REQUEST FOR PROPOSALS "RFP" NO. PS20200570
GAS FLARE PLANNING AND MAINTENANCE SERVICES

QUESTIONS AND ANSWERS NO. 4

ISSUED ON SEPTEMBER 22, 2020

Q1	Is there an existing O&M manual that can be provided to us during the bidding period?
A1	**O&M manuals below are now provided as per Amendment 4.** • **Flares 1, 3, 4, 5,and 6**
Q2	In the RFP the City indicates that the ambient gas detectors on-site are either MSA or General Monitors. Can the City indicate how many of each are at the site and what gases they are monitoring? Can the City provide a location plan for these to help us price out the annual maintenance/calibration?
A2	**Please refer to the below:** • **Require two people to calibrate** • **Need a 6 foot ladder to access** • **Approx. 2-3 days work for 2 techs to calibrate all sensors on site** • **Confined space entry is <u>not</u> required** • **Prefer done during office hours 7am-3pm Monday-Friday** • **May be emergency call outs after hours if sensor goes off** • **They monitor CH4 only** **Refer to the attached calibration report and record drawings of the building CH4 monitors as per Amendment 4.**
Q3	Can the City provide information on the air compressor that is on-site? What is the make/model and serial number and where is it physically located on-site?
A3	**Please refer to the below specification:** **Air Compressor: Atlas Copco** **SN AP1668017** **Type: GA55VSD FF** **Air Compressor Dryer: Atlas Copco** **SN UTF125D81** **Type: CD185+** **The trailer housing the air compressor and compressor dryer is physically located beside the flare station and outside the fence (north-west of the flare station and south-west of the main road.**
Q4	Your QA2 document does not have the correct task references for the amended Schedule in Section 6.0. Can this be updated?
A4	**The amended schedule in QA2 matches the schedule in section 6.0.**
Q5	Your QA2 document refers to target dates such as "Week of November 13th", etc. These are all Friday's. Can it be assumed that the City means the week of November 9th, 2020 and so on?
A5	**Yes. It means the Week of November 9, 2020.**

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Q6	Does the City want the proponent to take over all maintenance of the facility immediately upon project award or after tasks 4.1.1 to 4.1.5 and 4.2.1 to 4.2.3 have been completed? For our pricing for the 2021 maintenance, what month do we assume this begins?
A6	**The City wants the Proponent to complete tasks 4.1.1 to 4.1.5 and 4.2.1 to 4.2.3 prior to starting the preventative maintenance of the flare station facility.** **To price 2021 maintenance please use the start date below:** • **Latest April 1, 2021**
Q7	Can the City clarify when the first annual report will be due? Will this be due in January/February 2022 that will report for the 2021 calendar year?
A7	**Yes. The first annual report will be due January/February 2022 for 2021 calendar year.**
Q8	If the contract is awarded the week of November 13th, 2020, when will the Proponent be responsible for analyzing the first flare survey data? Will we be responsible for analyzing this data starting in January 2021 – so that the first data analyzed will be January, February and March 2021 and therefore first interpretation document would be due the first week of April 2021? Will all historical survey data be provided to us electronically?
A8	**Flare station survey is done quarterly. The Proponent will be responsible for analyzing the first flare survey data starting latest Second Quarter 2021.** **Refer to section 4.1.8 of the Scope below:** The City surveys the Flare stacks at the GCFS on a quarterly basis. The survey shall be performed by the City personnel and survey data will be sent electronically to the Proponent in MS Excel format. The Proponent will analyze the survey data within 2 weeks and advise on the acceptable lean of the flares over the contract. **Yes, the historical survey data will be provided to the Proponent electronically.**
Q9	As part of Task 4.1.6 all three blowers are listed in the excel costing table as Blower #1, Blower #2 and Blower #3. There are also separate line items for the "Blower System". Can the City explain this and indicate if the three blowers are part of the blower system? Can you explain your reference to Maxim and the need to verify O&M records with them?
A9	**The "Blower System" is different from "Blower #1, #2, and #3".** **However, the "Blower System" is referring to all ancillary equipments connected to the three blowers e.g. the isolation valves installed on the blower bypass branch line for each blower, and variable frequency drives (VFDs) of each blower etc.** **Refer to pages 94 (drawing# M-3) of the O&M manual of the Vancouver Landfill Gas Control System provided with Amendment 4 for the detailed P&ID of the blower system.** **The Village Farms blower is connected to the vacuum side and in parallel to the City's three blowers. The City need to review and verify the O&M manual of Village Farms blower system to confirm that they keep things up and running.**
Q10	What equipment is part of the climate station?
A10	**We will remove this from the program.**
Q11	In the revised excel spreadsheet the City has added a line item for inspection of the Building Gas Pipeline and to Pig and Clean this pipeline on an annual basis. Can the City verify that there is an existing port where this can be accomplished? Why does this pipeline need to be cleaned on an annual basis? Can the City provide any additional information that will allow us to price this properly?

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A11	**The pipeline has never being inspected or cleaned we currently suspect water pooling in the pipeline because the flow meters corrode within two years.** **During the GAP analysis the Proponent may recommend to inspect and clean the pipeline less frequently.** **As far as we know there is no pigging port on the pipeline we may be able to clean the pipeline with pressurized Nitrogen instead of pigging.** **Please refer to the site development plan drawing as per Amendment 4. The gas pipeline from the flare station to the administration building is visible. But the split to the technical trailer is missing on the drawing.**
Q12	The City has added two line items to the revised excel spreadsheet for replacement of the flow meter at the administration building and at the engineering and technical trailer. Is there one LFG flow meter at the administration building and one LFG flow meter at the engineering/technical trailer? Why do these need to be replaced on a twice per year basis? We will need to know the exact make, model and serial number of the existing flow meters if we need to determine replacement costs. Can the City explain this?
A12	**Yes, there is one building gas flow meter at the administration building and another building gas flow meter at the technical trailer.** **Currently, on average these flow meters fail every two years (**Biennial**). This may be due to the suspected water in the pipeline. Once the pipeline is cleaned the flow meters may be replaced less often. However, the flow meters are not designed for raw landfill gas which is corrosive.** **In the GAP analysis the Proponent may determine another solution to this problem e.g. recommending a new flow meter.** **Please refer to the attached photos and specification of the two flow meters.**
Q13	Part of the scope of work involves annual calibration of 4 flow meters. Does the City have spares that can be put in place while the flow meters are sent off-site for calibration? Further to this, can the City provide us with a full list of spare parts for the facility?
A13	**Most of the flow meters at the flare station have spares and some of the spares can be shared. Please see below:** • **FIT-050 flowmeter has a FOX FT2A. S/N 12061** • **FIT-100 FOX FT3, S/N 23939 currently installed.** **FIT-100 FOX FT2A, S/N30660 as spare** • **FIT-101 has a FOX FT2A, SN 27339** **FIT-101 and FIT-050 has FT2A, S/N 27338 as spare** • **FIT-102 FT2A, S/N 27340** **No spare for this flow meter. This flow meter does not affect measurements for regulatory purposes. The City will notify the Proponent if they need a spare flow meter.**
Q14	The City has included a line item for annual inspection and replacement of all thermocouples for each flare. Does the City want these replaced regardless of their state? Should this not just be "as-required"? I notice that there is also a separate line item for a semi-annual inspection of thermocouples and replace as required. Should the annual item for thermocouples be disregarded? Does the City have spare thermocouples on-site? Does the City want the Proponent to price supply of replacement thermocouples?
A14	**The thermocouples shall be replaced if they are faulty or damaged.** **The "Replace Thermocouple" and "Inspect and replace all thermocouples" tasks have been removed. We only retained the semi-annual task "Inspect condition of thermocouples and replace as required"**

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	The City has eight thermocouples as spare for flares #1, #3, and #4. **Yes, the Proponent should price the supply of replacement thermocouples.** **The specification of the thermocouple is below:** **Manufacturer: Pyromation** **SO 1302465-3** **Photos of some thermocouples are provided.**
Q15	Part of the scope is to Inspect and Repair the refractory lining. It seems not possible to cost out repair of refractory lining as the state of the refractory for each flare is unknown. Can repair of the refractory lining be taken out of the scope of work to be priced or does the City want us to include some kind of allowance for all five flares to have refractory repairs?
A15	**The task has been updated to "Inspect refractory lining and repair as required" for all flares.** **Please refer to additional information below;** • **Flare 1: The refractory has not been inspected** • **Flare 3/4: Refractory for the two flares was replaced in 2020.** • **Flare 5/6: These are new flares that were installed in the fourth quarter of 2019.** **The refractory is only required to be inspected semi-annually. The refractory repair shall be recommended following the inspection. So the Proponent only need to price refractory inspection and not the repair.** **During the GAP analysis the Proponent can propose a different frequency for refractory inspection.**
Additional Information	**We have added the PM task for knockout pot #4 (KO-4) in Appendix 3 - Commercial Pricing table as per Amendment 4.**