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December 23, 2011 1CH008.033

EPCM Manager Hope Bay Mining Limited Suite 300, Harbourside Drive North Vancouver, B.C. V7P 3S1

Attention: Mr. Kevin Mather

Dear Kevin

**Doris North Project: 2011 Construction Summary** 

This letter report provides the summary of formal documentation related to the engineering and construction support services provided by SRK Consulting (Canada) Inc. (SRK) to Hope Bay Mining Limited (HBML) during the 2011 calendar year.

SRK provided on site engineering services between January 13, 2011 and November 14, 2011. Daily construction reports, 307 in total, were prepared by SRK during this period. These reports are provided in electronic format in Appendix A.

Drawings issued throughout the year are provided in Appendix B. This appendix is separated into three sections. Appendix B01 contains the letters of transmittal which accompanied issued drawings. Drawing sets which contain drawings Issued for Construction (IFC) are in Appendix B02 (see Drawing Set 1 and 2); this appendix includes all revisions of these drawings issued in 2011, including Issued for Review (IFR) drawings. Drawing sets which were only issued for review, but have not yet advanced to IFC are found in Appendix B03 (see Drawing Set 2). The contents of Appendix B are summarized in Table 1.

Nunavut Water Board

ΔPR 1 2 2012

Public Registry

U.S. Offices:

Anchorage 907.677.3520
Denver 303.985,1333
Elko 775.753.4151
Fort Collins 970.407.8302
Reno 775.828.6800
Tucson 520.544.3688

Mexico Office: Guadalupe, Zacatecas 52.492.927.8982 Canadian Offices:
Saskatoon 306.955.4778

Sudbury 705.682.3270
Toronto 416.601.1445
Vancouver 604.681.4196
Yellowknife 867.873.8670

Group Offices: Africa

Asia
Australia
Europe
North America
South America

**Table 1. Appendix B Contents** 

Appendix	Topic	Contents	
B01	Letters of Transmittal 76 Transmittals		
	Drawings Issued for Construction (See Drawing Set 1 and 2)	Doris North Camp Area	
		Doris North Camp Area Diversion Berm	
		Doris North Explosives Facility	
		Doris North Fuel Storage Facility	
		Doris North Land Farm	
		Doris North Lubricant Storage Facility	
		Doris North Primary Vent Raise Pad	
		Doris North Reagent and Cyanide Storage Facility	
B02		Doris North Secondary Road	
802		Doris North Tail Lake Access Road	
		New Windy Camp Pad	
		North Dam	
		Pad R and Pad D Rock/Ground Support	
		Roberts Bay Fuel Tank Farm	
		Roberts Bay Fuel Tank Farm Rock/Ground Supports	
		Roberts Bay Fuel Transfer Access Road	
		Roberts Bay Quarry 1 Fuel Tank Farm	
		Windy Camp Temporary Diversion Berm	
	Drawings Issued for Review (See Drawing Set 2)	Doris North Airstrip Expansion & Bypass Road	
B03		Doris North Overburden Storage Areas	
		South Dam	

Four revisions of the Technical Specification Earthworks and Geotechnical Engineering were issued in 2011. These can be found in electronic format in Appendix C as follows:

- Appendix C01 Technical Specifications Earthworks and Geotechnical Engineering Rev. D
- Appendix C02 Technical Specifications Earthworks and Geotechnical Engineering Rev. E
- Appendix C03 Technical Specifications Earthworks and Geotechnical Engineering Rev. F
- Appendix C04 Technical Specifications Earthworks and Geotechnical Engineering Rev. G

SRK issued a Geotechnical Design Parameters report for the Hope Bay site, which can be found in electronic format in Appendix D.

Technical memorandums issued during the year are included in Appendix E. The memos are organized into sub-appendixes by subject/area, and then filed by date of issue. The contents of Appendix E are summarized in Table 2.

**Table 2. Appendix E Contents** 

Appendix	Topic	Content		
E01	Airstrip	Design Brief: Doris North Project – Airstrip Expansion and Bypass Road		
E02	North Dam	Doris North - North Dam Fillet Construction		
		Hope Bay Project – North Dam Additional Key Trench Excavation in Peat Zone		
		Hope Bay Project – North Dam Additional Excavation of Massive Surface Ice		
		North Dam Close-out Plan for April/May 2011 - FINAL		
		Tail Lake Water Level		
E03	Pad B/Power Plant Pile Design	Doris North – Pad B Power Plant Exhaust Stack Foundation Design		
E04	Roberts Bay Tank Farm Robert's Bay Tank Farm Slope Remediation			
E05	Sedimentation and Pollution Control Ponds	Doris North Project Water Management – Remedial Procedures for Leaking Pollution Control and Sedimentation Ponds		
		Pollution Control Pond Liner Extension		
E06	Sewage Treatment Effluent	Doris North Project – Alternate Land Application Strategy for Discharge of Sewage Treatment Effluent		
E07	Vent Raise	Site Directive for Sump Detail of Primary Vent Raise		
E08	Roberts Bay Quarry 1 Tank Farm	Roberts Bay Quarry 1 Tank Farm Liner Raise Design Notes		

Material testing results, thermistor certificates and monitoring data and other data related to the quality control and quality assurance of the construction activities can be found in Appendix F, and the contents are listed in Table 3.

**Table 3. Appendix F Contents** 

Appendix	Topic	Content		
F01	Airstrip	Proctor Testing		
		California Bearing Ratio (CBR) testing		
:	North Dam	Testing by EBA	Moisture Content (core material and overburden samples from percolation testing)	
			Particle Size Distribution	
			Compaction	
			Specific Gravity	
			Proctor	
			Salinity Testing	
F02			Percolation	
1 0			Drilled Core	
		Testing by Nuna	Particle Size Distribution (core material blend)	
		Geosynthetic Clay Liner	Factory Test Certificates	
		Multi-bead Thermistors	Multi Bead Thermistor Test Certificates	
			Multi Bead Thermistor Data	
		Single Bead Thermistors	Beads Utilized for Summer Cover Monitoring	
			Sacrificial Beads Installed During Construction	
	Pad D	Material Testing for Retaining Wall Backfill	Chlorides	
F03			Resistivity	
			PH	
			Sulphate	
F04	Doris Creek Bridge	Thermistor Data		

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More than 40 requests for information were receive during the construction activities. SRK responses to the requests for information can be in Appendix G, organized by request number. Several site instructions were also received by SRK and these complete with the SRK response, arranged by date can be found in Appendix H.

General correspondence related to the construction activities are found in electronic format in Appendix I. The correspondence is organized by subject/area (and date) as listed in Table 4.

**Table 4. Appendix I Subject Area Listing** 

Appendix	Subject Area	
101	General Project	
102	Incomplete Works Summary memo	
103	North Dam	
104	Pad B/Power Generator Piles	
105	Pad D	
106	Sedimentation and Pollution Control pond	
107	Doris Windy Road	
108	Airstrip	
109	Landfarm	
l10	Oil-Lube Facility	
l11	Roberts Bay Jetty	
l12	Roberts Bay Tank Farm Expansion	
113	Roberts Bay Tank Farm in Quarry 1	
l14	Vent Raise	
l15	Water Management	
116	Windy Camp	
117	Pad R	

Water levels of the Pollution Pond, temporary water storage pond on Pad D, Tail Lake and the Sedimentation Pond were measured at various intervals throughout the year. Water level monitoring Data can be found in Appendix J.

To document final and interim inspections, Inspection Acceptance and Sign-Off Forms were completed. These are organized in sub- appendices by area and arranged by date. These documents can be found in Appendix K as follows:

- Appendix K01 Pad B
- Appendix K02 North Dam
- Appendix K03 Sedimentation and Pollution Control Ponds
- Appendix K04 Landfarm
- Appendix K05 Roberts Bay Tank Farm
- Appendix K06 Roberts Bay Fuel Transfer Access Road
- Appendix K07 2010 Work Inspected in 2011

As-built drawings of construction works completed in 2010 were issued, these can be seen in Appendix L (see Drawing Set 2). The contents are as follows:

- Engineering Drawings for the Doris-Windy All Weather Road
- Engineering Drawings for the Roberts Bay Laydown Area
- Engineering Drawings for the Laydown Pad Expansions
- Engineering Drawings for the Doris North Camp Area
- Engineering Drawings for the Doris North Fuel Tank Farm

If you have any questions about the documentation listed in this letter please feel free to contact me directly at (604) 601 -8451.

Yours truly,

SRK Consulting (Canada) Inc.

Megan Miller, E.I.T. Staff Consultant

Lowell Wade, M.Sc., P.Eng.

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Senior Consultant