

ITEM OPPORTUNITY SYNOPSIS

Name of the item to be scouted: Closed-Loop Algae Controller

NAICS Code, if known:

Opportunities will be posted for 30 days unless another timeframe is given below.

Number of Days: 15

TECHNICAL INFORMATION

Describe the Item:

Please describe the item application/the end use of item.

The National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS), Northeast Fisheries Science Center (NEFSC) Milford Laboratory needs to purchase a closed-loop algae controller. Similar to the product manufactured in Canada by Industrial Plankton. The Closed-Loop Algae Controller will monitor and control provision of microalgal biomass from the Industrial Plankton bioreactors to the high-density, flow-through larval system. The Closed-Loop Algae Controller will provide a precise, continuous ration of microalgal food to the flow-through larval hatchery system, thereby providing multiple batches of larvae with intended, identical nutritional support. Microalgal monitoring data from the Closed-Loop Algae Controller must be consistent with data from the bioreactors, applying the same sensors and data-logging routines.

Provide the item number if applicable: (N95 Mask vs Protective Mask).

Supplier Information:

Type of Supplier being sought (select from list below)

Manufacturer

Contract Manufacturer

Distributor

Other (please specify)

Reason for scouting submission (select from list below)

BABA BAA Waiver

2nd Supplier

Price

Re-Shore

Past supplier no longer available

New Product Startup

Other (please specify)

Summary of Technical Specifications and Performance Requirements:

Describe the manufacturing processes (elaborate to provide as much detail as possible)

Electronic and Mechanical Assembly

Provide dimensions / size / tolerances / performance specifications of the item.

See the following for comparable specs: <https://industrialplankton.com/wp-content/uploads/2022/03/Industrial-Plankton-Technical-PBR-Catalog.pdf>

List required materials needed to make the product, including materials of product components, if applicable.

Components include: Touchscreen control system with PLC & proprietary software. Real-time density sensor. Manual water inlet needle valve. In-tank volume sensor. Bio secure algae dosing pumps. pH probe & transmitter. Automated pH buffer pump for closed loop pH control. Temperature sensing & logging

Are there applicable certification requirements?

See the following for comparable specs: <https://industrialplankton.com/wp-content/uploads/2022/03/Industrial-Plankton-Technical-PBR-Catalog.pdf>

Are there any applicable regulations that apply to the production of this item?

Yes

No

Please Explain:

Are there any other standards, requirements?

Yes

No

Please Explain:

Additional Comments:

Is there other information that would impact the item's performance or usefulness? Please explain.

Our technical subject matter experts have stated there is no existing, off-the-shelf product available to accomplish the very specialized (unique to our facility) need. Components to build a flow-control and monitoring system are available and presumably, others could assemble and program a system that would meet the application need. However, no other system would offer the advantages of compatibility with the existing bioreactor control and data-collection systems that will be located, literally, side-by-side with the new apparatus. Further, no other company would be starting design with an existing monitoring and control design

specific for microscopic algae – this aspect is unique to Industrial Plankton and is allowing production of the new, custom apparatus at substantially lower cost than a competitor starting from scratch.

Business Information

Volume and Pricing:

Estimated Potential Business Volume (i.e. #Units per day, month, year): One Time Purchase

Estimated Target Price / Unit Cost Information: (flexible and negotiable not accepted)
\$35,6600

Delivery Requirements:

When is it needed by? (Immediate, 30 days, 6 months, etc)

Describe packaging requirements (i.e., individually/ group packaging).

Where will this item be shipped?

Additional Comments:

Is there other information you would like to include?

Upload photos and/or diagrams of the item (helpful but not required).