Jon Niermann, *Chairman*Bobby Janecka, *Commissioner*Catarina R. Gonzales, *Commissioner*Kelly Keel, *Executive Director* 



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

November 7, 2024

Mr. Bradley Hennig Business Development and Regulatory Affairs Manager Anua P.O. Box 77457 Greensboro, NC, 27417

Re: Approval of proprietary OSSF treatment system for:

Anua

Puraflo Coir models: Puraflo® Coir P200C\*2, Puraflo® Coir P200C\*3, Puraflo® Coir P200C\*4, Puraflo® Coir P200C\*5, Puraflo® Coir P200C\*6, and Puraflo® Coir P200C\*7.

## Dear Bradley Hennig:

We received your request for a Texas Commission on Environmental Quality (TCEQ) review of the above-referenced proprietary treatment systems with supporting documentation on August 20, 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 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 construct an individual OSSF.

This approval notes that the Puraflo® Coir P200C\*2, Puraflo® Coir P200C\*3, Puraflo® Coir P200C\*4, Puraflo® Coir P200C\*5, Puraflo® Coir P200C\*6, and Puraflo® Coir P200C\*7 products are approved for use in Texas as Class I treatment systems under NSF Standard 40. The NSF testing report indicates that the Puraflo Coir P200C\*2 testing was conducted under the provisions of NSF/ANSI Standard 40 for Residential Wastewater Treatment Systems (2022), NSF/ANSI Standard 350 for Onsite Residential and Commercial Water Reuse Treatment Systems (2022), Washington State (WAC 246-272A-0130), and Coliphage Reduction.

The Puraflo Coir P200C\*2 produced an effluent that successfully met the performance requirements established by NSF/ANSI Standard 40 for Class I systems and NSF/ANSI Standard 350. Similarly, the scale-up models are proportionally equivalent to the tested unit, constructed of the same material, and have an equivalent flow system, meeting the performance requirements established by NSF/ANSI Standard 40 for Class I and NSF/ANSI Standard 350.

As required by Title 30 TAC 285.32(c)(5)(A), proprietary units are approved to treat flows equal to or less than their rated capacity with an influent wastewater strength

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ranging from a 30-day average CBOD concentration between 100-300 mg/L. Proprietary units may be used as components in an overall treatment system treating influent stronger than 300 mg/L CBOD. However, the overall treatment system will be considered a non-standard treatment system (rather than a proprietary system) and shall meet the requirements set forth in 30 TAC 285.32(d). This approval also notes that the subject units include pump chambers. All pump tanks are subject to the requirements specified in 30 TAC §285.34(b).

The Puraflo Coir is an advanced secondary treatment system that further treats septic tank effluent before final dispersal. A typical Puraflo Coir system consists of (1) A septic tank with a commercially rated effluent filter connected to the tank outlet pipe; (2) Dosing tank and effluent pump to accommodate dosing of the septic tank effluent onto the organic fiber media, biofilter modules where advanced treatment occurs due to the physical, chemical, and biological processes in the organic fiber media; and (3) Site-specific, final effluent dispersal system.

The filtered septic tank effluent is collected under gravity in the pump tank. A timed dosing system is activated by a programmable timer, which pumps the effluent through a flow-splitting inlet manifold located at the base of the treatment modules. An orifice plate is located at the top of each inlet manifold, which allows the flows to be split equally and fed simultaneously to each rectangular distribution grid with helical spray nozzles underneath the module lid. The effluent percolates laterally and vertically through the depth of the organic fiber and emerges as liquid from the base of the system. The treated effluent is then collected and dispersed.

| Model Number             | Rated<br>Capacity<br>(Gallons<br>per Day) | Notes / Minimum Tank Requirements   |
|--------------------------|---|---|
| Puraflo® Coir<br>P200C*2 | 400                                       | Requires installation with a 1,000-gallon septic tank and 500-gallon dosing tank.   |
| Puraflo® Coir<br>P200C*3 | 600                                       | Requires installation with a 1,500-gallon septic tank and 750-gallon dosing tank.   |
| Puraflo® Coir<br>P200C*4 | 800                                       | Requires installation with a 2,000-gallon septic tank and 1,000-gallon dosing tank. |
| Puraflo® Coir<br>P200C*5 | 1,000                                     | Requires installation with a 2,500-gallon septic tank and 1,250-gallon dosing tank. |

| Model Number             | Rated<br>Capacity<br>(Gallons<br>per Day) | Notes / Minimum Tank Requirements   |
|--------------------------|---|---|
| Puraflo® Coir<br>P200C*6 | 1,200                                     | Requires installation with a 3,000-gallon septic tank and 1,500-gallon dosing tank. |
| Puraflo® Coir<br>P200C*7 | 1,400                                     | Requires installation with a 3,500-gallon septic tank and 1,750-gallon dosing tank. |

Table 1. Puraflo Coir Series Rated Capacity, as cited in the NSF Official Listing Certification which certifies that these products conform with the requirements of NSF/ANSI 40 for Residential Wastewater Treatment Systems.

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.

Joseph L. Hopkins

Technical Programs Team Leader

Texas Commission on Environmental Quality

JLH/CRA