

# State of Alaska Department of Environmental Conservation Village Safe Water Program

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August 7, 2024

To: Vendor List

Re: Amendment 1

ITB 25-VSW-MTM-001 Dredge Equipment

ITB Due Date: August 19th, 2024 @ 2:00 PM AST

### The following are vendor questions and the department's response:

1. Vendor: Sec. 1.02: What is the address where the bids will be publicly open at?

Department: Department of Environmental Conservation,

Village Safe Water Program 555 Cordova Street, 4th Floor Anchorage, Alaska, 99501

2. Vendor: Part 2 Products: What is the insitu percent of solids the lagoon to be dredged?

Department: The unit is for current and future use so solids amount will vary.

3. Vendor: The 30% solids, is this by weight or volume?

Department: Volume.

4. Vendor: This project is at a WWTP where solids rarely exceed 10% - 15%, specifying a dredge to archive 30% to 70% is questionable. Can this be overlooked?

Department: The specification is required for equal comparison between products. It cannot be overlooked.

5. Vendor: You will need more than 300ft of travers cable to successfully work the pond, how will this be handled. Should be about 400ft.

Department: See attached revised Section 43 21 44 Dredge Equipment Specifications.

6. Vendor: How much float hoses is required?

The lagoon there dredging requires 200ft. of floating hose. The rest is for transferring the slurry to the storage lagoon.

Department: See attached revised Section 43 21 44 Dredge Equipment Specifications.

7. Vendor: Can we quote (2) 100ft length of floating hose, can we quote 13 sections of pipe by 40ft. long which are easy to handle.

Department: Yes.

8. Vendor: How much power cable to run the dredge is required?

Department: See attached revised Section 43 21 44 Dredge Equipment Specifications.

9. Vendor: C.9 Where is the dredge line booster pump going? The dredge itself is all that is required to do the work.

Department: If no buster pump is required to meet pumping requirements, then the vendor is not required to provide one.

10. Vendor: When would start-up happen? This year or spring of 2025?

Department: This year.

#### **Attachments:**

1) Revised Section 43 21 44 – Dredge Equipment Specifications

April Akers

Procurement Specialist

April Akers

#### SECTION 43 21 44 -

# DREDGE EQUIPMENT

### PART 1 - GENERAL

#### 1.1 SUMMARY

A. Section Includes: Floating Wastewater Lagoon Dredge Equipment.

#### 1.2 SUBMITTALS

- A. Product Data: Manufacturer catalog information, indicating materials of construction and compliance with indicated standards.
- B. Manufacturer's Certificate: Products meet or exceed specified requirements.

#### PART 2 - PRODUCTS

# 2.1 DREDGE EQUIPMENT

### A. Description:

- 1. Dredge equipment shall be floating assembly specifically designed for the controlled removal of settled sludge and contaminated sediments from various lower depths of a wastewater lagoon and transporting removed sludge and sediments to a disposal location.
- 2. Dredge equipment shall include integral pumps for suctioning sludge and motors for adjusting position of suction inlet.
- 3. Protection of wastewater lagoon liner during sludge and sediment removal shall be an integral design feature of dredge equipment.
- 4. Dredge equipment shall be connected to the shore by a cable and pully system and automatically adjust location along the pully wire to maximize sludge removal.
- 5. Dredge equipment shall be capable of being controlled by a single operator located on the shore.
- 6. Unit shall be easily transported to the site in a standard shipping container.
- 7. At no time shall it be required for operators to enter the wastewater lagoon water to operate or maintain the dredge equipment.
- 8. Unit shall come complete with all components necessary to remove wastewater sludge from the bottom of the wastewater lagoon including all hoses, piping, connections, electrical connections, floats, motors, pumps, controls, pully wires, anchors, or other ancillary equipment necessary to operate.

# B. Performance and Design Criteria:

- 1. The dredge equipment shall hydraulically or pneumatically remove the settled sludge and/or contaminated sediments at a minimum of 74 cubic yards per hour with a 30% solids content.
- 2. The dredge equipment shall be capable of removing the sediment and transporting the slurry to the disposal location at the upper lagoon with slurry solids content of between 30 and 70 percent *by volume*.
- 3. Dredge equipment shall be capable of pumping a minimum of 250 GPM and a maximum of 1200 GPM.at heads of up to 160 feet.
- 4. Discharge Size: 4-inch min.
- 5. Suction Size: 6 inch.
- 6. Solids Handling: 3 inches.
- 7. Max Speed: 1800 RPM.
- 8. Minimum working depth of 14-feet.

### C. Required Included Equipment:

- 1. Electric Suction Pump, submersible or surface mounted controlled by a variable frequency drive (VFD) controlled remotely. VFD and electrical equipment shall be enclosed in a NEMA 3R for outdoor environments.
- 2. Integral floats constructed of durable material resistant to punctures or incidental damage during normal operations including loading and unloading equipment.
- 3. Minimum of 400300-ft of traversing cable
- 4. Solar Panel charging system to charge the lifting winch battery (if provided)
- 5. Winches. Remote Operated Lifting Winch and Traversing Land Winch
- 6. Gas Generator Output to match power requirements of the Traversing Land Winch
  - a. Provide a minimum of 250-feet of cable to provide power to dredge.
- 7. A discharge flow meter and density gauge able to be located where readout can be easily accessed to allow monitoring of flow.
- 8. A minimum of 750 feet of discharge hose in maximum 250-foot long segments.
  - a. At least 200-feet of the discharge hose shall be float hose.
- 9. Dredge line booster pumps as required to maintain the rates of flow specified herein. Pumps shall operate without requiring the addition of either water or solids to the dredge pipe slurry.
- 10. All required manuals, tools, and equipment to properly operate and maintain equipment.

# D. Approved Products

- 1. Eddy Pump DSE 4000 Electric Driven 4-inch Dredge Equipment
- 2. DAE Pumps Electric 4-inch Dredge Heavy-Duty Mini Pontoon Dredge
- 3. Mud Cat 20E Electric Dredge

### PART 3 - EXECUTION

### 3.1 DELIVERY

A. Deliver all materials and equipment to:

Metlakatla Indian Community Dock Metlakatla, Alaska 99926

### 3.2 STARTUP

A. Manufacturer shall provide representative to travel to Metlakatla, Alaska for a minimum of 2 days onsite to train wastewater facilities operators in proper operation and maintenance of dredge equipment. Manufacture shall schedule site visit with Metlakatla Indian Community a minimum of 3 weeks prior to proposed visit.

**END OF SECTION**