THIS IS NOT AN ORDER

REQUEST FOR BIDS/PROPOSALS COVERSHEET

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

Procurement and Contract Services
703 E. Beach Dr. Ocean Springs, MS 39564

Date: _____

Name: _____

Company: _____

Address: _____

City/State/Zip:_____

Bid No. 26-39

THE UNIVERSITY OF SOUTHERN MISSISSIPPI is considering the purchase of the following item(s). We ask that you submit your bid and retain one copy for your files. Right is reserved to accept or reject any part of your bid. Your quotation will be given consideration if received on or before:

April 22, 2026 2:00 p.m. CDT

Buyer: Millissa Weaver

TERMS - Bidder should state terms of sale. Our terms are 2% ten days, net 45 days. These terms will apply per Mississippi law.
AWARDING CONTRACT - Cash terms will not be used as a basis for awarding contracts; however, the University will accept cash discounts when earned.

NOTE: If you cannot quote on the exact material shown, please indicate any exception giving brand name and complete specifications of any alternate. If additional space is required, use a separate sheet or letter of transmittal.

ITEM	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL NET PRICE
		Bid# 26-39 Bead Filtration System for the Oyster Hatchery and Research Center as per attached specifications. An itemized price list is required. **RFX 3160007989** PROPOSAL MUST BE RETURNED TO THE UNIVERSITY IN ACCORDANCE WITH THE SPECIFICATIONS. RFX NUMBER AND DATE OF BID OPENING MUST BE SHOWN ON THE OUTSIDE OF THE ENVELOPE IF USING THAT METHOD.		

We quote you as above-F.O.B. The University of Southern Mississippi. Shipment can be made in _____ days from receipt of order. DATE _____ TERMS _____
Return quotation to Procurement Services at above address.

AA/EOE/ADAI

Signature Required_____

Sun-Herald

NOTICE TO BIDDERS

Sealed bids will be received in the Shipping and Receiving Office (Room 1-148) of the Oceanography Building on Gulf Coast Research Laboratory's Halstead Campus at 703 E. Beach Drive, Ocean Springs, Mississippi, 39564, until **Wednesday, April 22, 2026 at 2:00 p.m.** for the purchase of the following:

Bid# 26-39 Bead Filtration System for the Oyster Hatchery and Research Center
RFX: 3160007989

Detailed specifications and electronic bid submission instructions may be secured from the above office upon request or our website https://www.usm.edu/procurement-contract-services/current-bids-and-sole-source-notices.php

Right is hereby reserved to reject any or all bids.

Millissa Weaver
Procurement Coordinator
The University of Southern Mississippi
Gulf Coast Research Laboratory
(228) 818-8001

Publish **2** times and charge to The University of Southern Mississippi:

04/05/2026
04/12/2026

Bid# 26-39
RFX 3160007989
University of Southern Mississippi
Bead Filtration System for the Oyster Hatchery and Research Center

Technical Specifications – Aquaculture Filtration Systems

1. General Requirements

The University of Southern Mississippi (USM) is soliciting sealed bids for the purchase and delivery of aquaculture bead filtration systems and associated components for use in recirculating aquaculture systems (RAS).

All equipment shall be new, unused, and of current production. Demonstration, refurbished, or prototype units will not be accepted.

The specifications contained herein establish minimum acceptable standards for performance and quality. Equipment offered shall meet or exceed all listed requirements. Equivalent products will be considered; however, USM reserves the right to determine equivalency based on performance, design, durability, and compatibility with existing systems.

Where manufacturer-specific technologies or features are referenced, they are intended to establish a benchmark for quality and performance. Bidders proposing alternate products must provide sufficient documentation to demonstrate equivalency.

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2. Intended Application

The filtration systems will be used in recirculating aquaculture systems (RAS) supporting aquatic species production. Systems must be capable of:

- Efficient removal of suspended solids
- Supporting biological filtration (nitrification)
- Continuous operation in high-solids aquaculture environments
- Automatic or semi-automatic backwashing without interrupting system operation
- Minimizing water loss during cleaning cycles

All units must be suitable for both freshwater and marine applications and be compatible with existing aquaculture infrastructure.

3A. High-Profile Bead Filter (Quantity: 4)

Preferred Model: Polygeyser HPPG-10 (or approved equal)

Minimum Technical Specifications

- Pressurized bead filtration system utilizing floating media for solids capture and biological filtration
- Incorporates air-assisted backwash technology (geysing action or equivalent)

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- Vessel constructed of fiberglass (required)
- Designed for continuous operation without system shutdown during backwash cycles
- Rated for high-solids aquaculture applications

Media Requirements:

- Supplied with fine bead media
- Minimum media capacity: 10 cubic feet
- Media shall provide:
    - High surface area for biological filtration
    - Effective solids capture and retention

System Components:

- Inlet and outlet connections
- Drain/waste discharge connection
- Pressure gauge ports
- Isolation valves, where applicable
- Air supply system compatible with linear pumps (approximate shutoff pressure: 10 psi)

Performance Criteria:

- Flow capacity: minimum 150 GPM
- Capable of automatic or manual backwash operation
- Designed to minimize water loss during cleaning cycles
- Diameter: approximately 38 inches
- Configuration: high-profile vertical design

Performance Expectations

- Efficient removal of fine suspended solids
- Reliable nitrification under standard RAS loading conditions
- Stable hydraulic performance with minimal head loss

3B. High-Profile Bead Filter – Large Capacity (Quantity: 1)

Preferred Model: Polygeyser HPPG-25 (or approved equal)

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Minimum Technical Specifications

All requirements listed in Section 3A apply, with the following additions:

- Larger-capacity unit designed for higher flow rates and biomass loads
- Vessel constructed of fiberglass (required)
- Increased bead volume and vessel size

Media Requirements:

- Supplied with standard bead media
- Minimum media capacity: 25 cubic feet

Performance Criteria:

- Flow capacity: minimum 375 GPM
- Diameter: approximately 59 inches
- Designed for commercial-scale aquaculture applications
- Backwash system must maintain effectiveness at higher operating volumes
- Structural design must support increased hydraulic and biological loading

Performance Expectations

- Capable of supporting larger system volumes and higher feed loads
- Maintains filtration and cleaning efficiency comparable to smaller units

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3C. Bead Filter System – Endurance Series (Quantity: 12)

Preferred Model: END4000K (or approved equal)

Minimum Technical Specifications

- Pressurized bead filter designed for solids removal and biological filtration
- Constructed from corrosion-resistant materials suitable for indoor or outdoor use
- Designed for moderate- to high-density aquaculture systems

Media Requirements:

- Supplied with standard bead media
- Minimum media capacity: 1.75 cubic feet
- Media shall provide:

  - High specific surface area
  - Effective solids capture

System Components:

- Pump (if part of packaged system) or compatibility with external pumps
- Multiport valve or equivalent flow control system
- Backwash functionality (manual or automated)
- Inlet and outlet connections
- Drain/waste discharge connection
- Pressure gauge ports
- Isolation valves, where applicable
- Air supply via linear pump (minimum performance: 1.3 CFM @ 3 PSI)

Performance Criteria:

- Flow capacity: minimum 18 GPM
- Capable of routine backwashing without disassembly
- Designed to minimize water loss during cleaning cycles
- Compatible with standard aquaculture piping systems
- Designed for ease of maintenance and long service life

Performance Expectations

- Effective removal of suspended solids
- Stable biological filtration during continuous operation
- Consistent performance across multiple units operating in parallel

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4. Delivery Requirements

- FOB Destination: University of Southern Mississippi
- Equipment shall be fully assembled to the maximum extent practical
- Vendor must coordinate delivery schedule with University personnel prior to shipment
- Vendor shall provide installation guidance and documentation upon request
- Each shipment must include:
  - Packing list
  - Operating manuals
  - Maintenance instructions

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5. Acceptable Manufacturers

The following manufacturer is preferred due to demonstrated performance in aquaculture applications:

- Aquaculture Systems Technologies (AST)

Equivalent manufacturers will be considered, provided all specifications and performance requirements are met or exceeded.