

NAME	23. SAFETY MONITORING & EMERGENCY RESPONSE PROGRAM	
NEED	Completion of an effective safety monitoring and emergency response system is required for Pimicikamak resource users in the exercise of their aboriginal and Treaty rights where safety is substantially affected by the hydro project. The system is designed to facilitate, and be based primarily on, volunteer safety monitors. It will be integrated with existing emergency responders.	
GOAL	Establish means of monitoring safety and responding to emergency situations to remedy direct and indirect safety impacts of the project in accordance with Art. 25 of the NFA.	
DELIVERABLES	<ul style="list-style-type: none"> • Agreed management structure specifying ownership and other responsibilities • Supply of trained duty officers; duty roster; duty logs • A handset-issuing arrangement and user registry • Protocols with emergency responders • The integrated SM&ER plan, co-funding and related resource arrangements • Evaluation report 	
STRATEGY / SCHEDULE / MILESTONES	Jan 15 Mar 15 May 15 June 15 April 15	<ul style="list-style-type: none"> • Approval of SMER Phase 1 • Parties define management structure • Purchase Equipment • Implement Field Work • Finalize SMER Phase 2
CONSTRAINTS	<ul style="list-style-type: none"> • Integrated plan will involve numerous other agencies 	
ASSUMPTIONS / RISK	<ul style="list-style-type: none"> • Functioning communication system assumes Pikwitonei ERTS is operational. • All operators and owner will require comprehensive liability insurance coverage. 	
ROLES	<ul style="list-style-type: none"> • Collaborative management by Pimicikamak, Manitoba and Manitoba Hydro with appropriate lead from Pimicikamak. Manitoba has lead ER role. 	
BUDGET 14/15	\$181,000 \$27,150 \$208,150	Warren Work Plan Phase 1 Pimicikamak Admin Fee (15%) TOTAL
BUDGET 15/16	TBD	Warren Work Plan Phase 2 TOTAL

Pimicikamak Safety Monitoring Program 2 (PSMP2), Upgraded 2015-16

	A	B	C	D	E
1					
2	NFA Program 23, Safety Monitoring System 2 (Budget Draft 2 to 2015 January 13)				
3	Phase 1 - Costs of Design, Project Management, Equipment, Installation, Commissioning, Training, Operation				
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5	Item #	Item Description (Phase One, Proof of Concept, Summer 2015)	Budget Plan	Actual	Note(s)
6			(est. +/- 10%)	(invoice +/- 10%)	
7	a.	site visits chopper/boat, system design, project management/training, 5-yr support	\$ 36,000		notes 1, 14, 15
8	b.	local training costs, 4 duty operators plus 4 community responders	\$ 16,000		notes 2, 3, 15
9	c.	stipend for local administrator (6 months @ 1,000/month)	\$ 18,000		note 15
10	d.	stipends for 4 operators @ \$4,000 each/year	\$ 16,000		note 15
11	e.	repairs, small parts replacements for existing ERTS radio system	\$ 10,000		note 15
12	f.	remote a-v monitors; 2 systems for Phase One, 4 more planned for Phase Two	\$ 24,000		note 12
13		(each includes remote IP cameras, towers/masts, telecom links, ICT hardware,			
14		self-contained solar/wind power and installation)			
15	g.	central monitoring facility (computers, displays, digital storage, wireless links,	\$ 20,000		notes 15, 16
16		radio interoperation, secure server at NFA office)			
17	h.	network maintenance and rentals (\$1,000/month for Phase One)	\$ 6,000		
18	i.	monitoring phablets (8 smart cel phones for duty ops and responders, 2 year plan)	\$ 16,000		note 15
19	j.	licensing (for existing radio repeater and 20 VHF radios), annual recurring	\$ 1,000		note 11
20	k.	comprehensive liability insurance, annual recurring	\$ 10,000		notes 9, 15
21	l.	annual contingency (site visits, repairs and replacements, Phase One)	\$ 4,000		note 14, 15
22	m.	full-scale disaster simulation (all components and all PSMP responders)	\$ 4,000		note 18
23		Subtotal	\$ 181,000	\$ -	note 6
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45	NOTES				
46	1. Safety Monitoring System 2, design and budget prepared by Interomatics®, Winnipeg (Wayne Warren, ICT Consultant at 204-955-3584).				
47	2. Budget includes training of project administrator, duty operators and local installers/maintenance personnel.				
48	3. Training of PSMP2 operators will include Level 1 during Phase One with upgrade to Level 2 during Phase Two.				
49	4. Monitoring, maintenance and repair parts warehousing is intended for the former NFA office in Cross Lake.				
50	5. The IP-based cameras require wireless radio links to the existing 400' cellular tower in Cross Lake and to the existing 100' ERTS tower.				
51	6. PSMP2 must be exercised annually to ensure readiness. This category includes Program 21, 23 and 71N.				
52	7. Police record checks will be required for all designated operators due to the sensitive nature of the operators' monitoring jobs.				
53	8. Design, consulting, supervision and long-term support for this project covers all aspects of technical supervision.				
54	9. Comprehensive liability insurance should be confirmed in writing for all personnel and equipment in this project.				
55	10. Radio licensing (Industry Canada) is an annual, recurring expense and covers 1 repeater plus 20 VHF radios.				
56	11. To ensure successful development of the complete PSMP system, one link should be installed and tested thoroughly during Phase One.				
57	12. Sites within 15 to 25 kms can use guyed, pop-up masts but sites further distant from the PSMP Monitor site will need self-supporting towers.				
58	13. New wind/solar systems can provide sturdy masts that co-locate and support the PSMP radios/cameras (suitable to Hydro's green plans).				
59	14. Site visits during Phase One/Phase Two requires helicopter rental, ~1-day, to confirm placement of remote sites, then 2-4 days later stages.				
60	15. This budget category is shared by Programs 21, 23 and 71N. Separate components can be defined if needed.				
61	16. Contingency budget amounts are included to cover unexpected costs or replacement of damaged apparatus during installation/training.				
62	17. Phase One (Pimicikamak Monitor Site in Cross Lake to Whiskey Jack Landing Treatment Centre) is designed as "proof of concept".				
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