



July 7, 2023

## **Addendum No. 1**

### **Invitation to Tender ES-23-14 Landfill Gas System Equipment Upgrade Foothills Boulevard Regional Landfill**

The addendum is being issued prior to the closing of the Invitation to Tender to provide further information, make changes to, or to clarify the Contract Documents and is to be read, interpreted and coordinated with all other parts of the Contract Documents. In the case of a conflict with the balance of the documents, this Addendum shall govern. **Tenderers shall attach a signed copy of this addendum to their tender.** This addendum shall form part of the Contract Documents.

This addendum is being provided in clarification to ITT ES-23-14 released June 23, 2023

**Question:** Is the thermal dispersion FIT (Flow Indicating Transmitter) going to be replaced, or use the existing one? If it is being replaced what are the flow ranges and pressure of this piping?

**Answer:** Replacement of the Flow Indicating Transmitter is not part of this Invitation to Tender

**Question:** What is the range for the pressure transducer?

**Answer:** The current downstream pressure transmitter has a calibration range of -100 to 100 in H2O. Note: If downstream pressure transmitter needs to be replaced it must be compatible with the required upstream transmitter, include this cost in the tender submission.

**Question:** For the O2 and CH4 Analyzer, are they looking for a sample panel analyzer or an instrument to measure?

**Answer:** See 18.0 Scope of Work Multi-stream Gas Analyzers and Displays

**Question:** Is the display screen for the gas streams analyzing to be interactive with only the gases it is measuring OR is the intention to incorporate more inputs and outputs from existing instruments to be made interactive within the system through this remote display?

**Answer:** Display screens shall be at the point of gas stream sampling, (display only) and at the remote interface, (interactive) to be located within the current PLC panel, located in the electrical room.

**Question:** If a new remote-IO (Input/Output) rack needs to be added with new modules (readily available), what protocol can the flare system use to communicate besides RS232 without needing to add any additional hardware to the Flare Control Panel.

**Answer:** Any new remote Input/Output rack that is required will comply with programming protocols provided by the updated flare control panel, (supplied by others).



**Question:** If necessary, what protocols does their SCADA solution provide besides DH485? (Both for serial and TCP communication)

**Answer:** Communication protocols will be a standard network capability.

**Question:** For remote access (VPN solution) to their downtown offices, will their IT department be ok with allowing internet access to a firewall device and to enable the proper ports to establish the VPN access? If not, we can provide an LTE driven VPN solution, but this would need a data-plan from a locally available cellular provider.

**Answer:** The Regional District of Fraser-Fort George already has an internet connection for data transfer to the gas plant.

**Question:** What will be the primary tasks that the remote operator/users need to carry out? This question is to better understand the usage of the remote-access.

**Answer:** The primary tasks would be remote system monitoring, restart in safe mode, simple report generation, Blower adjustment.

**Question:** Could any existing electrical schematics and network drawings be made available to us?

**Answer:** See 17.0 Purpose

**Question:** Would the new upstream Pressure Transducer have any governance on how the flare control system operates? Would it need to be tied into that panel specifically? Or is this pressure measurement being used in the overall system monitoring?

**Answer:** The New Upstream Transducer would be vacuum and work in conjunction with the new flare control panel and be compatible with the down stream transducer. It will be a 4 to 20 mA instrument.

**Question:** Due to some bad photos taken by me, I can't tell if there is room for additional Analog Inputs in the Flare Control Panel, but it looks like there is room inside the MCC's PLC. At any rate, I will need to review the existing schematics with one of my engineers in order to properly assess overall scope of work for integrating the new pressure transducer and HMI into their SCADA system. In this circumstance, we would want (ideally) John Zink to provide any of the required programming services.

**Answer:** Programing requirements will be completed in step with the installation of the updated flare control panel. (Supplied by others).

**Question:** Are they planning on replacing their existing Computer/Server? If so, is the plan to move this over to a PC Based HMI? If this is the case we would need to know details of the existing Software, Version #'s, and data requirements.

**Answer:** The existing Computer/Server will be moved off site and will receive data collected and downloaded from the process via the remote interface Display Screen, (interactive) to be located within the current PLC panel, located in the electrical room. It will be expected to have the ability to carryout, system adjustments, system restart, system status reporting using defined times and parameter requirements and display information in a graphical format. Note: This is not a complete list. See 18.0 Scope of Work



- Question:** Is there a preference for the size of the HMI Screen? Typical sizes for the system outlined would be to use an HMI Screen between Size 17 – 19” or 21.5” wide screen. Please confirm.
- Answer:** For the remote interface Display Screen either size would be acceptable.
- Question:** Please provide details of the existing Allen Bradley, PLC & Modules – Part Number, Version #'s and Software details.
- Answer:** Access to the panel(s) were provided at the mandatory site viewing. In 2002, AB SLC5/03, SLC5/04 and SLC5/05 were used with DH485 and RS232 communication protocols.
- Question:** We assume new cabling/conduit runs for Pressure Transducer and Gas Analyzer – May need more pairs for more gas readings for PLC. Seals in existing conduit make adding individual wiring impossible so possibly new multipair cable from local Junction Box to PLC and this would take care of the Pressure Transducer feedback as well.
- Answer:** Additional cabling/conduits may be necessary to meet the requirements of this Invitation to Tender.
- Question:** Assumption is the new upstream Pressure Transducer will communicate to the flare control PLC. Is this correct?
- Answer:** Yes.
- Question:** Is there any electrical and control narratives available before award?
- Answer:** See 17.0 Purpose
- Question:** Is there a BOM of the existing flare control PLC and network equipment?
- Answer:** Yes. The existing BOM will be shared with the successful proponent. The Bill of Material for the flare control PLC will be determined upon installation of the updated flare control panel by others.
- Question:** Is there a copy of the Previous flare controller Technical Safety BC approvals?
- Answer:** The Landfill Gas System was compliant with all pertinent, relevant, and required regulation and legislation when installed in 2002. Updated TSBC field certifications will be required and will be coordinated by the Regional District of Fraser-Fort George.
- Question:** Is the intention of the scope to completely replace the existing John Zink Allen Bradley PLC with a new PLC and program to the existing philosophy OR try and use existing PLC with the new HMI and measuring instruments?
- Answer:** See 18.0 Scope of Work for what's required. Note; Instrumentation installation, new PLC installation and Flare Control Panel installation (by others) and any related and required programming that is integral and adheres to the existing operational philosophy, will be coordinated by Contractor and the Regional District to minimize operational downtime.



I/We hereby verify that we have considered this Addendum No 1 in our ITT submission.

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Signature of Tenderer

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Name of Tenderer

Inquiries relating to this ITT may be directed to:

Darwin Paton  
Environmental Services Technologist  
Phone: 250-960-4400  
Email: [dpaton@rdffg.bc.ca](mailto:dpaton@rdffg.bc.ca)