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Texas Commission on Environmental Quality

JLH/CRA