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				H337697-AAAnnn-DD-104-000X		A												
				PREPARED BY	DISCIPLINE	DATE												
					Process	2011-08-27												
PACKAGE NUMBER				H337697-PM403				Waste Water Treatment				PROCUREMENT AGENT						
ITEM (SPEC)	DESCRIPTION	BIDDER'S NAME	Filter Innovations		CONFORMANCE	BIDDER B		CONFORMANCE	BIDDER C		CONFORMANCE	BIDDER D		CONFORMANCE				
		PROPOSAL DATE	2011-08-26			YYYY-MM-DD			YYYY-MM-DD			YYYY-MM-DD						
		CLARIFICATION MEETING	ITEM			ITEM			ITEM			ITEM						
		SPECIFIED	(BID)	PROPOSED		(BID)	PROPOSED		(BID)	PROPOSED		(BID)	PROPOSED					
1	Table 1-1 Supply Waste water Treatment Plants	2 WWTP			√													
2	new, complete, fully operational equipment, with all necessary auxiliary equipment and acessoreis, except if lexcluded from scope of work	Required		No redundancy included as requested in spec.	√													
2.1	Table 1-1Supply Wastewater Treatment Plant	2 WWTP			√													
	Table 2-1 Settling Basin/Sump	Required		Concrete system - cost of heating or insulating specifically excluded - don't know if they are doing the design of the sump or not as requested.	INA													
	Table 2-1 Oil/Water Sepatator	Required		Included	√													
	Table 2-1 pH Neutralization System	Required		Included	√													
	Table 2-1 Fine Filtration System	Optional		Included	√													
	Table 2-1 Secondary Organic Removal System	Optional		Included	√													
	Table 2-1 Air-Compressor	Optional		Included	√													
	Table 2-1 Containers	Optional		Included	√													
2.3	System Mounting	Skid		ISO containers (4 per system)	√													
	Supervision by Supplier Representative	Installation, Erection, Commissioning, FAT		Not included	N													
	Access platforms and ladders	As required		Included	√													
	Interconnectinf Piping and Supports	Required		Pipe from sump and heat tracing and insulation of that pipe are excluded. Piping spool to contain equipment at sump tank is included.	N													
	Instrumentation	Smartbus/4-20mA Hart		Don't see any mention of Smartbus or Hart	N													
	Special tools	One set		No mention - may not be needed	INA													
	Factory Aceprance Test	Required		Electrical system factory tested. Control system factory tested.	√													
	Lubrication protection for shipment	Required			INA													
	Spares List	Required		Not provided. Will be with firm price bid.	N													
	Crating for Shipment	Required		No mention, but these are mostly ISO containers with some peripherals.	INA													
	Data requirement	Drawing, Manuals		2 copies of standard vendor manuals	√													
	Training	Qualified trainer		Not included	N													
	Electical terminal boxes	System Power/instrumentation/ controls		25% spare terminal blocks, boxes have 20% spare space, NEMA 4, 25% spare I/O, 25% spare slots	√													
	Wiring/cableing/cable trays/ conduits	Power/controls		Max fill on wire ways is 70%, bottom entry for cables	√													
	Electrical equipment should be designed to be suited for installation in hazardous area	Class 1, Div. 2		Oil separation room and oil storage room is Class1 Div 2. How is this section separated from rest of container? Equipment for sump area is also class 1 div. 2.	√													
	Control Devices	PLC and HMI		AB PLC and HMI make not specified	√													
	Motor Starters with start electronic overload protection	Required		No mention	INA													
	Reagents and chemicals	Start-up and one year		Not noted as included	INA													
	Laboratory equipment with one year of reagents	Required		Not provided. Will be with firm price bid.	N													
	Paint	Prime/Finsh/touch-up		Not specified	INA													
2.5	Table 2-4: Battery Limits	as per spec			√													
3.3	Site Conditions	as per spec		Not sent to them, but system looks to be designed correctly	N/A													
3.4	Design Life	25 years		Nothing noted	INA													
4.1	Raw Wastewater Characteristics	as per spec			√													
4.2	Average Waste water Flowrate (Mary River)	6.5 m³/h		8.25 m³/hr average fow for both systems (both are identical)	√													
	Peak Waste water Flowrate (Mary River)	17 m³/h		They did not give the size of the EQ tank which would determine the ability to handle peaks.	√													
	Minimum Settling Tank Retention Time (Mary River)	12 h		Not given	√													
	Average Waste Water Flowrate (Steensby)	8.25 m³/h		8.25 m³/hr average fow for both systems (both are identical)	√													
	Peak Waste Water Flowrate (Steensby)	20.5 m³/h		They did not give the size of the EQ tank which would determine the ability to handle peaks.	√													
	Flowrate through the carbon filter is not to exceed	0.61 m3/hr/m2		"The carbon filtration vessels have been sized based on using the largest volume vessels practical to fit inside the enclosure and not using the 0.61 m3/hr/m2."	N													
	Minimum Settling Tank Retention Time (Steensby)	12		Not given	√													
5.1	Guarantee	Flows as Per Spec		No process warranty included	N													
	Guarantee	Water Quality spec		No process warranty included	N													
5.2	Warranty	18 months from delivey or 12 months from commissioning		12 months from delivery	N													



		Baffinland Iron Mines Corporation MARY RIVER PROJECT		TECHNICAL BID EVALUATION AND RECOMMENDATION				DOCUMENT NUMBER H337697-AAnnn-DD-104-000X		REV. A					
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										DATE 2011-08-27					
ITEM (SPEC)	DESCRIPTION	BIDDER'S NAME		Filter Innovations		CONFORMANCE	BIDDER B		CONFORMANCE	BIDDER C		CONFORMANCE	BIDDER D		CONFORMANCE
		PROPOSAL DATE		2011-08-26			YYYY-MM-DD			YYYY-MM-DD			YYYY-MM-DD		
		CLARIFICATION MEETING	ITEM (BID)	PROPOSED	ITEM (BID)		PROPOSED	ITEM (BID)		PROPOSED	ITEM (BID)		PROPOSED		
H337697-PM403-462500		TECHNICAL REQUIREMENTS													
1	Modular System	As per spec		Yes	√										
1.6	Oil Water Separator	As per spec		Material of construction of baffles specified as SS in spec. Material in proposal for unit specified as CS. Should be ok.	N										
1.7	Air Compressor System	As per spec		"The compressed air dryer will have a dewpoint of -40, not -65 as specified." Should be ok - located inside.	N										
1.8	Tanks	As per spec		Basic information available.	INA										
1.9	Containers	As per spec		Basic information available.	INA										
2	Pumps, Valves and Piping Requirements	As per spec		Basic information available.	INA										
3	Mechanical Requirements	As per spec			INA										
4	Electrical Requirements	As per spec			INA										
5	Instrumentation and Controls Requirements	As per spec		They are using an ultrasonic LT in the sump. Is this the best choice for a tank that may see foam? Pressure based? Basic information on instrumentation provided.	INA										
6	Structural Requirements	As per spec			INA										
7	Painting Requirements	As per spec			INA										
8	Regulations, Standard and Codes	As per spec		Not cited in proposal.	N										
9	Health, Safety, Environment and Community Requirements	As per spec		Excluded safety showers. Other information not available. Included a safety policy document.	INA										
10	Assembly and Testing	As per spec		Included. Specifics not detailed.	√										
11	Shipping, Construction, Commissioning and Operator Training	As per spec		Shipping not included. No training. No commissioning.	N										
12	Spare Parts	As per spec		Spare parts list not provided. Said will be provided later. This is reasonable. Spares of rotating components not included in pricing.	N										
13	Quality Assurance	As per spec		Presentation showing quality system included.	INA										
H337697-PM403-013219		Data with Submission	CA, PFD, PID, Eq. List, Inst. List, Consumptions, Data Sheets	Basic PFD and rough GA provided. Nothing else.	N										
STATISTICS				Filter Innovations's Bid Results		BIDDER B's Bid Results		BIDDER C's Bid Results		BIDDER D's Bid Results					
TOTAL √	Conforms to the Specification			TOTAL √	27	TOTAL √	0	TOTAL √	0	TOTAL √	0				
TOTAL N	Does not Conform to the Specification			TOTAL N	17	TOTAL N	0	TOTAL N	0	TOTAL N	0				
TOTAL N/A	Not Applicable			TOTAL N/A	1	TOTAL N/A	0	TOTAL N/A	0	TOTAL N/A	0				
TOTAL INA	Information Not Available			TOTAL INA	20	TOTAL INA	0	TOTAL INA	0	TOTAL INA	0				
APPROVALS		NAME / SIGNATURE		DATE (YYYY-MM-DD)		COMMENTS:		COMMENTS:		COMMENTS:					
Package Coordinator						Complete system, including oil water separator, filtration, oil tank and emulsion breaking equipment. The de-emulsion step is provided as well although it was not requested. This can be ironed out in the next phase of the project.									
Discipline Lead Engineer		Rusi Kapadia / Rusi Kapadia		2011/09/26		Equipment to be supplied an iso-containerized system. Filtration uses "bag filters" . We would prefer to see automatic backwashing filters. This detail can be updated in next phase of the project.									
Engineering Manager															
Area Manager															
RECOMMENDATION: Use Filter Innovations for basis of engineering drawings.															
LEGEND: √: Conforms to the Specification      N: Does Not Conform to Specification      N/A: Not Applicable      INA: Information Not Available															
Data Sheet N1	Equipment Sound Level	<80 dBA at 1 meter		85 dBA at 1 meter	N										
Data Sheet E11	Surface Loading Rate	<30 m/hr		No information	INA										
Data Sheet E13	Weir overflow rate	<300 m³3/m/day		No information	INA										



H337697-PM403-50-104-0001



**Baffinland Iron Mines Corporation**  
**MARY RIVER PROJECT**

## TECHNICAL BID EVALUATION AND RECOMMENDATION

DOCUMENT NUMBER

H337697-AAnnn-DD-104-000X

PREPARED BY

**DISCIPLINE**

## Process

REV.

A

DATE \_\_\_\_\_

2011-08-27

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## Waste Water Treatment

**PROCUREMENT AGEN**[illegible]

LEGEND: √: Conforms to the Specification

N: Does Not Conform to Specification

N/A: Not Applicable

INA: Information Not Available