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Questions and Answers

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Project Description / Description de projet **Solicitation No. 16-22151: Water treatment Services for the National Research Council 1200 Montreal rd. campus, Ottawa**		
Solicitation No./ N° de solicitation **16-22151**	Project No./N° de projet	W.O. No./N° d'ordre de travail
Departmental Representative / Représentant Ministériel **Steve Cassidy**	Date **March 28, 2017**	

Questions:	Answers:
15. Of the 20 cooling towers, how many are using solid chemistry?	**15. Two towers use a fully solid chemical solution for the treatment of the cooling tower. These systems are remotely monitored by the supplier that they are rented from.**
16. Of the 20 cooling towers, how many have controllers and how many controllers must be supplied by the winning bidder?	**16. All towers have controllers but most only have the capacity to control two products.**
17.Of the 20 cooling towers how many chemical pumps must be supplied by the winning bidder?	**17. If the winning supplier requires more than the existing pumps on site to deliver their program, the additional pumps will be at the winning supplier's expense.**
18. Where solid chemistry is being presently used, can liquid chemistry be substituted?	**18. No. The locations where the dry chemical systems have been installed were selected due to the ergonomically hazardous site conditions for liquid handling and storage.**
19.Where liquid chemistry is being presently used, can solid chemistry be substituted?	**19. The implementation of dry chemical systems where the economical as well as the health and safety for the maintenance and operation makes sense will be the driver for that decision.**
20. "The proposed supplier must regulate the concentration of amine using an on-site analyzer system which is designed to continuously monitor and control the concentration of amine in the system. A sample conditioning module prepares the process sample as it is being pumped to an analyzer.	**20. The amine detection system is a data logger of the amine concentration as measured at the furthest point of our steam system. The data is downloaded once a month for system validation.**

The conditioned sample is measured as it passes through a polished, quartz tube in the fluorometer by the following process; an excitation light source shines through the quartz tube, the conditioned sample fluoresces, and a photomultiplier measures the emitted light. The quantity of light emitted is proportional to the amount of chemical present in the system". The amine detection system that is on site at present only logs amine levels it does not control amine feed. Is this considered sufficient?	
21. If yes to the previous question, does this have to be supplied by the winning bidder since it only monitors amine levels?	21. The amine detection system is an important tool used to ensure that the complete district steam system is being treated with amines
22. The stated annual cooling tower water makeup is 150 km3/yr. Please confirm that this is 150,000 m3/yr	22. 150,000 m3/yr
23. What are the cooling tower ratings in tonnage?	23. Not available.
24. "Storage container material of construction must be stainless steel. It must have an appropriate lining if storing corrosive chemical material. Exteriors must be stainless for strength." Are storage containment systems with years of safe and reliable history excluded if the material of construction is not stainless steel?	24. Alternative storage material may be considered if there is sufficient credible documentation provided. This should include all proposed design drawings of the containment systems that are intended to be used in place of stainless steel.
25. "Secondary containment volume must be at least 150% of the delivered chemical storage container volume." Are proven containment systems with years of safe and reliable history excluded if the containment volume is less than 150%?	25. The current tanks in use include a landing point for the chemical pump within the confines of the containment so that any leakage can be also contained within the storage container. Alternative secondary containment options must be able to adequately address this concern.

Upon request, the text above can be provided in French.