

## **Advance Contract Award Notice (ACAN)**

### **ACAN # 23-58216 EFFLUENT LIFT STATION EQUIPMENT ADD-ON**

#### **1. Advance Contract Award Notice (ACAN)**

An ACAN is a public notice indicating to the supplier community that a department or agency intends to award a contract for goods, services or construction to a pre-identified supplier, thereby allowing other suppliers to signal their interest in bidding, by submitting a statement of capabilities. If no supplier submits a statement of capabilities that meets the requirements set out in the ACAN, on or before the closing date stated in the ACAN, the contracting officer may then proceed with the award to the pre-identified supplier.

#### **2. Definition of the requirement**

The Department of National Research Council Canada has a requirement for the supply of one (1) self-contained skid to pump effluent from an effluent pit to an Actini Biokill decontamination tank and adhere to biocontainment requirements for CL2 organisms.

#### **3. Criteria for assessment of the Statement of Capabilities (Minimum Essential Requirements)**

##### **Existing equipment:**

The ACTINI Ultima 1000L/H is a continuous heating treatment machine designed to decontaminate BSL2 biowaste. It has been designed to ensure that all potential contaminants will receive a decontamination treatment before releasing to the drain. We refer to this machine as the ACTINI Biological Kill system.

##### **New requirement - Effluent lift station skid:**

The Effluent Lift station skid is required for the existing ACTINI Ultima 1000L/H Biological Kill system by the company ACTNI LLC. The Effluent Lift skid must automatically lift BSL2 biological material in a closed containment manner to the ACTINI Ultima Biological Kill system for treatment. The lift-station must be integrated to the ACTINI Biological Kill system.

##### **Any interested supplier must demonstrate by way of a Statement of Capabilities that its product/equipment/system (as appropriate) meets the following requirements:**

-The equipment must be able to pump water-like liquids with the following characteristics:

<b>Viscosity</b>	1 cP at +20°C (68°F) 0.3 cP at +100°C (212°F)
<b>Density</b>	1 g/cm <sup>3</sup>
<b>Heat conductivity</b>	0.5 W/m.K
<b>Specific heat</b>	1 cal/g/K
<b>Particles</b>	< 1 mm
<b>Chloride concentration</b>	Maximum 0.1 g/L
<b>pH</b>	5 to 9
<b>Cells concentration</b>	< 200,000 cells/mL
<b>Inlet temperature</b>	20°C to 40°C (68°F to 95°F)

-Note that modifications may be required in case of sticky, agglomerating, coagulating, foaming or abrasive products.

-This must be a self-contained process skid which includes a CRN stainless steel tank, pumps and related stainless steel piping to transfer water-like effluent to the ACTINI Ultima 1000L/H Biological Kill system and adheres to biocontainment requirements for CL2 organisms.

-The effluent capacity of the skid should be 1600 L/hour.

-This skid must connect directly to the existing biokill skid and ensure a closed containment system for CL2 material from drain effluent to decontamination tank. It must be air tight. All connections are welded and made of stainless steel. The parts that must be accessed for maintenance like the pump must have sanitary connections with bolted stainless clamps.

-The lift system must be fully integrated, automated, programmed, logically interlocked and visually displayed into the existing (HMI) human machine interface and PLC (programmable logic controller) of the ACTINI Ultima 1000L/H system. The control system software program used by the existing ACTINI Ultima 1000/H Biological Kill System is intellectual property of the company ACTINI LLC and their software code information is not be accessible to non-ACTINI software.

<b>PLC</b>	1 point I/O Allen Bradley 1734
<b>I/O</b>	Wired directly on local I/O cards
<b>Local network</b>	Communication with ProfiNet or Ethernet
<b>BMS communication</b>	Dry contact (already included in the ultimate skid) <ul style="list-style-type: none"> <li>• Major alarm</li> <li>• Minor alarm</li> <li>• Storage tank available</li> <li>• Run permissive (for Neutralization skid)</li> </ul>

-The equipment must fit in an existing underground PIT with the following dimensions: 1270 mm length times 1270 mm width and 1980 mm height. There must be enough

space for a maintenance personnel to go in the PIT with the equipment in place to perform maintenance and calibration duties on the lift station skid.

## **Components:**

### **Pneumatic pump:**

Characteristics: 7.4 gallon/min, Lift 10 feet, Air supply : 20-100 Psi

### **Valves:**

Characteristics: 316L SS, Ball valves, TF4 series

### **Level sensors:**

Vibronic point level detection, 316L SS, -50°C...+150°C (-58 °F...+302 °F)

**CRN stainless steel tank:** Capacity 1600 L/hour.

The use of connections with gaskets is minimized and most connections are welded 316L stainless steel. All component list items are tagged with 300 series stainless steel material.

It is a self-contained process skid which includes a stainless-steel tank, pumps and related stainless-steel piping to transfer water-like effluent to the ACTINI Ultima 1000/H Biological Kill System and adheres to biocontainment requirements for CL2 organisms.

## **Components also include:**

- Yamada DP15 Pneumatic pump:
  - Characteristics: 7.4 gallon/min, Lift 10 feet, Air supply : 20-100 Psi
- Topline Valves:
  - Characteristics: 316L SS, Ball valves, TF4 series
- Endress & Hauser Level sensors:
  - Vibronic point level detection, 316L SS, -50°C...+150°C (-58 °F...+302 °F)

-All piping in contact with the effluent must be made of welded stainless steel 316L. The use of connections with gaskets is minimized. All component list items are tagged with 300 series stainless steel material.

-The system must be fully automated, connecting and communicating seamlessly with existing Actini equipment.

- The electrical cabinet is UL/cUL labelled and described below:

<b>Electrical panel</b>	Electrical cabinet - Skid mounted
	Powder coated
<b>Wiring</b>	According to UL508A
<b>Command &amp; power supply</b>	120V UPS / 1ph / 3A
<b>Electrical Cabinet</b>	Lockable
<b>Enclosure rating</b>	NEMA 4

-The automation package is described below:

<b>PLC</b>	1 point I/O Allen Bradley 1734
<b>I/O</b>	Wired directly on local I/O cards
<b>Local network</b>	Communication with ProfiNet or Ethernet
<b>BMS communication</b>	Dry contact (already included in the ultimate skid) <ul style="list-style-type: none"> <li>• Major alarm</li> <li>• Minor alarm</li> <li>• Storage tank available</li> <li>• Run permissive (for Neutralization skid)</li> </ul>

**Vendor Experience:**

-The company must demonstrate they have a successful record of experience of at least 10 years designing and building for clients: effluent lift skids for BSL2 decontamination systems. Demonstrated by providing past projects names and dates.

**4. Applicability of the trade agreement(s) to the procurement**

This procurement is subject to the following trade agreements:

- Canadian Free Trade Agreement (CFTA)
- Canada-Korea Free Trade Agreement ( CKFTA)

**5. Justification for the Pre-Identified Supplier:**

ABC Actini LLC is the only vendor that has a lift effluent system that can be fully integrated, programmed, logically interlocked and visually displayed into their existing HMI human machine interface and PLC programmable logic controller of the existing ACTINI Ultima 1000/H Biological Kill System currently at NRC. The control system software program in use on the existing ACTINI Ultima 1000/H Biological Kill System is

intellectual property of the company ACTINI LLC and their software code information will not be accessible to non-ACTINI software.

**6. Government Contracts Regulations Exception:**

The following exception to the Government Contracts Regulations is invoked for this procurement under subsection 6(d) - "only one person is capable of performing the work".

**7. Exclusions and/or Limited Tendering Reasons**

The following exclusion(s) and/or limited tendering reasons are invoked under the:

**Canadian Free Trade Agreement (CFTA), Article 513.1: Limited Tendering**

(b) if the goods or services can be supplied only by a particular supplier and no reasonable alternative or substitute goods or services exist for any of the following reasons:

(ii) the protection of patents, copyrights, or other exclusive rights;

(iii) due to an absence of competition for technical reasons.

(v) to ensure compatibility with existing goods, or to maintain specialized goods that must be maintained by the manufacturer of those goods or its representative;

**Canada–Korea Free Trade Agreement (CKFTA),** which defers to WTO-AGP Article XIII, Limited Tendering b) where the goods or services can be supplied only by a particular supplier and no reasonable alternative or substitute goods or services exist for any of the following reasons:

**8. Period of the proposed contract or delivery date:**

The system must be delivered, installed (start-up), and SAT (Site Acceptance Tests) completed on or before August 30, 2024

**9. Cost estimate of the proposed contract:**

The estimated value of the contract is \$ 98,520.00 USD.

**10. Name and address of the pre-identified supplier**

ABC Actini LLC –  
11 Lincoln Drive, Lewis Run, PA 16738

**11. Suppliers' right to submit a statement of capabilities:**

Suppliers who consider themselves fully qualified and available to provide the goods, services or construction services described in the ACAN may submit a statement of capabilities in writing to the contact person identified in this notice on or before the closing date of this notice. The statement of capabilities must clearly demonstrate how the supplier meets the advertised requirements.

**12. Closing date for a submission of a statement of capabilities**

The closing date and time for accepting statements of capabilities is February 14, 2024 at 2:00 p.m. EST.

### **13. Inquiries and submission of Statements of Capabilities**

Inquiries and Statements of Capabilities are to be directed to:

Cindy Romain

Senior Contracting Officer /Finance and Procurement Services Directorate National Research

Council Canada E-mail: [Cindy.Romain@nrc-cnrc.gc.ca](mailto:Cindy.Romain@nrc-cnrc.gc.ca)