NEWMONT
NORTH AMERICA

Project Proposal: Doris North Mine Modifications and Related Amendments to Project Certificate No. 3 and Type A Water Licence No. 2AM-DOH0713

Doris North Mining District
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Prepared for:
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Plain Language Summary (English, Inuktutuk, Innuinaktun)

This package describes the changes that Hope Bay Mining Ltd. ("HBML"; a wholly owned subsidiary of Newmont Mining Corporation) would like to make to the Doris North Mine (the "Mine"). As support for making these changes, the package also includes supporting memos and drawings that give more details about the changes and confirms that the changes will not cause any negative impacts. The current Nunavut Impact Review Board ("NIRB") Project Certificate No. 003 (the "NIRB Certificate") and the Nunavut Water Board ("NWB") Type A Water License No. 2AM-DOH0713 (the "Type A Water License") will need to be amended to let HBML go forward with some of the changes.

The main Mine changes are:

- HBML now plans to mine the entire Doris Deposit (including Doris North, Doris Lower, Doris Central, and Doris Connector) as well as any other deposits that can be accessed through the existing Doris North Mine Portal. Miramar Hope Bay ("Miramar") originally thought it could only mine the Doris North deposit through the Doris North Mine Portal. Miramar originally thought the Mine would be open for only 2 years. Because HBML has found more ore to mine accessible via the Doris North Mine Portal, it now expects to add about 2 to 4 years of overall mine life. This change will extend the benefits of the Mine for a longer period to Inuit, Nunavut and Canada.

- The mining rate at first will be around 1,000 tonnes per day (tpd), and the milling rate will be about 800 tpd. If HBML finds more ore at Doris, they may increase the mining rate to 2,000 tpd and the mill throughput to 1,800 tpd. All of these are yearly averages. Miramar originally suggested the mining rate would be 720 tpd with a milling rate of 800 tpd.

- Miramar said they would only find a little groundwater while they were mining in the permafrost at Doris North. Because Doris Central and Connector are under Doris Lake, HBML now expects to find more groundwater. Testing shows it will be salty. This salty groundwater will be sent from the mine to the tailings pond (formerly Tail Lake). Eventually, the groundwater will turn the water in the tailings area salty. For this reason, it will be better to send the tailings water directly to Roberts Bay, instead of Doris Creek which flows into Roberts Bay as Miramar originally planned. HBML also believes that discharging directly to Roberts Bay will be a better water management plan than the original plan to discharge to Doris Creek. Before the water is put in Roberts Bay, HBML will test it to make sure that it will not harm the environment and will comply with all laws. HBML is planning to install water treatment plants to clean the tailings pond water before discharge if it does not pass the tests. As a result HBML does not plan to build the water laboratory on site that Miramar originally permitted.

- HBML will need bigger laydown areas for ore and waste rock storage than Miramar planned because more ore will be mined.

- HBML plans to build more sewage plants at the Doris North Camp and add more bunk houses so that HBML can have up to 360 people staying in the camp. The increased milling and larger underground workforce is the reason that more beds at camp are needed.

- Other minor changes will be made to the Mine, including some site re-organization.

As part of this application, HBML is requesting a 10-year renewal of the Type A Water License (to expire in 2022). Currently, the Type A Water Licence will expire in September 2013.

ᐅᖃᐅᓰᑦ ᐊᑐᖅᑕᑦ ᑐᑭᓱᐊᓇᕐᓯᐊᖅᑎᓪᓗᒋᑦ ᓇᐃᓅᖅᓯᒪᔪᑦ

ᐅᓇ ᐃᓗᐃᑦᑐᓂᒃ ᐱᑕᓕᒃ ᐅᓂᒃᑲᓂᒃ ᐱᔾᔪᑎᓕᖕᓂᒃ ᐊᓯᑦᖅᑎᕆᒍᑎᒃᓴᖕᒋᓐᓂᒃ ᐅᑯᐊ Hope Bay ᐅᔭᕋᓐᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᐅᕝᕙᖓᖓᔪᓂᒃ ᐅᔭᕋᓐᓂᐊᖅᕕᐊᓐᓂ Doris North Mine-ᑯᑦ. ᐃᑲᔪᕐᓂᖃᓐᓂᐊᕐᒪᑕ ᐅᑯᐊ ᐊᓯᑦᖅᑎᑕᐅᒍᒪᔪᓂᒃ, ᐊᓪᓛᒃᓯᒪᔪᑦ ᐃᓗᐃᑦᑐᑦ ᐃᓚᖃᒻᒥᔪᑦ ᐊᒥᓱᓂᒃ ᐅᖃᐅᓯᓕᐅᖅᓯᒪᔪᓂᒃ ᐱᔭᕆᐊᑐᓂᖅᓴᓂᒃ ᐱᓕᕆᔾᔪᑎᑦ ᑐᑭᖏᓐᓂᒃ ᐅᔾᔨᓇᕐᓂᖅᓴᐅᑎᓪᓗᒋᑦ ᑐᑭᓱᓇᕐᓂᖅᓴᐅᑎᓪᓗᒋᑦ ᖃᓄᐃᑦᑑᓂᖏᓐᓂᒃ ᐅᓂᒃᑳᑦ ᐃᓗᐊᓃᑦᑐᑦ ᐅᓂᒃᑳᑦ ᐱᔾᔪᑎᓖᑦ ᐊᓯᑦᖅᑕᐅᕐᑯᔭᓂᒃ ᐊᒻᒪᓗ ᓇᓗᓇᐃᖅᓯᒍᑕᐅᓪᓚᕆᓐᓂᐊᕐᒪᑕ ᐊᓯᑦᖅᑕᐅᓂᐊᖅᑐᑦ ᓱᕋᐃᒍᑕᐅᕐᒋᓂᖅᓴᐅᓂᐊᕐᒪᑕ ᓄᓇᒥᒃ ᐱᐅᓯᖅᓱᖅᑐᒥᒃ ᐊᒃᑐᐃᒍᑎᒃ. ᐃᓚᖏᑦ ᐊᓯᑦᖅᑎᖅᑕᐅᓖᖅᑐᑦ ᐅᔭᕋᓐᓂᐊᖅᕕᖕᒥ ᐃᒫᒃ ᒥᒃᓯᖅᑲᒪᑕ ᒦᓇ ᓄᓇᕗᑦᒥ ᐊᕙᑎᓕᕆᔨᑦ ᑲᑎᒪᔨᖏᑦ ᑐᓂᓯᒪᔭᖏᑦ ᐱᔪᓇᐅᑎᑦ ᓇᓗᓇᐃᒃᑯᑕᖅᑭᕇᑦ ᓈᓴᐅᑖ No. 003 ᐊᒻᒪᓗ ᓄᓇᕗᑦᒥ ᐃᒪᓕᕆᔨᑦ ᑲᑎᒪᔨᖏᓐᓂᒃ ᐃᒪᖅᑭᑦ ᐃᒪᐃᑦᑐᖅ Type A ᓚᐃᓴᐅᑉ ᓈᓴᐅᑖ No. 2AM-DOH0713 ᐋᕿᒋᐊᖅᑕᐅᒋᐊᖃᙱᑦ.

ᒪᑯᓇᖓᖓᓪᓚᕆᒃᑐᑦ ᐱᓕᕆᕝᕙᖕᒥ ᐊᓯᑦᖅᑕᐅᙱᖅᑐᑦ:

- Hope Bay ᐅᔭᕋᓐᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᒫᓐᓇ ᐸᕐᓇᐃᓯᒪᓕᕐᒪᑕ ᐅᔭᕋᓐᓂᐊᖅᕖᖑᔪᓂᒃ ᐃᓘᓐᓇᖓᓄᑦ Doris-ᒥ ᐱᑕᖕᒥᒃ (ᐃᓕᖁᔭᐅᓪᓗᑎᒃ Doris North ᐅᐊᖕᓇᖓᓂ, Doris Lower ᐊᒃᐸᓯᖕᓂᖅᓴᕖᑦᑐᖅ, Doris Central ᖁᑎᖓᓃᑦᑐᖅ, Doris Connector ᐊᑦᑕᑎᖓᓂᓗ) ᓇᓪᓕᐊᑐᐃᓐᓇᖅ ᐱᑕᓖᑦ ᕿᒥᕐᕈᔭᐅᕙᔭᕐᒥᔪᑦ ᐅᕝᕙᖓᔪᑦ Doris North ᐅᔭᕋᓐᓂᐊᖅᕕᐊᑕ ᑲᑕᖓᒍᑦ. ᐅᑯᐊ Miramar Hope Bay-ᑯᑦ ᓯᕗᓪᓕᕐᒥ ᐅᔭᕋᒃᓴᖅᓯᐅᕐᓂᐊᖅᑐᕆᐅᓚᐅᕐᒪᑕ ᑭᓯᒥᓕ ᐅᕙᓂ Doris North-ᒥ ᐱᑦᑲᓪᓚᑦ ᑎᑭᐅᑎᓯᒪᔪᒥᒃ ᐅᕝᕙ Doris North-ᒥ ᐅᔭᕋᒃᓴᖅᓯᐅᖅᕕᐅᑉ ᑲᑕᖓᓂ ᐃᓗᐦᒧᐊᖓᔪᒥ. ᓲᖃᐃᒻᒪ ᐅᑯᐊ Hope Bay ᐅᔭᕋᒃᓴᖅᓯᐅᖅᑏᑦ ᓚᒪᑎᑦ ᓇᓂᓯᑲᓐᓂᖅᓯᒪᖓᒪᑕ ᐱᑕᖕᒥᒃ ᐲᔭᕋᒃᓴᒥᒃ ᓴᓂᐊᓃᑦᑐᒥᒃ Doris North ᐅᔭᕋᓐᓂᐊᖅᕕᐅᑉ ᑲᑕᖓᑕ, ᐊᓯᐃᓪᓛᒃ ᐃᓕᕆᐊᓕᕋᔭᖅᑐᑦ ᐱᓕᕆᕝᕕᐅᒃᑲᓂᕐᓗᑎᒃ ᐊᕐᕌᒍᐃᑦ 2 ᑎᑭᓪᓗᒍ 4-ᖑᑦ ᐃᓘᓐᓇᑎᒃ ᐅᔭᕋᓐᓂᐊᖅᕕᐅᓗᑎᒃ. ᐅᑯᐊ Miramar-ᑯᑦ ᐃᓱᒪᓚᐅᖅᓯᒪᓚᐅᓚᐊᕐᒪᑕ ᐅᔭᕋᓐᓂᐊᖅᕕᒃ ᒪᑐᐃᖓᓚᓚᔭᕆᐊᖓᓂᒃ ᐊᕐᕚᒃ ᒪᕐᕈᐃᓐᓈᒃ. ᐊᓯᐃᓪᓛᒃ ᑖᕝᕙᖓᖓᔪᑦ ᐊᓯᑦᖅᑕᐅᓚᔭᕐᒪᑕ ᐊᐅᑎᒃᑲᓐᓂᕋᔭᖅᑐᑦ ᐱᑕᖅᑲᓪᓚᑕ ᐊᑯᓂᐅᓂᖅᓴᖅ ᐊᐅᑎᓂᖅᑲᓐᓂᐊᖅᑐᑦ ᐃᓄᖕᓄᑦ, ᓄᓇᕗᑦᒥ ᐊᒻᒪᓗ ᑲᓇᑕᒥ.

- ᒪᓕᒃᑕᐅᓂᐊᖅᑐᓃᒃ ᖃᓄᑎᒋ ᐱᑕᖃᓐᓂᖓᓂᒃ ᐊᑐᐃᓐᓇᕐᓂᒃ ᐅᔭᖃᓂᒃ Hope Bay ᐅᔭᕋᓐᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᐃᓕᕆᐊᕆᑐᐃᓐᓇᕆᐊᓖᑦ ᐅᔭᕋᓐᓂᐊᖅᕕᐅᓚᔭᖅᑐᒥᒃ ᓴᕕᕋᔭᒃᓴᖅᑕᓕᕐᒥᒃ (ᑎᑭᐅᑎᓯᒪᑎᓪᓗᒋᑦ 2000 ᐃᒃᑕᕆᓐᓂᓕᕐᓂᒃ ᑖᓐᓯᓂᒃ ᐅᓪᓗᖅ ᐊᑕᐅᓯᖅ) ᐱᕙᓪᓕᐊᑎᑦᓯᕕᐅᓚᔭᕐᑐᓗ ᖃᓄᑎᒋ ᓱᒃᑲᓂᓕᕐᒥᒃ ᐱᕙᓪᓕᐊᔭᐅᓂᕐᒋᑦ ᐅᔭᕿᕆᕕᕐᒥ ᓴᓇᕕᕐᒥ ᐃᒫᑎᒋ ᐱᕙᓪᓕᐊᓂᖃᓪᓗᑎᒃ (ᑎᑭᐅᑎᓯᒪᔪᓂᒃ 1800 ᑖᓐᓯᓂᒃ ᐅᓪᓗᖅ ᐊᑕᐅᓯᖅ). ᓂᕆᐅᒋᔭᑦ ᐅᔭᕋᒃᓴᖅᓱᐅᖅᕕᐅᓚᔭᖅᑐᑦ ᒥᒃᓴᐅᓴᒃᑐᓂᒃ ᐅᓪᓗᖅ ᐊᑕᐅᓯᖅ 1000 ᑖᓐᓯᓂᒃ ᖃᐅᑕᒫᑦ, ᐊᒻᒪᓗ ᓯᖃᓪᓖᕕᖕᒥ ᓴᓇᕕᖕᒥ ᐱᕙᓪᓕᐊᓂᖃᔭᖅᑐᑦ ᖃᓂᒋᔭᓂᒃ 800 ᑖᓐᓯᓂᒃ ᐅᓪᓗᖅ ᐊᑕᐅᓯᖅ. ᑖᒃᑯᐊ ᑕᒪᕐᒥᒃ ᐅᔾᔮᖅᑑᑕᐅᓲᓂᒃ ᒪᓕᒃᑐᑦ ᐊᕐᕋᒍᑕᒫᑦ. ᐅᑯᐊ Miramar-ᑯᑦ ᐃᓱᒪᓚᐅᕐᓯᒪᖕᒪᑕ ᐅᔭᕋᓐᓂᐊᕐᓂᐅᕐᑲᑦᑕᔭᖅᑐᖅ ᐱᕙᓪᓕᐊᓂᖅᑲᑦᑕᔭᕐᓂᕆᓐᓂᒃ ᐃᒫᒃ ᑎᑭᐅᑎᓯᒪᔪᓂᒃ 720 ᑖᓐᓯᓂᒃ ᐅᓪᓗᖅ ᐊᑕᐅᓯᖅ ᐊᒻᒪᓗ ᓯᖃᓪᓖᕕᖕᒥ ᐱᕙᓪᓕᐊᓂᖃᑎᓪᓗᒋᑦ ᐃᒫᒃ 800 ᑖᓐᓯᓂᒃ ᐅᓪᓗᖅ ᐊᑕᐅᓯᖅ.

- ᐅᑯᐊ Miramar-ᑯᑦ ᓯᕗᓪᓕᕐᒥ ᐃᒫᒃ ᐃᓱᒪᓚᐅᖅᓯᒪᓚᐅᖅᓯᒪᖓᒪᑕ ᓇᓂᓯᐅᔭᖅᑐᓇᓪᓗᑎᒃ ᒥᖀᖅᓯᒪᔪᒥᒃ ᐃᒥᕐᒥᒃ ᓄᓇᐅᑉ ᐃᓗᐊᓅᖓᔪᒥᒃ ᐱᓕᕆᓗᑎᒃ ᐅᔭᕋᒃᓴᖅᓱᐅᖅᑐᑦ Doris North-ᒥ. Hope Bay ᐅᔭᕋᓐᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᓂᕆᐅᒃᑐᑦ ᓇᓂᓯᓛᕆᐊᒃᓴᖅ ᐊᖏᓂᖅᓴᒥᒃ ᓄᓇᐅᑉ ᐃᓗᐊᓂ ᐃᒪᖅᑕᖅᑲᒃᑲᓂᖅᑐᒥᒃ ᖁᓂᓕᕈᑎᒃ ᐅᔭᕋᓐᓂᐊᕐᓗᑎᒃ ᐅᕙᓂ Doris Central ᖁᑎᖓᓂ ᐊᒻᒪᓗ Connector ᐊᒃᑐᐊᓂᖓᓅᖓᔪᒥᒃ, ᐊᒻᒪᓗ ᖃᐅᔨᓴᕈᑎᑦ ᓴᕿᐅᒪᓂᖅᑲᓪᓚᑕ ᐱᑕᖅᑲᓪᓚᑦ ᑕᕆᐅᖓᔪᒥᒃ. ᑖᕝᕙᓂ ᓄᓇᐅᑉ ᐃᓗᐊᓂ ᐃᒥᕐᒥᒃ ᐅᕝᕕᖅᑲᑦᑕᔭᖅᑐᒥᒃ ᐃᓛᓐᓂᑯᑦ ᐊᒃᑕᖅᑲᐅᒻᒥ ᐅᔭᕋᒃᓯᓕᕆᔾᔪᑎᒥᓂᖅᑕᓕᐅᑉ ᐃᓂᖓᓅᖓᔪᒧᑦ (ᐅᓇ ᐃᒫᒃ ᑕᐃᔭᐅᖅᑲᑦᑕᓚᐅᖅᓯᒪᔪᖅ ᐊᒃᑕᖅᑲᐅᑦ Tail Lake). ᑎᑭᐅᑎᔪᒥᓖᖅᑐᖅ, ᓄᓇᐅᑉ ᐃᓗᐊᓃᑦᑐᖅ ᐃᒥᖅ ᐃᒪᕈᐃᓗᓂ ᐊᒃᑕᖅᑲᐅᒻᒥ ᐅᔭᕋᒃᓯᓕᕆᔾᔪᑎᒥᓂᖅᑕᓕᐅᑉ ᐃᓂᖓᓄᑦ ᐃᒥᑦᓯᐊᕙᒃ ᑕᕆᐅᕈᕋᔭᕐᒪᑦ. ᑕᒪᒃᑯᐊᖑᑦᑕᕐᒪᑕ ᓈᒪᓂᖅᓴᐅᓚᔭᖅᑐᑦ ᑐᕋᑦᑎᑕᐅᖔᖅᐸᑦ ᐊᒃᑕᖅᑲᐅᑎᐅᑉ ᐃᒪᖓ ᑲᕕᓯᓕᒃᑑᑉ ᐃᒪᖓᓄᑦ, ᐅᕝᕙᓘᕝᕚᖏᑦᑐᖅ Doris Creek ᑰᖓᓄᑦ ᐅᑯᐊ Miramar-ᑯᑦ ᑕᐃᒪᓐᓇ ᐸᕐᓇᓯᒪᓕᐅᖅᓯᒪᓚᕐᒋᑦ ᑖᒃᑯᐊ. ᒪᑐᒪᓕ ᓯᕗᕐᖓᒍᑦ ᐃᒥᖅ ᐅᕝᕚᖅᑲᑦᑕᔪᒪᓪᓚᑦ ᑲᕕᓯᓕᒃᑑᑉ ᐃᒪᖓᓄᑦ, ᐅᑯᐊ Hope Bay ᐅᔭᕋᓐᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᖃᐅᔨᓴᖅᑲᑦᑖᖅᑐᑦ ᓯᕗᖅᑎᓇᖑᕆᓪᓚᑦ ᐊᕙᑖᓂᒃ. Hope Bay ᐅᔭᕋᒃᑕᓇᐊᑦ ᓚᒪᑎᑦᑯᑦ ᐸᕐᓇᐃᔪᑦ ᐋᕿᖑᕿᔾᔨᒪᔪᑦ ᐃᒥᕐᒥᒃ ᓴᓗᒪᖕᓴᐃᕕᒃᓴᒥᒃ, ᐃᒥᖅ ᐱᐅᓯᖅᓱᕆᐸᑦ ᖃᐅᔨᓴᖅᑕᐅᖃᑦᑕᕐᓂᐊᕐᒪᑦ ᓱᕋᓪᓚᖕᖑᖅ. ᓲᖃᐃᒻᒪ Hope Bay ᐅᔭᕋᒃᑕᓇᐊᑦ ᓚᒪᑎᑦᑯᑦ ᐋᕿᖑᕿᔾᔨᒪᕗᑦ ᐃᒥᕐᒥᒃ ᓴᓗᒪᖕᓴᐃᕕᖕᓂᒃ, Hope Bay ᐅᔭᕋᓐᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᓴᓇᖑᕆᓪᓚᔾᔭᕆᑦᑐᑦ ᐃᒥᓕᕆᕕᒃᓴᒥᒃ ᖃᐅᔨᓴᖅᕕᖕᒥᒃ ᐃᖕᒥᒃᑰᓕᖓᔪᒥᒃ ᑕᒫᓂ ᓄᓇᒥ ᐅᑯᐊ ᕿᓯᐊᓂ Miramar-ᑯᑦ ᑕᐃᒪᓐᓇᐃᑦᑐᒥᒃ ᐋᕿᒍᒪᓚᐅᖅᓯᒪᔪᑦ.

- Hope Bay ᐅᔭᕋᓐᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᐋᕿᕆᐊᓖᑦ ᓄᓇᒥ ᐃᓕᐅᖅᑲᐅᕕᐅᖅᑲᑦᑕᔭᖅᑐᒥᒃ, ᐱᑕᖕᓂᒃ ᐅᔭᖃᓂᒃ ᐊᒻᒪᓗ ᐊᒃᑕᑯᓂᒃ ᐲᔭᖅᑕᐅᓂᑯᑦ ᐅᔭᖃᑦ ᐃᓂᒃᓴᖓᓐᓂᒃ ᐊᖏᓂᖅᓴᒥᒃ ᓲᖃᐃᒪ ᐊᖏᓂᖅᓴᑦ ᐲᔭᖅᑕᐅᖃᑦᑖᖅᑐᑦ ᐱᑕᖏᑦ ᖃᓂᖅᑕᑦ.

- Hope Bay ᐅᔭᕋᓐᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᐊᖏᓪᓕᕆᐊᕆᖃᕐᒪᖕᒥᔪᑦ ᖁᒃᑕᖅᑲᐅᒻᒥᒃ ᐅᕙᓂ Doris North Camp ᐊᓯᓂ ᓄᓇᓕᕆᔭᐅᓰᒥ ᐊᒥᓱᙳᖅᑎᕐᒪᑕ ᐃᓛᓪᓕ ᓯᓂᒃᕖᑦ ᐊᓯᓂ ᓄᓇᓕᕆᔭᐅᓰᒥ ᐃᒫᑎᒋ 180 ᑎᑭᓪᓗᒋᑦ 360-ᒧᑦ.

- ᐊᓯᖏᑦ ᐱᔭᕆᐊᑐᓗᐊᖏᑦᑐᑦ ᐊᓯᑦᖅᑎᖅᑕᐅᖅᑐᑦ ᐅᔭᕋᓐᓂᐊᖅᕕᖕᒥ, ᐃᓕᕆᔭᑦ ᒪᑯᐊ ᑖᒃᑯᓃᑦᑐᑦ ᐋᕿᒃᓯᒪᓂᖏᑦ ᐋᕿᒋᐊᖅᑕᐅᓗᑎᒃ.

- Hope Bay ᐅᔭᕋᓐᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᑐᒃᓯᕋᑦᑐᑦ ᓄᑖᕈᕆᐊᖅᑎᑦᓯᒍᒪᓪᓗᒋᑦ ᐃᒪᖅᑭᕈᑕᐅᕙᒃᑐᒥᒃ ᐃᒪᐃᑦᑐᒥᒃ Type A ᓚᐃᓴᖅᑭᒻᒥᒃ ᑎᑭᐅᑎᓯᒪᓕᓪᓗᒍ ᐅᕝᕙᓘ 2022-ᒧᑦ.

ᐅᑯᐊ ᓄᓇᕗᑦᒥ ᐊᕙᑎᓕᕆᔨᑦ ᑲᑎᒪᔨᖏᑦ ᐊᒻᒪᓗ ᓄᓇᕗᑦᒥ ᐃᒪᓕᕆᔨᑦ ᑲᑎᒪᔨᖏᑦ ᐊᖏᖅᐸᑕ, Hope Bay ᐅᔭᕋᓐᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᐱᕆᐊᓖᕈᒪᔪᑦ ᐊᓯᑦᖅᑎᓖᖅᑕᒥᓐᓂᒃ ᐅᔭᕋᓐᓂᐊᖅᕕᖕᒨᖓᔪᒥᒃ ᐅᖃᐅᓯᐅᖃᐅᔪᑦ ᐅᓂᒃᑳᑎᒍᑦ ᐅᑯᓇᓂ ᑎᑎᕋᖅᓯᒪᔪᑦ ᓄᑖᙳᑎᓪᓗᒍ 2013-ᒥ (ᐅᕝᕙᓗᑭᐊᖅ ᐊᑑᑕᐅᔪᓐᓇᖅᐸᑕ ᓯᕗᕐᖓᒍᑦ).

Qaniqhimannaqtut Uqauhiit Nainaqhimayut

Ukuat katihimayut unniqtutai tapkuat ahianguqnit tapkuat Hope Bay Uyagakhiuqvit Nanminilgit ("HBML-kut") piyumayai taphumunga Doris North Uyagakhiuqvik (tamna "Uyagakhiuqvik"). Ikayuqhiutininut tapkuat piyauni tahapkuat ahianguqnit, tapkuat katihimayut ilaqaqmiyut amihunik piluaqnaqtuliqutinik tuhaqhityutit unniqtuttiaqtai tapkuat ahianguqnit naunaiqhugitlu tapkuat ahianguqnit pityutaulaittut ihuittumik aktuanit. Ilai ahiangugutit taphumunga Uyagakhiuqvikmut piniat tapkuat tatya Nunavut Avatiligiyit Katimayit ("NIRB-kut") Havanguyuq Titigaqtaq Nappaa 003 (tapkuat "NIRB-kut Titigaqtat") tamapkuatlu Nunavut Imaligiyit Katimayit ("NWB-kut") Qanugitunia A Imaqmut Laisa Nappaa 2AM DOH0713 (tamna "Qanugitunia A Imaqmut Laisa") piyaqaqniat ihuaqhigiaqni.

Tapkuatatuqniqpat Havanguyuq ahianguqni tapkuat:

- HBML-kut tatya upalungaiqtut uyagakhiuqnianik tamna tamaat Doris Piqaqni (ilautitlugit Doris North, Doris Atpani, Doris Qitqa tamnalu Doris Atatyuta) tahapkualuttauq kitutliqak ahii piqaqnit piyaulat atuqhugit tapkuat tatya atuqtut Doris North Uyagakhiuqvik Nunamuktaqvia. Miramar Hope Bay-kut ("Miramar-kut") ihumagihimayagaluangat pilaqnia kihimik uyagakhiuqnia tamna Doris North piqaqnia talvuna Doris North Uyagakhiuqvik Nunamuktaqvia. Piplugu HBML-kut nalvaqni havikhaqaqpaliqnit haniani tamna Doris North Uyagakhiuqvik Nunamuktaqvia, nigiugiliqtat tatya ilani mikhaani 2 tikitlugu 4 ukiut uyagakhiuqtaulaqnia. Miramar-kut ihumagihimayagaluangat tamna Uyagakhiuqvik angmalaqnia kihimik 2 ukiuknut. Una ahianguqnia uiguniaq ihuaqutainut taphuma Uyagakhiuqviup hivitutqiyamut pivikhai Inuit, Nunavut tamnalu Kanatamut.

- Qanugitninut piyaulaqni havikhat HBML-kut ilagialaqtai tapkuat uyagakhiuqniqmut aktilangi havikhat (tikitlugu 2000 tansit upluq tamaat) tapkuatlu aktilangi havikhaliuqnit hanayauni (tikitlugu 1800 tansit upluq tamaat). Nigiugiyauyut tapkuat uyagakhiuqniq aktilangi atuqpakniqhauniat mikhaani 1000 tansit upluq tamaat, tapkuatlu havikhaliuqni aktiulangi mikhaani 800 tansit upluq tamaat. Tamaita tahapkuat ukiumut atulaqnikhauyut mikhautnit. Miramar-kut ihumagihimayagaluangat tamna uyagakhiuqniq aktilanga piniagahugini tikitlugu 720 tansit upluq tamaat tapkuatlu havikhaliuqnit aktilangi tikitlugit 800 tansit upluq tamaat.

- Miramar-kut ihumagihimayagaluangat nalauttaqnikhai kihimiuyuq mikkatakmik maniqami imait atuqtitlugu uyagakhiuqni Doris Qitqani tamnalu Atatyuta, uuktugautitlu takukhaupkaqtat tagiunginauniaqnia. Una maniqamit imaq nuktigauniaq talvangat uyagakhiuqvikmit talvunga uyagaktaqnikut kuvigaqvianut hiamaktailivikmut (tamnaugaluaq Tail Tahiq). Atuqpalianiaq, tahamna maniqami imaq akutyutiginiaqta imaq talvani uyagaktaqnikut hiamaktailivia imagiktumit tagiunginaqmut. Taimaittumik piplugu, nakutqiyauniaq nuktiqninut tapkuat uyagaktaqnikut imait tugaqtitlugit talvunga Roberts Bay-mun, talvungaungittuq Doris Kuugauyaqmut piyainut Miramar-kut upalungaiyaqtagaluangatut. Hivuani tamna imaq kuvipkagauniahaqtitlugu Roberts Bay-mun, HBML-kut uuktugaqniaqtat atuqpiaquuplugu huguqtagutaulaitnia avatigiyauyumut. HBML-kut upalungaiyaqtut iluqaqni imaqmut halumaqhautit halumaqtiqninut imaq naamagiyaungitpat uuktugaqni. Piplugit HBML-kut uplaungaiyaqni ilauqaqni imaqmut halumaqhautit, HBML-kut upalungaiqhimaittut hananinik imaqmut naunaiyaivik havakvikmi tapkuat Miramar-kut upalungaiyautigihimayagaluangatut hananikha.

- HBML-kut piyaqaqtat iliuqaqvikhaq, havikhat iqakut uyaqat tutquqvi aglivaliqni piplugit ilavaliqni havikhat aktilangi uyagakhiuqtauniat.

- HBML-kut upalungaiyaqtut ilavaliqnnik tapkuat anait halumaqhaivit talvani Doris North Hiniktaqvik pitquplugit ilavaliqni iglikhat hiniktaqvikmi talvangat 180 talvunga 360.

- Ahii mikiyut ahianguqnit piyauniat Uyagakhiuqvikmi Mine, ilalgit ilai havakvikmi ihuaqhatqikhaqni.

- HBML-kut tukhigaqtut nutanguqnianik tamna Qanugittunia A Imaqmut Laisa tikitlugu 2022.

Pikpata NIRB-kut tapkuatlu NWB-kut angiqhimani, HBML-kut upalungaiqhimayut pigiaqni tahapkuat ahianguqnit taphumunga Uyagakhiuqvikmut unniqtuqninut ukuat katihimanit atulihaqtitlugu 2013 (tunganiluniit ayuqnaitpat).

Executive Summary (English, Inuktutuk, Innuinaktun)

This application relates to the Doris North Mine (the "Mine") authorized by the Nunavut Impact Review Board ("NIRB") under Project Certificate No. 003 (the "Project Certificate") issued in September 2006 and the Nunavut Water Board ("NWB") under Type A Water Licence 2AM-DOH0713 (the "Type A Water License") issued in September 2007.

Based on encouraging results from its continuing exploration in the vicinity of the Doris North Mine, Hope Bay Mining Ltd. ("HBML"; a wholly owned subsidiary of Newmont Mining Corporation) now anticipates it will use the existing Doris North Portal to access and mine the entire Doris deposit. This includes sub-deposits previously described as Doris North, Doris Lower, Doris Central, and Doris Connector and any extensions or new discoveries that can be accessed from the Doris North Portal. The decision to use the existing Doris North decline to access all of the known Doris sub-deposits has led mine engineering and operations to identify changes to the existing mine footprint and facilities that will be necessary in order to optimize the operation and ensure a continuous ore feed. The changes presented in this document and the supporting appendices add approximately 2 to 4 years of mine life to the approximately 2.5 years originally reported in the Final Environment Impact Statement ("FEIS") approved by NIRB. The changes are within the scope of the currently approved closure plan for the Tail Lake Tailing Impoundment Area ("TIA").

The Mine changes described within this application are required in order to continue developing the Phase 1 Doris North Mine and are not a "pre-build" to support the Phase 2 Hope Bay Belt Project. Phase 2 will be the subject of separate regulatory applications to the NIRB and NWB. In the Phase 2 Project Description, HBML will describe how it will expand existing Doris site infrastructure in the future once Phase 2 is approved in order to support development in the southern Hope Bay Belt. As well, Phase 2 will require a significant number of new stand-alone facilities. This approach will minimize disturbance of the land and maximize capital investment. The Phase 1 Doris North Mine discussed in this application is a stand-alone operation and does not depend on Phase 2 for the operation of either the Doris North Mine or changes now being proposed.

Proposed changes to the Doris North Mine are summarized briefly below.

- Mining the Doris Central and Connector sub-deposits in addition to the Doris North deposit will extend the mine life of the Doris North Mine by an estimated 2 to 4 years. HBML has conducted geochemical analysis to characterize the material included in Doris Central and Doris Connector and the composition of these materials supports the view that the waste rock can be managed via existing site controls and the changes to facilities described within this application.

- HBML anticipates an initial mining rate of 1,000 tonnes per day (tpd; yearly average ore mining rate) and that ore from these deposits will be processed by the existing mill at a rate of 800 tpd (yearly average). These rates may ultimately grade up to a 1,600 tpd yearly milling average and mining rate of up to 2,000 tpd yearly depending upon what additional resources are found at Doris.

- Expanded mining activities will result in additional waste rock and ore that will require storage, therefore laydown areas and ore and waste rock pad areas will be expanded accordingly.

- HBML anticipates that saline ground water will be encountered in the talik under Doris Lake during mining of Doris Central and Doris Connector and below the permafrost in Doris Lower. Any groundwater encountered during mining will be diverted to the TIA through an overland pipeline.

- In order to manage saline groundwater as well as reduce potential for negative impacts on the freshwater environment, HBML will revise management of the TIA so that water is discharged directly to Roberts Bay via pipeline and a diffuser on the ocean floor, rather than to Doris Creek as previously planned. All regulatory parameters, including those listed in the Type A Water License and in the *Metal Mining Effluent Regulations,* will be met prior to discharge. Process water will be treated prior to deposit in the TIA and if needed prior to discharge to Roberts Bay. Footprint impacts will be minimal, as the on-land portion of the discharge pipeline will follow the existing all-weather road to Roberts Bay, will pass down the jetty and then into Roberts Bay. The pipeline will run about 600 m from shore into a deep pocket.

- In order to maximize capacity of the TIA while continuing subaqueous tailings disposal, HBML proposes to reduce the TIA water cover to 2.3 m (from the previously proposed 4 m). This depth is sufficient to prevent re-suspension and ice entrainment of the tailings.

- During operations and continuing into closure, mixed tailings (a combination of destructed cyanide tailings and flotation tailings) will report to the TIA. HBML believes it is now appropriate to move to a mixed tailings because HBML is introducing additional treatment measures in the mill to destroy cyanide in the tailings slurry (which was not a measure proposed by Miramar). Cyanide will be destructed to 0.05 mg/L which will fall below management thresholds set out in the International Cyanide Management Code for the Gold Mining Industry and will meet all applicable Canadian regulatory standards.

- The revisions that HBML is requesting to TIA water management will ensure that discharge meets required criteria and as such, the on-site laboratory previously proposed by Miramar Hope Bay and described in the Project Certificate is no longer necessary.

- Sewage treatment capacity and beds at the Doris North Camp will increase from 180 to 360. The increased milling and larger underground workforce triggers the requirement for more beds.

- Materials from existing Windy Road quarries A, B, D, and new quarry I will be used for general construction use.

- Waste management facilities (incineration, materials handling) currently located near Roberts Bay may be relocated to an area near Quarry A (where the landfill is proposed to be located). HBML wishes to retain flexibility with respect to placement of these facilities.

- HBML may change the water source for the Doris North camp from Doris Lake to Windy Lake. HBML wishes to retain flexibility with respect to placement of these facilities.

- In addition, HBML wishes to clarify that it is expected that certain measures originally anticipated to be temporary will continue. Specifically, HBML plans to continue to:

    - supplement permanent accommodations located on site with continued use of the accommodation barges located in Roberts Bay, which will support approximately 125 additional workers on site during construction.

    - require ongoing discharge of treated sewage effluent to the tundra from time to time in future years. This will allow for maintenance of the tailing discharge lines to the TIA, which will in the future be used to transport treated effluent to the TIA.

    - from time to time and as needed, over-winter fuel tankers in ice in order to ensure continuous delivery of fuel to site.

As part of this application, HBML has described the direct associated changes to its reclamation and closure plan. The management plans associated with the Project Certificate and Type A Water Licence will be updated once the amendment process is complete and the final requirements relating to these proposed changes have been identified. Preliminary views on potential changes to these plans are included in this document.

In order to proceed with the proposed Mine changes, HBML will request all necessary amendments to the Project Certificate in addition to amendments to the Type A Water Licence. As part of this application, HBML requests that the Type A Water Licence be extended to permit a ten year licence term (expiry in 2022). It is HBML's desire to pursue a NIRB/NWB coordinated review process to the extent possible.

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ᐅᑯᐊ ᑐᒃᓯᕋᐅᑎᑎᒍᑦ ᑐᒃᓯᕌᑦ ᐱᔾᔪᑎᓖᑦ ᐅᑯᓄᖕᒐᖕᒐᔪᓂᒃ Doris North–ᒥ ᐅᔭᕆᒃᓴᖅᓯᐅᖅᑲᖕᒎᖕᒐᔪᑦ ᐱᔪᓐᓇᕈᑎᖃᖅᑎᑕᐅᔪᑦ ᓄᓇᕗᑦᒥ ᐊᕙᑎᓕᕆᔩᑦ ᑲᑎᒪᔩᖏᑦᑕ ᓇᓗᓇᐃᒃᑯᑖᑦ ᐱᔪᓐᓇᐅᒻᒥᒃ ᐃᒫᒃ ᓈᓴᐅᑎᓕᖅᒥᒃ No. 003 ᐅᕙᓂ ᑐᓂᔭᐅᓚᐅᖅᓯᒪᔪᖅ September 2006–ᒥ ᐅᑯᐊᓗ ᓄᓇᕗᑦᒥ ᐃᒪᓕᕆᔩᑦ ᑲᑎᒪᔩᖏᑦᑕ ᐃᒪᓕᕆᔪᓐᓇᐅᑎᖃᑦᑎᑕᖏᑦ ᐃᒪᐃᑦᑐᒥᒃ Type A–ᒥᒃ ᓚᐃᓴᒥᒃ ᐆᒥᖓ 2AM-DOH0713 ᑐᓂᔭᐅᔪᔪᖅ ᐅᕙᓂ September 2007–ᒥ.

ᒪᓕᒃᑕᐅᓪᓗᑎᒃ ᑲᔪᓯᒍᓐᓇᐅᑎᖃᒻᒪᑕ ᓯᕗᕐᖓᒍᑦ ᐋᑐᑕᐅᕙᓚᐅᖅᓯᒪᔪᑦ ᕿᓂᖅᑎᓪᓗᒋᑦ ᑕᑯᒃᓴᖓᓂᑦᑐᒥᒃ Doris North ᐅᔭᕆᒃᓴᖅᓯᐅᖅᕕᐊᑕ, Hope Bay Mining Ltd.–ᑯᑦ ᒫᓇ ᐋᑐᑎᖦᑭᒪᖓᑕ ᑖᕙᓂ ᓴᕿᐅᒪᓪᓴᐅᑎᑦᔪᒥ ᐅᔭᕆᒃᓴᖅᓯᐅᖅᕕᖓᒥ Doris North–ᒥ ᐊᖓᔪᒥ ᓄᓇᐅᑉ ᐃᓗᐊᓄᑦ ᐊᕐᑯᑎᒋᔭᐅᓰᖅ ᐃᓗᒧᐊᖓᔪᖅ ᐃᑎᖅᕕᐅᓰᖅ ᐊᒻᒪᓗ ᐲᔭᐃᒍᒪᖓᑕ ᐅᔭᕆᓐᓂᐊᕐᓗᑎᒃ ᐃᓘᓐᓇᖓᓂ Doris–ᒥ ᐱᑕᓕᓖᒪᒥᒃ. ᑖᒃᑯᖓᖓᔪᑦ ᐃᓚᖃᕐᕋᔭᖅᑐᑦ ᐅᔭᕆᒃᓴᖅᓯᐅᖅᕕᐅᕙᔪᔪᓂᒃ ᐅᑯᓇᓂ Doris North–ᒧᑦ, ᐅᕙᓂᓗ Doris Lower ᐊᒃᐸᓯᓐᓂᖅᓴᒥ, Doris Central ᕿᑎᖓᓃᑦᑐᖅ, Doris Connector ᐊᒃᑐᐊᔪᖅ ᑖᒃᑯᖓᖓᔪᖅ ᐊᒻᒪᓗ ᓇᒧᑐᐃᓐᓈᖓᔪᑦ ᑖᒃᑯᖓᖓᔪᑦ ᐅᕝᕙᓗᑭᐊᖅ ᓄᓖᓂᒃ ᓇᓂᓯᕕᐅᓯᒪᔪᓂᒃ ᑖᒃᑯᖓ ᑎᑭᐅᑎᔪᓐᓇᖅᑐᓂᒃ Doris North–ᒥ ᐅᐊᓐᓇᖓᓂ ᑲᑕᖓᓂᑦᑐᖅ ᐃᓗᒡᒍᕐᑲᓄᖅᑑᕈᑕᐅᒪᓂᒃ ᐊᑐᖅᑕᐅᖃᑦᑕᕐᓂᐊᕐᓂᖅᑎᑦ ᒫᓇ ᓴᕿᐅᒪᔪᑦ ᐅᕙᓂ Doris North–ᒨᖓᔪᑦ ᐊᒃᐸᓯᓕᕐᒪᑕ ᐃᓘᓐᓇᑎᒃ ᖃᐅᔨᒪᔭᑦ Doris–ᒨᖓᔪᓕᒫᑦ ᓇᓗᓇᐃᖅᓯᕕᐅᓯᒪᔪᓕᒫᑦ ᐱᑖᓖᑦ ᐱᓕᕆᕕᐅᕝᕙᑦᑕᖅᓯᒪᔪᑦ ᓴᓇᔭᐅᓯᒪᔪᓂᒃ ᐱᑖᓖᑦ ᐊᒻᒪᓗ ᐊᐅᓚᑦᓯᒍᑎᑦ ᑖᒃᑯᖓᖓᔪᑦ ᓇᓗᓇᐃᔭᖅᑕᐅᓛᕐᒪᑕ ᖃᓄᖅ ᐊᓯᐳᐊᓂᖅᑎᑦ ᐱᓕᕆᕕᐅᕝᕙᑦᑕᔪᑦ ᐋᑐᑕᐅᕝᕙᑦᑕᓚᐅᖅᓯᒪᔪᑦ ᐊᒻᒪᓗ ᓴᓇᕕᐅᓲᑦ ᐋᕿᒋᐊᖅᑕᐅᓛᕐᒪᑕ ᐊᐅᓚᑦᓯᒍᑎᑦ ᐊᒻᒪᓗ ᑲᔪᓰᕐᒪᑕ ᐅᔭᖅᑲᓂᒃ ᐋᑐᑎᔪᒃᓴᖅᑕᓕᖅᓂᒃ ᐲᔭᐃᕙᐅᓰᑦ. ᐱᔾᔪᑎᓖᑦ ᐊᓯᑭᖅᑕᐅᓂᐊᖅᑐᓂᒃ ᐅᑯᐊ ᐱᔾᔪᑎᖃᕐᒪᑕ ᐊᓪᓚᒃᓯᒪᔪᑎᒍᑦ ᐊᒻᒪᓗ ᐃᑲᔪᕐᓂᖃᖅᓂᐊᕐᒪᑕ ᐃᓚᒋᓕᐅᑎᓯᒪᔪᑦ ᐃᓚᒋᓕᐅᑎᓂᐊᕐᒪᑕ ᐃᒫᒃ ᖃᓂᑦᑑᓂᖓ ᐱᓕᕆᕕᐅᓛᖅᑐᑦ ᒥᒃᓴᐅᓴᒃᑐᑦ 2 ᑎᑭᑦᑐᒍ 4 ᐊᕐᕌᒍᐃᑦ ᐱᔾᔪᑎᓖᑦ ᐅᔭᕆᓐᓂᐊᖅᕕᐅᖅᑲᖕᒎᖕᒐᔪᑦ ᐋᑐᑎᓂᖃᖅᓴᕐᓂᖓᓂᒃ ᑎᑭᐅᑎᕐᓯᒪᔪᒥᒃ 2.5 ᐊᕐᕌᒍᒃ ᒪᕐᕉᒃ ᐊᕿᕖᓗ ᑐᓴᒐᒃᓴᖅᑎᒍᑦ ᑐᓴᖅᑕᐅᔪᔪᑦ ᐅᑯᑎᒎᓇ ᑭᖑᓪᓕᖅᐹᖅᓯᐅᑎᑦ ᐊᕙᑎᓕᕇᔪᑎᑦ ᑐᑭᖏᑦᑎᒍᑦ. ᐋᑐᑕᐅᔪᒪᓯᒪᔪᓅᖓᓪᓚᑦ ᒫᓇ ᐊᖏᖅᑕᐅᓯᒪᔪᑦ ᒪᑐᓯᒍᑎᓅᖓᔪᑦ ᐋᕿᒃᓯᐃᒍᑎᑦ ᐅᔭᕆᒃᓴᓕᕇᔪᑎᒥᖅᑕᓕᖕᒥ ᐊᒃᑕᑯᖅᑲᐅᒧᖓᔪᑦ ᑖᕙᓂ ᑕᓯᕐ

ᐱᓕᕆᕙᖕᒨᖓᔪᑦ ᐊᓯᕈᖅᑎᑕᐅᓂᖅᑭᓐᓂᒃ ᐱᔾᔪᑎᓖᑦ ᐅᓂᒃᑳᑦ ᐅᑯᑎᒎᓇ ᑐᒃᓯᕋᐅᑎᒃᑯᑦ ᐋᑐᑕᐅᔭᕆᐊᒃᑲᓪᓚᑕ ᑕᐃᒫᒃ ᑭᓯᐊᓂ ᑲᔪᓯᒍᑕᐅᔪᓐᓇᕐᓚᑕ ᐱᕙᓪᓕᐊᑎᕆᒍᑎᓄᑦ ᐅᕗᖓᖓᔪᑦ ᓯᕗᓪᓕᖅᓯᐅᑎᑦ ᐃᒫᒃ Phase 1–ᑯᑦ Doris North Mine ᐅᔭᕆᒃᓴᖅᓯᐅᖅᕕᐊᓂ ᐊᒻᒪᓗ ᓯᕗᕐᖓᒍᑦ 'ᓴᓇᔭᐅᓚᐅᖅᓯᒪᖕᕆᑦᑐᒦᑦᑐᖅ' ᐃᑲᔪᕐᓂᖅᑲᓂᐊᕐᓚᑦ ᐊᐃᑉᐹᓅᖓᔪᒧᑦ ᐅᕗᖓ Phase 2–ᒧᑦ Hope Bay–ᒨᖓᔪᓕᒫᒦᑦᑐᖅ ᓇᓄᓇᐃᖅᑕᐅᓯᒪᔪᒨᖓᔪᖅ ᐱᓕᕆᕝ. ᐊᐃᑉᐹᒨᖓᔪᖅ Phase 2–ᑯᑦ ᐅᐱᒃᑑᑕᐅᔪᖅ ᐃᖕᒥᒃᑯᖓᑕᐅᔭᕐᓚᑦ ᐱᕐᑯᔭᓕᕇᔪᑎᑎᒍᑦ ᑐᒃᓯᕋᐅᑎᑦ ᑐᕌᑦᑐᑦ ᓄᓇᕗᑦᒥ ᐊᕙᑎᓕᕆᔩᑦ ᑲᑎᒪᔩᖏᓐᓄᑦ ᐊᒻᒪᓗ ᓄᓇᕗᑦᒥ ᐃᒪᓕᕆᔩᑦ ᑲᑎᒪᔩᖏᓐᓄᑦ. ᐅᕝᕙᓇ ᐱᓕᕇᔪᑕᐅᕙᔭᖅᑐᑦ ᑐᓪᓚᐊᒍᑦ Phase 2–ᑯᑦ ᐅᓂᒃᑳᑦ ᐱᓕᕆᕝᓴᐅᑉ ᖃᓄᐃᑦᑑᓂᖓᓂᒃ ᐱᔾᔪᑎᓖᑦ Hope Bay ᐅᔭᕆᒃᓴᖅᓯᐅᖅᕕᐊᓂ ᓴᕿᐅᒪᓂᖃᕇᕐᓚᑦ ᖃᓄᑎᒋ ᐊᖏᓪᓕᒋᐊᖅᑕᐅᔩᕐᓂᖓᓂᒃ ᐱᔾᔪᑎᓖᑦ ᑖᕙᓂ Doris–ᒥ ᓴᓇᔭᐅᒧᒫᕐᓂᐊᖅᑐᑦ ᑖᒃᑯᐊ ᑐᓪᓚᐊᓅᖓᔪᑦ Phase 2–ᑯᑦ ᐊᖏᖅᑕᐅᓯᒪᓕᖅᐸᑕ ᑲᔪᓯᒍᑎᒃᓴᑦ ᐱᕙᓪᓕᐊᔭᐅᓚᐅᖅᑐᑦ ᐅᐊᖕᓇᓗ Hope Bay–ᒥ ᓇᓄᓇᐃᖅᓯᕕᐅᓯᒪᔪᒦᑦᑐᑦ. ᑕᐃᒪᓇ ᐱᓕᕆᐊᖑᓕᖅᐸᑕ ᑖᒃᑯᖓᖓᔪᑦ ᐸᓕᕆᔭᓪᓚᑕ ᓱᕋᐃᓂᕐᒋᑦ ᓄᓇᒥᒃ ᐊᒻᒪᓗ ᐊᑭᑐᕐᒋᓂᖅᓴᐅᕙᔭᓪᓚᑦ ᐊᑭᑐᔪᓕᕆᔭᕐᔪᑎᑦ ᐱᕈᑉᐸᒃᓕᐊᒍᑎᓅᖓᔫᑦ. ᐅᕝᕙᓇ ᓯᕗᓕᒃᑯᑦ Phase 1–ᑯᑦ Doris North ᐅᔭᕆᒃᓴᖅᓯᐅᖅᕕᐊᓂᒃ ᐅᐱᒃᑑᑕᐅᓪᓚᑕ ᐅᑯᐊ ᑐᒃᓯᕋᐅᑎᑦ ᑭᓯᐊᓂ ᑐᕌᓪᓚᑕ ᑕᐃᒪᓇᑐᐊᖅ ᐊᐅᓚᑕᐅᕙᔭᖅᑐᓂᒃ, ᐱᔾᔪᑎᖃᖅᑭᓪᓚᑕᓕ ᑐᓪᓚᐊᓅᖓᔪᓂᒃ ᐅᕝᕙᓇ Phase 2–ᑯᑦ ᐊᐅᓚᑦᓯᒍᑕᐅᕙᔭᖅᑐᓂᒃ ᐱᔾᔪᑎᓕᖅᓂᒃ Doris North–ᒥ ᐅᔭᕆᒃᓴᖅᓯᐅᖅᕕᖓᒥᒃ ᐱᔾᔪᑎᖃᓪᓚᑕ ᖃᓄᐃᑦᑑᓂᖓᓂᒃ ᑐᑭᓕᐅᖅᓯᒪᔭᑦ ᐊᕙᑎᓕᕇᔪᑎᑎᒍᑦ ᐅᕝᕙᓗᑭᐊᖅ ᐊᓯᕈᖅᑎᖅᑕᐅᒍᓯᒪᔪᑦ ᑐᒃᓯᕋᖑᓪᓚᑦ.

ᑐᒃᓯᕌᑦ ᐊᓯᕈᖅᑎᖅᑕᐅᔪᓯᒪᔪᑦ ᐅᕙᓂ Doris North–ᒥ ᐱᓕᕆᐊᖑᔪᓯᒪᔪᑦ ᐅᑯᐊ ᐊᑕᐅᓯᑐᑦ ᓇᐃᓈᖅᓯᒪᔪᑦ.

- ᐅᔭᕆᓂᐊᖅᕕᒃ ᑖᕐᓯᒪ Doris Central ᕿᑎᖓᓃᑦᑐᖅ ᐊᒻᒪᓗ ᐊᕐᑯᑦ ᐊᒃᑐᐊᔪᖅ ᐱᑕᓕᖕᒥᑦᑕᐅᖅ ᐃᓚᒋᓕᐅᑎᓯᒪᖓᑕ ᐅᕗᖓᖓᔪᓄᑦ Doris North–ᒧᑦ ᐊᑕᔪᑦ ᐱᑖᓖᑦ ᓱᓕ ᐱᓕᕆᐊᖑᔭᖅᑐᓄᑦ ᐅᐃᒍᓕᐅᑎᓯᒪᖓᑕ ᐅᔭᕆᒃᓴᖅᓯᐅᖅᕕᐅᒃᑲᓂᕐᓂᐊᕐᓂᖓᓄᑦ Doris North–ᒥ ᐱᓕᕆᕝᒃᓴᖅ ᐃᒫᒃ ᒥᒃᓴᐅᓴᒃᑐᓂᒃ ᐱᓕᕆᕝᐅᒃᑲᓂᕆᔭᖅᑐᖅ ᒪᕐᕉᒃ 2 ᑎᑭᑦᑐᒍ ᓯᑕᒪᓄᑦ 4 ᐊᕐᕌᒍᕐᓄᑦ. ᐅᑯᐊ Hope Bay-ᒥ ᐅᔭᕆᒃᓴᖅᓯᐅᖅᕕᖓᒥ ᐊᐅᓚᑦᓯᖃᑦᑕᖅᓯᒪᓕᕐᓚᑦ ᓄᓇᓕᓐᓄᑦᑎᒃ ᖃᐅᔨᓴᖅᓯᑎᒃ ᖃᓄᐃᑦᑐᓕᓐᓂᒃ ᐱᑕᖃᓪᓚᖕᖒᖅ ᐃᓚᒋᓕᐅᔾᔭᐅᓪᓗᓂ ᕿᑎᖓᓅᖓᔪᖅ Doris Central–ᒥ ᐊᒻᒪᓗ ᐊᒃᑐᐊᓂᖓᓃᑦᑐᖅ Doris Connector–ᒧᑦ, ᑕᐃᒪᖓᓂᑦ ᖃᐅᔨᓴᖅᑕᐅᖃᑦᑕᖅᓯᒪᖓᑕ ᖃᓄᐃᑦᑐᓂᒃ ᐱᑕᖃᓪᓚᕐᖒᖅ ᑭᖑᕚᖓᑦ ᓇᓄᓇᐃᖅᓱᑕᐅᓯᒪᓕᕐᓚᑦ ᐅᔭᖅᑲᑦ ᐲᔭᖅᑕᐅᓂᑯᑦ ᖃᓄᖅ ᐋᑐᑕᐅᒍᓐᓇᕐᓂᖅᑭᓐᓂᒃ ᑖᕙᓃᑦᑐᑦ ᐊᐅᓚᑕᐅᓗᑎᒃ ᐊᒻᒪᓗ ᐊᓯᕈᖅᑎᓇᐅᔭᕐᓚᑦ ᖃᓄᖅ ᐋᑐᑕᐅᔭᕐᓂᖅᑭᓐᓂᒃ ᐱᓕᕆᕙᖕᒨᖓᔪᑦ ᑖᒃᑯᐊ ᑕᐃᒪᓇ ᐅᓂᒃᑳᖑᔪᑦ ᐅᑯᑎᒎᓇ ᑐᒃᓯᕋᐅᑎᒃᑯᑦ.

- Hope Bay ᐅᔭᕆᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᐃᒫᒃ ᐋᑐᑎᖦᑭᒪᖓᑕ ᐱᒋᐊᕈᑕᐅᕙᔭᖅᑐᓂᒃ ᖃᓄᐃᓪᓗᐊᖅᑐᓂᒃ ᐲᔭᐃᖅᑕᑦᓗᑎᒃ 1000 ᑖᓐᓯᓂᒃ ᐅᓪᓗᖅ ᐊᑕᐅᓯᖅ (ᐊᕐᕌᒍᓕᒫᖅ ᐋᑐᑕᐅᓲᑦ ᒪᓕᒃᑕᐅᓗᑎᒃ ᐅᔭᕆᓂᐊᕈᑕᐅᓲᑦ ᐱᕙᓪᓕᐊᑎᕆᔪᑕᐅᓲᑦ) ᐊᒻᒪᓗ ᐅᔭᖅᑲᑦ ᐱᑖᓖᑦ ᑖᕙᖓᑦ ᐲᔭᖅᑕᑦ ᓯᖅᑲᓪᓚᔭᐅᖅᑲᑦᑖᖅᑐᑦ ᐅᔭᕆᓕᕆᕝᒥ ᐃᒫᑎᑭ ᐱᕙᓪᓕᐊᓂᖅᑲᑎᓪᓗᒋᑦ 800 ᑖᓐᓯᓂᒃ ᐅᓪᓗᖅ ᐊᑕᐅᓯᖅ (ᑕᐃᒪᓇ ᐋᑐᑕᐅᕙᒃᑐᑦ ᐊᕐᕌᒍᑕᒫᑦ ᐋᑐᑕᐅᓗᑎᓪᓗᒋᑦ). ᑕᐃᒪᓇ ᐋᑐᑕᐅᕙᔭᖅᑐᑦ ᐱᕙᓪᓕᐊᓂᖅᑲᑎᓪᓗᒋᑦ ᖁᕝᕙᓯᐊᖅᑕᐅᑐᐃᓐᓇᓯᐊᓖᑦ ᐃᒫᒃ ᑎᑭᐅᑎᓯᒪᔪᓂᒃ 1,600 ᑖᓐᓯᓂᒃ ᐅᓪᓗᖅ ᐊᑕᐅᓯᖅ ᐅᔭᖅᑲᓂᒃ ᓯᖅᑲᓖᕝᒥ ᑕᐃᒪᓇ ᐋᑐᑕᐅᕙᔫᑎᒍᑦ ᐋᑎᓗᑎᒃ ᐊᒻᒪᓗ ᑎᑭᐅᑎᓯᒪᔪᓂᒃ 2,000 ᑖᓐᓯᓂᒃ ᐅᓪᓗᖅ ᐊᑕᐅᓯᖅ ᑭᓯᐊᓂᑖᒃ ᓱᓕ ᐃᓚᐅᔭᖅᑐᑦ ᐱᑕᖃᐸᑦ ᐊᑐᐃᓐᓇᕐᓂᒃ ᓇᓂᓯᔪᖃᐸᑦ Doris–ᒥ.

- ᐊᖏᓪᓕᒋᐊᓇᓕᖅᐸᑕ ᐅᔭᕆᒃᓴᖅᓯᐅᖅᕕᖓᒥ ᐊᐅᓚᑦᓯᔾᔪᑎᑦ ᓴᕿᐊᒃᑲᓂᖅᓴᔭᕐᓚᑦ ᑭᖑᕚᖓᑦ ᐅᔭᖅᑲᑦ ᐲᔭᖅᑕᐅᓂᑯᑦ ᓄᓇᒥᒃ ᐊᒻᒪᓗ ᕿᓂᖅᑕᑦ ᐃᓂᖅᑲᓇᖅᑲᖅᓴᔭᕐᓚᑦ ᐃᓕᐅᖅᑲᐅᕝᒥᒃ, ᑕᐃᒪᐃᒻᒪᑦ ᐃᓂᖅᑲᓇᖅᑲᖅᓴᔭᕐᓚᑦ ᓄᓇᒥ ᐃᖕᒥᒃᑯᓕᖓᓗᑎᒃ ᐊᒻᒪᓗ ᐱᔭᖅᑕᐅᓂᑯᑦ ᐅᔭᖅᑲᑦ ᐃᓂᖅᑲᑐᑎᒃᑕᐅᖅ ᒪᓂᖅᑐᒥ ᐊᓯᐃᑖᒃ ᑭᖑᕚᖓᑦ ᑕᒪᒃᑯᐊ ᐊᖏᓂᖅᓴᐅᓕᖅᓴᔭᖅᑐᑦ.

- Hope Bay ᐅᔭᕆᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᓂᕆᐅᒃᑐᑦ ᐱᑕᖃᑎᓇᐊᖓᓂᒃ ᓄᓇᐅᑉ ᐃᓗᐊᓂ ᐃᒥᕐᒥᒃ ᑕᕆᐅᖓᔪᒥᒃ, ᑕᐃᒪᐃᑦᑐᖅ ᑎᑭᐅᑎᔭᐅᒃᐸᑦ ᓄᓇᐅᑉ ᐃᓗᐊᓃᑦᑐᖅ ᖁᐊᐳᓇᖕᕆᑦᑐᖅ ᐃᒥᖅᑕᓕᒃ ᑕᓯᕐᒥᒃ ᐊᑖᓂ Doris Lake ᑕᓯᖓᑕ ᐅᔭᕆᒃᓴᖅᓯᐅᖅᑐᖅᑲᓕᖅᐸᑦ ᐅᕗᖓ ᑎᑭᐅᑎᓯᔪᒧᑦ Doris Central ᕿᑎᖓᓄᑦ ᐅᕗᖓᖓᔪᒧᓪᓗ Doris Connector ᐊᒃᑐᐊᔪᒧᑦ, ᐊᒻᒪᓗ ᓄᓇᐅᑉ ᐃᓗᐊᓂ ᖁᐊᖑᐃᓇᖅᑐᖅᑲᓕᖓᒧᑦ ᐅᕙᓂ Doris Lower ᐊᒃᐸᓯᓐᓂᖅᓴᒥ. ᑎᑭᐅᑎᑕᐃᐸᑕ ᐃᒥᖅᑲᓕᖓᒧᑦ ᓄᓇᐅᑉ ᐃᓗᐊᓂ ᐅᔭᕆᓂᐊᖅᑎᓪᓗᒋᑦ. ᓄᓇᐅᑉ ᐃᓗᐊᓂ ᐃᒥᖅᑲᓕᒃ ᑎᑭᐅᑎᔭᐅᒐᐃᐸᑕ ᐅᔭᕆᓂᐊᖅᑐᓄᑦ ᓴᖑᖅᑲᑦᑖᖅᑐᑦ ᐊᒃᑯᖅᑲᐅᒧᑦ ᐅᔭᕆᒃᓴᓕᕇᔪᑎᒥᖅᑕᓕᖓᒧᑦ ᓄᓇᐅᑉ ᖄᖓᓂ ᓯᑐᓕᒃᑯᑦ.

- Hope Bay ᐅᔭᕆᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᐋᕿᒋᐊᑖᖅᑐᑦ ᐅᔭᕆᒃᓴᓕᕇᔪᑎᒥᖅᑕᓕᖕᒥᕈᖅᑐᖅ ᑯᒃᑐᖅ ᑖᕝᕙᖓᑦ ᐅᔭᕆᒃᓴᓕᕇᔪᑎᒥᖅᑕᓕᖕᒥᒃ ᑯᖓ ᑐᕌᖅᑲᑦᑖᖅᓯᓪᓗᑦ ᐃᒪᕝᕕᒧᑦ ᐊᕐᑯᑎᖅᑲᓗᓂ ᓯᑐᓕᖕᒥᒃ ᐊᒻᒪᓗ ᐊᕐᑯᑎᖅᑳᖅᓯᓪᓗᑦ ᓯᕐᕌᐃᑮᒃᑯᓪᓕᒃ ᑕᓇᐅᑉ ᐃᖅᑳᓂᑦᑐᒥᒃ, ᑐᕌᖏᕝᕙᓗᓂ ᐆᒪ Doris Creek ᑯᖓᓄᑦ ᑕᒪᒃᑯᐊ ᑕᐃᒪᓇ

<ᕐᓇᓯᒪᔭᐅᓚᐅᖅᓯᒪᓚᑕ. ᐃᓘᓐᓇᑎᒃ ᐊᑐᖅᑕᐅᔪᑦ ᒫᓐᓇ ᐱᖁᔭᓕᕆᔾᔪᑎᒃᑯᑦ ᐆᒃᑐᖅᑕᐅᓯᒪᓚᑕ ᓈᓴᐅᑎᑎᒍᑦ, ᐅᕙᓃᑦᑐᓪᓗ ᑎᑎᖅᓯᒪᔪᑦ ᐃᓚᒋᔭᐅᓪᓗᑎᒃ 2AM-DOH0713 ᐊᒻᒪᓗ ᓴᕿᔮᒃᓴᖅᑕᓕᖕᓂᒃ ᐊᒃᑕᑯᓕᕆᔾᔪᑎᑦ ᐱᖁᔭᑦ, ᒪᓕᒃᑕᐅᖃᖅᑕᕐᓂᐊᖅᑐᑦ ᓱᕗᕐᖓᒍᑦ ᓇᒧᐃᓐᓇᖅ ᖃᒥᑦᑐᖃᓚᐅᖏᓐᓂᖓᓂ ᖃᒥᒍᓐᓇᖅᑐᓂᒃ. ᓄᓇᒃᑯᑦ ᐃᒪᖓ ᑰᖃᑦᑕᕐᓗᓂ ᐊᖁᓯᐅᖅᓯᒪᔭᓄᑦ ᓱᓪᓗᓕᒃᑯᑦ ᒪᓕᖃᑦᑕᓂᐊᕐᓚᑕ ᐋᑕᐅᔪᓕᒫᑦ ᖃᖓᓕᒫᖅ ᐅᑭᐅᖑᒐᓗᐊᖅᐸᑦ ᐊᐅᔭᐅᒐᓗᐊᖅᐸᑦ ᐊᖁᑎᒃᑯᑦ ᐅᕝᕙ ᑐᕌᑦᑐᑦ ᐃᒪᖓᓄᑦ ᑲᐱᕼᐃᓕᒃᑑ< ᑭᙳᐊᓂ, ᐅᖓᑖᓄᑦ ᐃᑭᕋᓴᓕᐊᖑᓯᒪᔩ< ᓄᕗᓕᐊᖑᓯᒪᔩ< ᐊᒻᒪᓗ ᐃᒪᖓᓄᑦ ᑲᐱᕼᐃᓕᒃᑑ< ᐃᒫᑎᑭ ᒥᒃᓴᐅᓴᒃᑐᖅ 600m ᓄᓇᐅ< ᓯᓈᓂᒃ ᐃᑎᓂᖓᓅᖓᓗᓂ.

- ᐊᐅᓚᑦᓯᔪᖅᑕᑎᓪᓗᒍ ᐊᒻᒪᓗ ᑎᑭᐅᑎᒃ<ᑕ ᑲᔪᓯᔪᑦ ᒪᑐᓯᒍᑎᓄᑦ, ᐱᑕᓕᒃ ᖃᓄᐃᑦᑐᑐᐃᓐᓇᕐᓂᒃ ᐃᓚᒍᑕᒃᓴᔭᓂᒃ ᐅᔭᖅᓴᓕᕆᔾᔪᑎᒥᕐᓂᒃ ᐊᒃᑕᑯᓂᒃ (ᖃᓄᐃᑦᑐᑐᐃᓐᓇᕈᓘᔭᓂᒃ ᒎᓗᓂᒃ ᓯᖃᓪᓖᒍᑦ ᐆᑕᖅᓯᒍᓐᓇᓖᖅᑕᓕᒃ ᐊᒃᑕᑯᓂᒃ ᐊᒻᒪᓗ ᐳᒃᑕᖅᑯᑕᐅᓲᓂᒃ ᖃᖓᒍᑦ ᐊᒃᑕᑯᖅᑲᐅᒻᒦᑦᑐᒥᒃ) ᑐᓴᒃᓴᓕᐊᖑᖅᑲᑦᑕᓖᖅᑐᖅ ᑕᒻᑯᓄᖓᖕᖓᔪᑦ ᐊᓪᓚᒃᓯᒪᑎᓪᓗᒋᑦ ᐅᑯᑎᒨᓇ ᐃᓚᐅᖅᑲᐃᕙᐅᕙᒃᑐᒥᒃ ᐅᔭᖅᓴᓕᕆᔾᔪᑎᒥᖅᑕᓕᖕᒥᒃ ᐃᓂᖓᓃᑦᑐᒥ. Hope Bay ᐅᔭᕐᓇᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᐅᒃᐱᕈᓯᖓᓚᑕ ᒫᓐᓇ ᐊᑲᐅᓈᓕᕆᐊᖓᓂᒃ ᑲᒪᒋᔭᐅᒃ<ᑦ ᐱᑕᓕᒃ ᐊᔾᔨᒋᖕᒋᑦᑑᑎᓂᒃ ᐊᒃᑕᑯᖅᐅᑦ ᐅᔭᖅᓴᓕᕆᔾᔪᑎᒥᖅᑕᓖᑦ ᓲᖃᐃᒻᒪ ᐅᑯᐊ Hope Bay ᐅᔭᕐᓇᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᓴᕿᒍᓚᑦ ᐃᓚᒋᓕᐅᑎᓂᐊᖅᑐᓂᒃ ᓴᐳᒻᒥᖅᓴᐃᒍᑎᒃᓴᓂᒃ ᐅᔭᖅᓴᓕᓇᕕᖏᑦᑐᖅ ᓯᖁᑦᑎᑕᐅᔪᒪᓖᑦ ᒎᓗᓂᒃ ᓯᖃᓪᓖᒍᑦ ᐆᑎᕆᔪᓐᓇᓖᖅᑕᓕᒃ ᐊᒻᒪᓗ ᒪᕐᕿᕈᔫᔭᖅᑕᓕᖅ ᕿᓂᖅᑐᓂᒃ (ᑖᒃᑯᐊ ᑐᒃᓯᕌᓇᓚᐅᖅᓯᒪᖏᒪᖏᑦ ᐅᑯᐊ ᒥᐊᕿᒫᒃᑯᑦ Miramar–ᑯᑦ). ᒎᓗᓂᒃ ᐃᖕᒥᒃᑰᓕᖅᑎᕐᓯᒍᑦ ᐆᑎᕆᔪᓐᓇᓖᖅ ᓯᖁᑦᑎᖅᑕᐅᓖᕐᓚᑦ ᑎᑭᐅᑎᓯᒪᔪᒥᒃ ᐃᒫᒃ 0.05 mg/L ᐊᑑᑕᐅᓖᕐᓚᑕ ᒪᓕᒃᑐᑦ ᐊᐅᓚᑦᓯᔾᔪᑎᓅᖓᔪᓂᒃ ᐊᑑᑕᐅᓗᑎᒃ ᐋᕿᒃᓯᒪᔭᐅᓲᑦ ᓇᒥᒥᐅᑐᐃᓐᓇᕐᓄᑦ ᓯᓚᖅᔪᐊᒥ ᒎᓗᓂᒃ ᓯᖁᑦᑎᕆᔾᔪᑎᑦ ᐆᑎᕆᔪᓐᓇᓖᓂᒃ ᑕᒃᑯᓂᖓ ᐊᐅᓚᑦᓯᒍᑎᓂᒃ ᒪᓕᒃᑐᑦ ᒎᓗᓂᒃ ᐅᔭᕐᓇᓂᐊᖅᑏᑦ ᓴᓇᕕᖓᓂ ᐊᒻᒪᓗ ᒪᓕᓖᕐᓚᑕ ᐃᓘᓐᓇᖏᓐᓂᒃ ᐊᑑᑕᐅᔪᓐᓇᖅᑐᓕᒫᓂᒃ ᑲᓇᑕᒥᐅᑦ ᐱᖁᔭᓕᕆᔾᔪᑎᖏᑦᑎᒍᑦ ᐊᑑᑕᐅᓴᔪᑎᒍᑦ.

- <ᓚᖅᑎᑕᐅᒐᓱᐊᕐᓂᐊᕐᓚᑦ ᖃᓄᐃᓪᓗᐊᕐᓂᖓ ᐃᓂᓕᐅᖅᓯᒪᔭᖅ ᐅᔭᖅᓴᓕᕆᔾᔪᑎᒥᖅᑕᓕᒃ ᐊᒃᑕᑯᖅᑲᐅᑦ ᐋᑕᐅᔪᑦ ᑲᔪᓯᓂᐊᕋᓗᐊᖅᑎᓪᓗᒋᑦ ᐱᑕᓕᒃ ᑭᓯᑐᐃᓐᓇᕐᓂᒃ ᐃᒪᓃᑦᑐᓂᒃ ᐊᒃᑕᑯᖅᑲᐅᒻᒥ ᐅᔭᖅᓴᓕᕆᔾᔪᑎᒥᖅᑕᓕᕐᒥ ᐊᒃᑕᑯᑦ, ᐅᑯᐊ Hope Bay ᐅᔭᕐᓇᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᑐᒃᓯᕋᓪᓚᑕ ᒥᑭᓪᓕᕆᐊᕐᑯᔾᔨᓪᓗᑎᒃ ᐊᒃᑕᑯᖅᑲᐅᑎᐅ< ᐃᓂᖓᓂᒃ ᐅᔭᖅᓴᓕᕆᔾᔪᑎᒥᖅᑕᓕᕐᒥ ᐃᒪᖓᓃᑦᑐᑦ ᖃᖓᓂ ᐃᒪᐃᓪᓗᐊᖅᑐᒧᑦ ᑎᑭᐅᑎᓯᒪᓗᓂ 2.3 ᒦᑕᐃᑦ (ᐃᒪᐃᓪᓗᐊᖅᑐᑦᓕ ᑐᒃᓯᕖᖑᔩᓪᓚᑦ 4 ᒦᑕᐃᑦ). ᑖᑦᓯᒪ ᐃᑎᓂᖓ ᓈᒻᒪᖓᓚᑦ ᐱᓕᕆᐊᖑ<<ᑦ ᐱᔭᕆᐊᑦᑐᕋᔭᖕᒋᓪᓚᑦ ᐊᒻᒪᓗ ᓯᑯᒐᐃ<<ᑦ ᓱᕐᕆᓗᐊᖅᑕᑦᑕᓂᐊᖕᒋᓪᓚᑦ ᐊᒃᑕᑯᑕᓕᒃ ᐅᔭᖅᓴᓕᕆᔾᔪᑎᒥᕐᓂᒃ.

- ᐋᕐᕿᒋᐊᖅᑕᐅᒐᔭᖅᑐᓂᒃ ᐅᑯᐊ Hope Bay ᐅᔭᕐᓇᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᑐᒃᓯᕋᑦᑐᑦ ᐊᒃᑕᑯᖅᑲᐅᑦ ᐋᕐᕿᒋᐊᕋᔭᕐᓚᑦ ᒪᓕᒃᑐᓂᒃ ᐊᓯᐊᓄᑦ ᖃᒥᓲᖅᑕᓕᖕᓂᒃ ᐱᖁᔭᖅᑎᒍᑦ ᐊᑑᑕᕆᐊᓖᑦ ᒪᓕᒃᑕᐅᓗᑎᒃ ᐊᑑᑕᐅᓴᔪᑎᒍᑦ ᐊᒻᒪᓗ ᐅᑯᓇᓃᑦᑐᑦ ᐱᓕᕆᕙᐅᖅᑕᑦᑕᔩᑦ ᖃᐅᔨᓴᖅᕙᐅᖅᑕᑦᑕᔩᑦ ᑐᒃᓯᕌᓇᓯᒪᔭᕆᑦ ᐅᑯᐊ ᒥᐊᕿᒫᒃᑯᑦ Miramar Hope Bay–ᑯᑦ ᐊᒻᒪᓗ ᓴᕿᐅᒪᓚᑕ ᐅᓂᒃᑳᑦ ᐱᓕᕆᒍᑕᐅᔪᓐᓇᖅᑐᑦ ᓇᓗᓇᐃᒃᑯᑕᖅᕙᐊᒍᑦ ᓈᓴᐅᑖ No. 003 ᑖᒃᑯᐊᓕ ᐋᑐᐅᑎᐊᖅᑲᕈᓐᓃᕐᓚᑕ ᓲᖃᐃᒻᒪ Hope Bay ᐅᔭᕐᓇᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᓴᐳᒻᒥᖅᓴᐃᑎᐊᖅᑲᓚᖓᔩᑦ ᐃᒥᖅ ᐊᓯᐊᓄᑦ ᖃᒥᓚᐅᖏᓐᓂᖓᓂ.

- ᓯᓂᒃᕖᑦ ᐃᑉᓖᑦ ᐅᕙᓂ Doris North Camp ᐊᓯᓂ ᓄᓇᓕᕆᔭᐅᓲᒥ ᐊᒥᓲᓂᖅᓴᐅᓖᓕᖅᑐᑦ ᐃᒪᐃᓪᓗᐊᔩᑦ 180–ᒥᒃ ᑎᑭᐅᑎᓗᑎᒃ 360–ᒧᑦ.

- ᐱᔭᐅᕙᒃᑐᑦ ᑐᐊᑉᐸᒃᑕᖅᕕᖕᒥ ᐅᔭᕿᕆᕕᖕᒥ ᐅᑯᓇᓂ A, B, D, 1–ᒥᓗ ᐊᑐᖅᑕᐅᖅᑕᑦᑖᖅᑐᑦ ᖃᓄᑐᐃᓐᓇᖅ ᓴᓇᔪᖅᑕᑎᓪᓗᒍ.

- ᐊᐅᓚᑦᓯᔾᔪᑎᑦ ᐊᒃᑕᑯᓂᒃ ᒫᓐᓇ ᓴᓂᐊᓃᑦᑐᑦ ᑲᕙᓯᓕᖅᑑ< ᐃᒪᖓᓂ ᓅᑕᐅᑐᐃᓐᓇᕆᐊᖁᑦ ᓴᓂᐊᓄᑦ ᑐᐊᑉᐸᒃᑕᖅᕕᐅ ᐅᕝᕙ A.

- Hope Bay ᐅᔭᕐᓇᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᐊᓯᕈᐃᑐᐃᓐᓇᕆᐊᖁᑦ ᐃᒪᖅᑕᖅᕕᐅᕙᒃᑐᒥᒃ ᓄᓇᓕᕆᔭᐅᕙᒃᑐᒥ ᐅᕙᓂ Doris North–ᒥ ᐊᓯᓂ ᐃᑲᖓᖓᖅ Doris Lake–ᒥᒃ ᐅᕝᕙ Windy Lake–ᒧᑦ.

- ᒪᑯᐊ ᐃᓚᒋᔭᐅᓗᑎᒃ, Hope Bay ᐅᔭᕐᓇᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᓇᓗᓇᐃᑦᓯᐊᕈᒪᔭᖕᒋᑦ ᑐᑭᓯᓇᑦᓯᐊᕐᓂᐊᕐᓚᑦ ᖃᓄᖅ ᐋᑕᐅᖨᕈᒪᔩᑦ ᖃᓄᕐᓗ ᐊᑕᐅᒋᐊᕐᖓᖅᓯᒪᔩᓂᒃ ᕿᓚᒥᒃᑯᑦ ᑕᒻᑯᐊ ᑲᔩᓯᓂᖅᑲᓪᓗᑎᒃ. ᐅᑯᐊ Hope Bay ᐅᔭᕐᓇᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᓱᓕ ᐃᓚᒋᓕᐅᔾᔨᕈᒪᔩᑦ ᑕᐃᒪᖓᓕᒫᖅ ᐋᕐᑭᒃᓯᒪᔭᐅᖅᑕᑦᑖᖅᑐᓂᒃ ᓯᓂᒃᕖᒃᓴᑦ ᐅᓪᓚᕕᐅᖏᓐᓇᖅᑲᑦᑕᕐᓂᐊᕐᓚᑕ ᓯᑲᐅᒥ ᐃᑲᓃᑦᑐᒥ ᑲᕙᓯᓕᒃᑑᒥ, ᒥᒃᓴᐅᓴᒃᑐᓂᖃᐃᑦ 125–ᓂᒃ ᐃᓚᖓᔪᕐᓚᑕ ᐱᓕᕆᔨᓂᒃ ᑖᕝᕙᓂ ᓄᓇᒥ ᓴᓇᓐᓇᐅᑎᓪᓗᒍ. Hope Bay ᐅᔭᕐᓇᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᐊᑐᐃᓐᓇᖅᑕᑦᑖᖅᑐᓇᔩᑦ ᖁᒃᑕᑯᖅᑲᐅᑎᓂᒃ ᐊᒃᑕᖅᑕᐅᓲᓂᒃ ᓄᓇᒧᑦ ᐃᑖᓐᓂᑯᑦ ᐋᑕᐅᕙᓪᓗᑎᒃ ᑭᙳᖕᒐᒨᒐᓗᐊᖅ ᐊᓂᒎᑎᓯᒪᓕᖅ<ᑕ ᐊᕐᕆᒍᐃᑦ. ᒥᐊᓂᕆᔭᐅᖏᓐᓇᖅᑕᑦᑕᕐᓂᐊᕐᓚᑦ ᐅᔭᖅᓴᓕᕆᔾᔪᑎᒥᖅᑕᓕᒃ ᐊᒃᑕᑯᓂᒃ ᖃᒥᖅᑕᑦᑕᖅᑐᖅ ᐃᑯᖓᖓᔩᖅ ᐅᔭᖅᓴᓕᕆᔾᔪᑎᒥᖅᑕᓕᒃ ᐊᒃᑕᑯᖅᑲᐅᒧᑦ, ᑭᙳᖕᒐᒍᑦ ᓅᑕᐅᖅᑕᑦᑕᓕᖅ<ᑦ ᓴᓗᒪᓴᖅᓯᒪᔭᖅ ᐊᒃᑕᑯ ᐅᕝᕙ ᐅᔭᖅᓴᓕᕆᔾᔪᑎᒥᖅᑕᓕᒃ ᐊᒃᑕᑯᖅᑲᐅᒧᑦ. ᐃᓛᓐᓂᑯᑦ, ᐅᑯᐊ Hope Bay ᐅᔭᕐᓇᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᑲᔪᓯᔪᓂᒃ ᐊᑑᑎᖅᑕᑦᑐᐃᓐᓇᓂᐊᖅᑲᓖᖅᑐᑦ ᐱᐅᓯᕆᓲᒥᓐᓂᒃ ᐱᓕᕆᔾᔪᑎᒥᓐᓂᒃ ᐅᑭᐅᒥ ᐅᖅᓯᐊᓗᒃᑕᖅᑎᓂᒃ ᓯᑯᒃᑯᓲᓂᒃ ᑎᑭᑕᐅᖕᒋᓐᓇᖅᑲᑦᑐᑎᒃ ᐅᖅᓯᐊᓗᖕᓂᒃ ᑕᒡᕙᖓ ᓄᓇᒧᑦ.

ᐊᑑᑕᐅᒍᓐᓇᕐᓂᐊᕐᓚᑕ ᑲᔪᓯᒍᑎᒃᓴᑦ ᑐᒃᓯᕚᑦ ᐅᔭᕐᓇᓂᐊᖅᕕᖕᒥ ᐊᓯᑦᕋᖅᑕᐅᒍᒪᔩᑦ, ᐅᑯᐊ Hope Bay ᐅᔭᕐᓇᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᑐᒃᓯᕋᓖᖅᑐᑦ ᐋᕐᕿᒋᐊᓇᐊᓕᖕᒋᓐᓂᒃ ᓄᓇᕗᑦᒥ ᐊᕙᑎᓕᕆᔾᔪᑦ ᑲᑎᔾᔨᖕᑕ ᐱᓕᕆᔪᓐᓇᐅᑦ ᓇᓗᓇᐃᒃᑯᑕᖅ ᓈᓴᐅᑖ No. 003 ᐃᓚᒋᔭᐅᓗᑎᒃ ᐋᕐᕿᒋᐊᕈᑎᒃᓴᑦ ᐃᒥᖅᑲᕈᑕᐅᔪᒧᑦ ᐃᒪᐃᑦᑐᒥᒃ Type A–ᒥ ᓚᐃᓴᓐ 2AM-DOH0713. ᐅᑯᐊ Hope Bay ᐅᔭᕐᓇᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᐊᐅᓚᑦᓯᖏᕈᒪᔩᑦ ᕿᒥᕐᕈᒍᑎᓂᒃ ᐊᒻᒪᓗ ᐱᓕᕆᔾᔪᑎᒃᑲᓂᒃᓴᓂᒃ ᐃᓚᒋᓕᐅᑎᒐᔭᖅᑐᓂᒃ. ᐃᓚᒋᓕᐅᑎᑎᓪᓗᒋᑦ ᐅᑯᓄᖓᖕᖓᔪᓄᑦ ᑐᒃᓯᖅᑑᑎᓄᑦ, ᐅᑯᐊ Hope Bay ᐅᔭᕐᓇᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᑐᒃᓯᕋᓖᖅᑐᑦ ᐃᒥᖅᑲᕈᑎᒃᓴᒥᒃ ᐃᒪᐃᑦᑐᒥᒃ Type A–ᒥᒃ ᓚᐃᓴᒥᒃ ᐊᑑᑕᐅᒃᑲᓐᓂᓖᖅᑐᓂᒃ ᐱᔪᓐᓇᐅᑎᓄᑦ ᖁᓕᑦ 10 ᐊᕐᕌᒍᐃᑦ ᓚᐃᓴᖅᑲᕈᑎᓄᑦ ᐊᑑᑕᐅᔪᒃᓴᓂᒃ (ᐃᓱᓕᕝᕕᖅᑕᑎᓪᓗᒋᑦ 2022–ᒧᑦ).

ᐅᑯᓇᖓ ᐃᓚᒋᔭᑦ ᑐᒃᓯᖅᑑᑎᑎᒍᑦ, Hope Bay ᐅᔭᕐᓇᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᐅᓂᒃᑳᕋᑖᕐᓚᑕ ᖃᓄᐃᑦᑐᓂᒃ ᐊᓯᕈᖅᑕᐅᓛᖅᑐᓂᒃ ᓴᓗᒻᒪᖅᓴᐃᒍᑎᒃᓴᖏᓐᓅᖓᔪᓂᒃ ᐊᒻᒪᓗ ᒪᑐᓯᒍᑎᒃᓴᓂᒃ. ᐊᑑᑕᐅᓛᕈᒪᔩᑦ ᑖᒃᑯᓄᖓᖕᖓᔪᑦ ᐱᓕᕆᔪᓐᓇᐅᒻᒧᑦ ᓇᓗᓇᐃᒃᑯᑕᖅᑲᕈᑕᐅᔪᒧᑦ ᐊᒻᒪᓗ ᐃᒥᖅᑲᕈᑎᒃᓴᑦ ᐃᒪᐃᑦᑐᒥᒃ Type A–ᒥ ᓚᐃᓴ ᐋᕐᕿᒃᓯᒪᔭᐅᓛᕐᓚᑦ ᒫᓐᓇᕐᓂᑕᐅᓕᖅᑎᓪᓗᒋᑦ ᑭᙳᖕᒐᒍᑦ ᐋᕐᕿᒋᐊᕈᑎᑦ ᐱᔭᕇᖅᑕᐅᓯᒪᓕᖅ<ᑕ ᐊᒻᒪᓗ ᑭᙳᓪᓕᕇᖅᓯᐅᑎᑦ ᐊᑑᑕᐅᔭᕆᐊᓖᑦ ᑖᒃᑯᓄᖓᖕᖓᔪᑦ ᑐᒃᓯᕚᑦ ᐊᓯᕈᖅᑕᐅᒍᒪᔩᑦ ᓇᓗᓇᐃᖅᑕᐅᓯᒪᓕᖅ<ᑕ.

ᐱᖁᔭᓕᕆᔾᔪᑎᒃᑯᑦ ᒪᓕᒐᖅᑎᒍᑦ ᐊᕐᕆᖅᑕᐅᒃ<ᑕ ᑲᔪᒍᑕᐅᔪᓐᓇᖅᑐᑦ, ᐅᑯᐊ Hope Bay ᐅᔭᕐᓇᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᓂᕆᐅᒃᑐᑦ ᓴᓇᔪᖅᑳᕐᓚᑦ ᐊᒻᒪᓗ ᐊᐅᓚᑦᑕᑦ ᐊᓯᕈᖅᑕᐅᒃ<ᑕ ᐅᖃᐅᓯᐅᖃᑖᖅᑐᑦ ᐅᓂᒃᑳᖑᑦᑐᑎᒃ ᐅᑯᑎᒨᓇ ᑐᒃᓯᖅᑑᑎᒃᑯᑦ ᐱᕆᐊᖃᔭᖅᑐᑦ ᓄᑖᖑᑎᑦᑐᒍ ᐊᕐᕌᒍᖅ 2013 (ᐅᖁᓗᑭᐊᖅ ᒥᒃᓯᑦᑎᒍᑦ ᐱᖁᔭᓕᕆᔾᔪᑎᒃᑯᑦ ᐱᔪᓐᓇᕈᑎᖅᑲᓕᕐᓂᖅ<ᑕ). ᐅᑯᐊ Hope Bay ᐅᔭᕐᓇᓂᐊᖅᕕᒃ ᓕᒥᑎᑦᑯᑦ ᑐᒃᓯᕋᑦᑐᑦ ᐊᑑᑕᐅᔭᕆᐊᓕᖕᓂᒃ ᐋᕿᒋᐊᕈᑎᒃᓴᓂᒃ ᑐᓂᔭᐅᒋᐊᓕᖕᓂᒃ ᐅᖁᓗᑭᐊᖅ ᓱᕗᕐᖓᒍᑦ November 2012.

Ataniuyunut Nainaqhimayut

Una tukhigaut tugangayuq tapkununga Doris North Uyagakhiuqvik (tamna “Uyagakhiuqvik”) piyungnaqtitauyut tapkunanga Nunavut Avatiligiyit Katimayit (“NIRB-kut”) atuqhugit Havanguyumut Titigaqta Nappaa 003 tuniyauyuq talvani Saptaipa 2006 tapkuatlu Nunavut Imaligiyit Katimayit (“NWB-kut”) atuqhugit Qanugittuni A Imaqmut Laisa 2AM-DOH0713 tuniyauyuq talvani Saptaipa 2007.

Piplugit atugahuaqtitni qanugitni tapkuat kayuhini havikhaqhiuqnit tahamani ilangani Doris North Uyagakhiuqvik, Hope Bay Uyagakhiuqtit Nanminilgit (“HBML-kut”) tatya nigiugiyauyut atuqtaunikhai tapkuat tataya atuqtuq Doris North nunamuktaqvia itiqnianut uyagakhiuqnialu tamna tamaat Doris piqaqni. Una ilalik piqaqnivaliit hivuagut unniqtuqhimayut tapkuanguyut Doris North, Doris Atpahiknia, Doris Qitqani tamnalu Doris Atatyuta tapkuatlu kitutliqak uigunit nutatluniit nalvaqnit piyaulat talvanga Doris North Nunamuktaqvia. Tapkuat ihumaliugutit atuqtai tapkuat tatya atuqtut Doris North ilunmukpalianiani pitaqnit tamaita ilihimayauyut Doris piqaqpaliqnit pityutauyut Havanguyumut qauyimayiuyut aulatauyutlu naunaiqnit ahianguqni tapkuat tatya atuqtut uyagakhiuqviup tupliqnit havagutitlu tapkuat piyaqaqniat pinahuaqhugit nakuuniqhamik aulanit atuqpiaqnilu kayuhini havikhat piqaqniniut. Tapkuat ahianguqni hatqiqtauyut ukunani titiqani ikayugutauyutlu ilaliutinini ilatyutauyut mikhani 2 tikittugu 4 ukiunut uyagakhiuqviup atuqnia talvunga 2 ½ ukiut hivuagut unniqtauyut tapkunani Kinguliqpamik Avatiliqutit Aktuanit Uqauhit. Tapkuat ilaunittut ihumagiyauyut tapkunani tatya angiqtauyut umiknianut upalungaiyautit taphumunga Tail Tahiq Uyagakhiuqnikut Iqaqvia (TIA-nga).

Tapkuat Havanguyut ahianguqni unniqtai ukunani tukhigautini piyalgit pinahuaqhugit kayuhini pivaliatitni tapkuat Tukligikhat 1 Doris North Uyagakhiuqvik pingittutlu ‘hivuagut-hanahimayut’ ikayuqhiqninut Tukligikhat 2 Hope Bay QIminga Havanga. Tukligikhat 2 pityutauniat ilikkut maligaqnut tukhigautit tapkununga NIRB-kut tapkuatlu NWB-kut. Tapkunani Tukligikhat 2 Havanguyuq Unniqtuta HBML-kut unniqtuqniaqtai qanuqtut attaqtuhivaliqniaqni tatya atuqtut Doris havakvia havagutit hivunikhami atuliqat Tukligikhat 2 angiqtaukpat piniaqlugit ikayuqhiqni pivaliatitni tahamani kanagnangani Hope Bay Qiminga. Una mikhigiagutigiya tupligaqnia taahmna nuna aglivaliqhugitlu angiyut hanivaiviuni. Tamna Tuligikhat 1 Doris North Uyagakhiuqvik uqauhiuyuq uumani tukhigautmi ilikkuqtuq aulania pihimaittuqlu utaqinianik Tukligikhat 2 tapkuat aulani naliak tamna Doris North Uyagakhiuqvik unniqtuqnia talvani hivuliqmi EIS-nga ahianguqniluniit tatya uuktugutauyut.

Uuktugutauyut ahianguqni taphuma Doris North Havanguyuq nainaqhimayut hivikittumik ataani.

- Uyagakhiuqnia tamna Doris Qitqani tamanlu Atatyuta piqaqpaligutauni ilagiplugit tapkuat Doris North piqaqnit uiguniaqtai tapkuat uyagakhiuqviup atuqnikha taphuma Doris North Havanga taphuminga mikhaani 2 tikitlugu 4 ukiut. HBML-kut havaktai nunaliginiqmut naunaiyaqnit qanugittuyangi tapkuat hunat ilalgit talvani Doris Qitqani tamnalu Doris Atatyuta tapkautlu qanugittuni tahapkuat hunat ikayuqhiutiyut takuyauninik tapkuat iqakut uyaqat aulataulaqni piplugit tatya atuqtut havakvikmi munagiyauni tapkuatlu ahianguqnit havagutit unniqtuqnit tapkunani tukhigautini.

- HBML-kut nigiuktut pigiaqninik uyagakhiuqniqmut aktilangi 1000 tonnes/upluq (tpd-ngi) (ukiumut atuqpakniqhat havikhat uyagakhiuqni aktilangi) tapkuatlu havikhat tahapkunanga piqaqniqnit havaktauniat tatya atuqtumi havikhaliuqvikmi aktilanginut 800 tpd-ngi (ukiumut atuqpakniqhat). Tahapkuat aktilangi pityutauliqpalianiat nakuhivaliqninut tikitlugu 1,600 tpd-ngi havikhaliuqnit mikhautnit uyagakhiuqniqlu aktilanga tikitlugu 2,000 tpd-ngi piplugit tapkuat ilagiagutit piqaqnit nalvagauyut talvani Doris-mi.

- Ataqtuhivaliqnit uyagakhiuqniqmut huliniit pityutauniat ilagiagutinut iqakut uyaqat havikhatlu iqakut uyaqatlu tungavi attaqtuhivaliqlutik malikhugit.

- HBML-kut nigiuktut tapkuat tagiuqaqanit maniqap imaqaqni piyauniat talvani auktuqtaqniani ataani Doris Tahiq atuqtitlugu uyagakhiuqniq talvani Doris Qltqani tamnalu Doris Atatyuta, ataanilu nunap qiqumaitnaqnia talvani Doris Atpani. Kitutliqak nunap imaqtai nalautauni atuqtitlugu uyagakhiuqniq tugaqtitauniat talvunga TIA-ngi atuqlugit nunap qangagut huplut.

- HBML-kut nutanguqniaqtai aulatyutainut tapkuat TIA-ngi pitquplugit imait talvangaqtut TIA-ngi kuvipkagauyut tugaqpiaqlugit tagiumut atuqlugit huplut hiamaktitnilu tagiup natqanut, talvungaungittuq Doris Kuugauyaq hivuagut upalungaiyaqhimagaluaqmat. Tamaita atuqtut maligait piyaqaqnit, ilautitlugit tahapkuat titigaqhimayut talvani 2AM-DOH0713 tapkunanilu Haviit Uyagakhiuni Halumaittut Immat Maligait, piyauniaqtut kuvittaqtitiniahaqtitlugit. Tapkuat nunamitni ilagiyai tapkuat kuvigautit huplut malikniaqtat tamna atuqtuq apqutaunginaqtuq talvunga Roberts Bay-mun, apquhaqlugu tamna tikigaq tahamungalu Roberts Bay-mun mikhaani 600 miitat hinaanit itiniqmut.

- Atuqtitlugu aulataunia kayuhilunilu umiknikhaanut, akuhimayut uyagaktaqnikut iqakut (ilagit hiqumakut cyanide uyagaktaqnikut puktalaqnitlu ukagaktaqnikut) tuhagaqtitauniat talvunga TIA-ngi. HBML-kut ukpiguhuktut tapkuat tatya naamaktut nuktiqni akuhimayut uyagaktaqnikut piplugu HBML-kut atuqpaliayai ilagiagutit halumaqhautit piyauni talvani havikhaliuqvikmi huguqtigutauniat cyanide tapkunani uyagaktaqnikut imiqpalaniani (tapkuat pityuhiq uuktugauhimaittuq tapkunanga Miramar-kut). Cyanide huguqtigauniaq talvunga 0.05 mg/L tapkuat attaanitniat aulataunit piyakhanut ihuaqhihimayut tapkunani Hilaqyuaqmi Cyanide Aulatauninut Maligait tapkununga Guulit Uyagakhiuqnit Havaktit atuqniaqtatlu tamaita atuqnilgit Kanatamiuni maligaqnut atuqtauvaktut.

- Pinahuaqhugitatuqniqhaupkaqni pilaqnit taphuma TIA-ngi kayuhititlugit immap iluanipkaqni uyagaktaqnikut iqaqnit, HBML-kut uuktugutilgit mikhigiaqnia tamna TIA-ngi immap ulihimania talvunga 2.3 miitat (talvanga hivuagut uuktutauhimayuq 4 miitat). Una itinia naamaktuq pittailiniinut puktallaqtitni hikumilu qangulaiqnit tapkuat uyagaktaqnikut.

- Tapkuat nutanguqtiqnit tapkuat HBML-kut tukhigautigiyai taphumunga TIA-ngi atuqpiaqtitniaqtai tapkuat kuvipkaqni piyaunit atugialgit uuktutai taimaittumiklu, tapkuat havakvikmi naunaiyaivik hivuagut uuktutauyuq tapkunanga Miramar Hope Bay-kut unniqtuqhimayuqlu talvani Havanguyumut Titigaqtaq Nappaa 003 atugiaqaguiqtuq piplugu HBML-kut piniat atugiaqaligangat halumaqtiqni immat kuvipkagauniahaqtitlugit.

- Igliit talvani Doris North Hiniktaqvik ilavaliqniat talvanga 180 talvunga 360.

- Hunat talvanga atuqtumi Tuapaktaqviit A, B, D tamnalu 1 atuqtauniat tamaitnut hanayauyunut atuqni.

- Iqakut aulatauni havagutit tatya inilgit haniani Roberts Bay-mi nuttaulat nunamut hanianut Uyagaktaqvik A.

- HBML-kut ahiangulaqtat tamna imiqtaqvik taphumunga Doris North hiniktaqvik talvanga Doris Tahiq talvunga Windy Tahiq.

- Ilaliutiplugu, HBML-kut piyumayut uingaiqni tapkuat nigiugiyauni ilai piyakhat taihimayugaluit nigiugiyauni atulakninut kayuhiniat. HBML-kut upalungaiyaqtat kayuhini ilagiagutit atuinaqtukhat hiniktaqvit inikha havakvikmi kayuhilutik atuqnikhai hiniktaqvit umiaqpait kalutai inilgit talvani Roberts Bay-mi, tapkuat ikayuqhiutiniat mikhaani 125 ilagiagutit havaktit havakvikmi atuqniani hanayaunia. HBML-kut kayuhilat piyaqaqninik atuinaqni annat kuvigaqvia natiqnamut qakutikkut hivunikhani ukiuni. Una pilagutauniaq ihuaqhihimani uyagaktaqnikut kuvigaqnit huplut talvunga TIA-ngi. Qakutikkut, HBML-kut kayuhilat atuqtitni ukipkaqnit uqhukhalgiagutit umiaqpait hikumi pinahuaqlugit atuqpiaqnit kayuhini agyaqnit uqhukhat hannavikmut.

Pinahuaqhugit kayuhinit ukuat uuktugutit Uyagakhiuqviup ahianguqnit, HBML-kut tukhigaqniat Avatiligiyikkut Havanga Titigaqtaq Nappaa 003 ilaliutiplugit ihuaqhigiagut Qanugittunia A Imaqmut Laisa 2AM-DOH0713. Piyut HBML-kut piyumani pinahuaqnit ikayuqtigikluni naunaiyaqnit havaginilu ayuqnaitpat. Ilagiplugu uumunga tukhigautmut, HBML-kut tukhigaqniat tamna Qanugittunia A Imaqmut Laisa uiguyaunikha piyungnaqnia qulit ukiunut laisa hivitunikha (nungutluni talvani 2022).

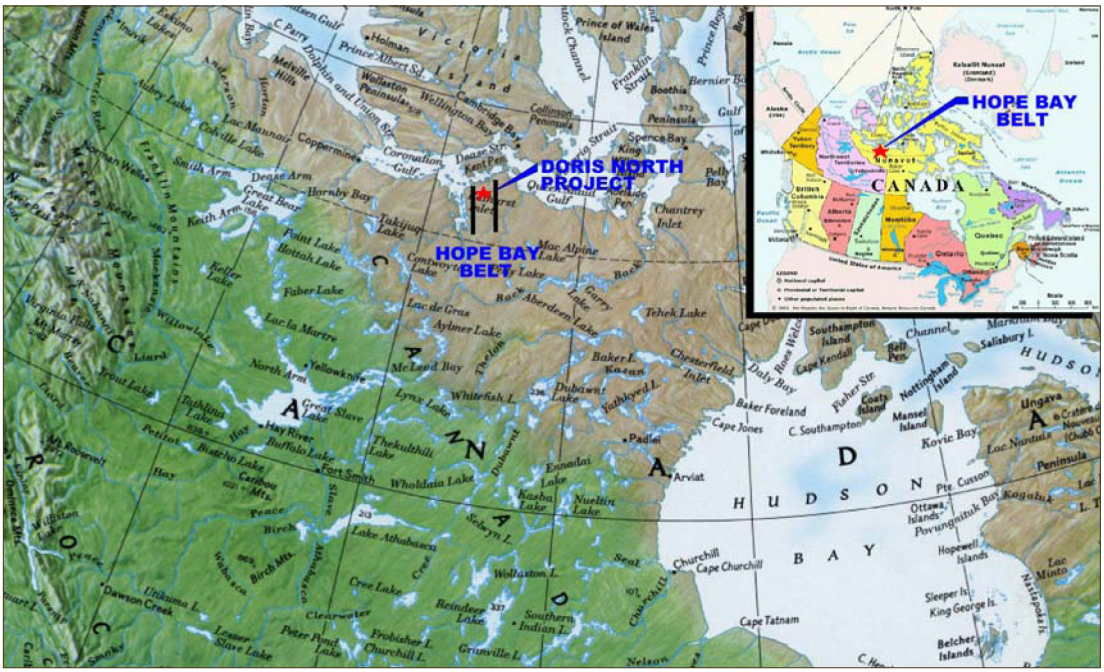
Ilagiplugu uumunga tukhigautmut, HBML-kut unniqtuqtai piqatai ahianguqnit halumaqhainikhanut umiknianutlu upalungaiyautit. Tapkuat uplaungaiyautit piqatai tapkuat Havanguyuq Titigaqtaq tamnalu Qanugittunia A Imaqmut Laisa nutanguqtauniaq pitaqat ihuaqhigiagut pityuhia iniqat tamnalu kinguliqpaamik piyaqaqnit tugangayut tahapkununga uuktugutauyut ahianguqnit naunaiqtauyut.

Maligaqnut angiqtaukpat kayuhinianut, HBML-kut nigiuktut hananikha aulataunialu ahianguqnit unipkautauyut uumani tukhigautmi pigiaqniat atulihaqniani 2013 (tunganiluniit pikpata maligaqnut pivikhai pilaqtitikpata). Taimaittumik, HBML-kut tukhiqtut tapkuat piyaqaqnit ihuaqhautit tuniyauni talvani tunganiluniit Nuvipa 2012.

1. Introduction

This document describes various changes planned to the Doris North Mine (the "Mine") identified by HBML and its technical advisors to optimize the Mine footprint, and also changes that are necessary in order to extend the planned Mine life. In order to proceed, several of these changes will require amendments to and/or modifications under Project Certificate No. 003 issued by the Nunavut Impact Review Board (NIRB) in September 2006, and Type A Water Licence 2AM-DOH0713 (the "Type A Water License"), issued by the Nunavut Water Board (NWB) in September 2007. Figure 1-1 below shows the location of the Doris North Mine at a local and regional scale.

Figure 1-1. Location Doris North Mine (local and regional scale)



The following Sections 1.1 to 1.2 provide background on the proponent HBML and need for the Mine changes. Section 2 provides an update of the Mine plan. Section 3 provides background detail on the geology of the Doris Central and Connector deposits, as well as a summary of updated geochemical analysis relating to the additional deposits.

Section 4 summarizes the proposed changes to the Mine, and Section 5 describes the anticipated regulatory requirements. Section 6 describes the public consultation that has been completed to date in relation to the changes. Section 7 describes an update of the predicted environmental and socio-economic impacts of the Doris North Mine described in the Miramar Final Environmental Impact Statement ("FEIS"), in relation to the proposed changes (Miramar, 2005). Section 8 describes the changes to the closure and reclamation plan for the Mine triggered by the proposed changes, in particular updating the reclamation security estimate as well as changes to post-closure water management. Section 9 describes changes to existing monitoring and management plans that will be necessary if the proposed changes go forward. HBML aniticipates that additional changes will be identified during the regulatory process and proposes to submit updated plans at a later date.

This document is supported by 23 appendices. Appendices 1 and 2 detail the proposed changes to the Project Certificate and the Type A Water Licence, respectively, and Appendices 3 to 23 provide detailed technical information prepared by Newmont's various professional advisors on matters relevant to the proposed Mine changes.

1.1 Proponent Information

Operator: Hope Bay Mining Ltd.
300-899 Harbourside Drive
North Vancouver, BC V7P 3S1

Parent Company: Newmont Mining Corporation
800-6363 South Fiddler's Green Circle
Greenwood Village, CO 80111

Newmont Mining Corporation ("Newmont") is primarily a gold producer, with significant assets or operations in the United States, Australia, Peru, Indonesia, Ghana, Canada, New Zealand, and Mexico. Founded in 1921 and publicly traded since 1925, Newmont is one of the world's largest gold producers. Headquartered near Denver, Colorado, the company has over 35,000 employees and contractors worldwide. As of December 31, 2010, Newmont had proven and probable gold reserves of 91.8 million equity ounces and an aggregate land position of approximately 38,840 mi^2 (100,600 km^2).

In late 2007, Newmont Mining B.C. Limited, an indirect wholly-owned subsidiary of Newmont, purchased Miramar Hope Bay Limited ("Miramar"), a Canadian gold company that controlled the Hope Bay Belt. This includes the Doris North Mine and exploration and mineral rights over one of the largest undeveloped greenstone belts in North America. Hope Bay Mining Ltd. ("HBML") was created to develop and operate the Hope Bay Greenstone Belt. HBML is a wholly owned subsidiary of Newmont.

Newmont's vision is to be the most valued and respected mining company through industry leading performance. Key to achieving that vision is the ability to make a lasting and positive contribution toward sustainable development through environmental stewardship, social responsibility, and the protection of human health. Newmont is globally committed to sustainable development, as demonstrated by their commitment to international initiatives such as the International Council on Mining and Metals' Sustainable Development Framework, United Nations Global Compact, and listing on the Dow Jones Sustainability Index. Newmont considers the Hope Bay Project to be an opportunity to develop a positive working relationship with the Inuit, Nunavut, and Canada by managing risk and sharing the economic and social benefits with stakeholders through a responsible approach to exploration, mining, and gold production.

1.2 Purpose of and Need for Mine Changes

The development of the Hope Bay Belt as a series of sustainable projects over a number of years is of potential great value to the people of the Kitikmeot Region, Nunavut and Newmont shareholders, and it is of strategic importance for Canadian sovereignty. The objectives are to provide opportunity for the Kitikmeot Region, Nunavut and Newmont shareholders, while protecting the environment and minimizing negative socio-economic impacts.

To provide appropriate context for the proposed Phase 1 Doris North Mine changes within the potential long-term belt-wide development, HBML is providing some information in this application regarding the potential Phase 2 Hope Bay Belt Project. Phase 2 of the Hope Bay Project will be the subject of separate future NIRB and NWB applications. The Phase 2 Project will likely proceed in three phases: 1) expansion of underground development beyond what is accessible from the Doris North decline, 2) moving into the Madrid/Patch district with underground and open pit mining and crushing and milling operations, and 3) development of open pit and underground mining and milling operations in the Boston district. Phase 2 will include the expansion of infrastructure at Doris beyond what is required for the operation of the existing stand alone Phase 1 Doris North Mine.

However, in the near term the Phase 1 Doris North Mine will operate as a stand-alone project. HBML views the Doris North Mine as the potential Phase 1 of belt wide development, which may start limited gold production from one stand-alone underground mine located at the north end of the belt near Doris Lake. Originally, Miramar Hope Bay anticipated a 2 year mine life for the Doris North Mine. Ongoing exploration since HBML acquired the Mine suggests there are sufficient resources to allow 2 to 4 years of additional mine life with some revisions to existing facilities and new infrastructure. The proposed changes to the Phase 1 Doris North Mine will permit the mine to begin sustainably operating as a stand-alone operation, independent from potential future Phase 2 Hope Bay Belt Project activities. The changes that are proposed to existing and planned Doris North Mine facilities are required for Phase 1 and are not a "pre-build" for any aspect of Phase 2.

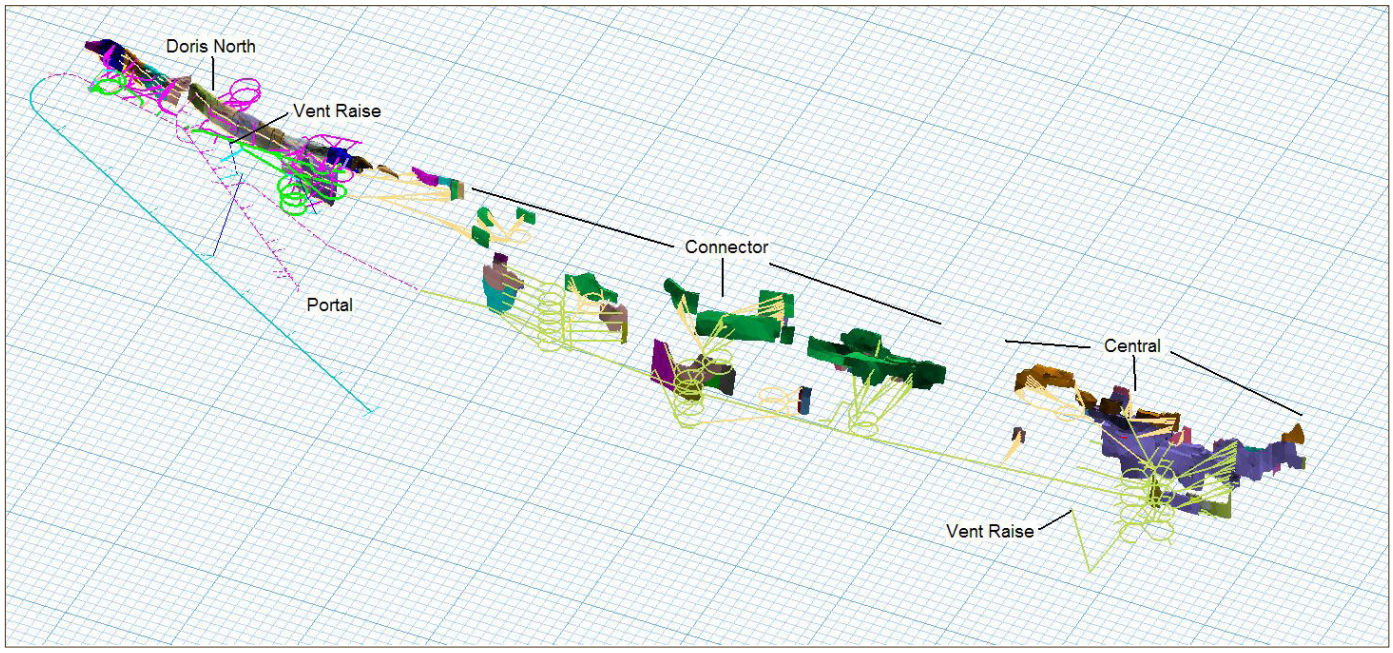
Continual operation of the Phase 1 Doris North Mine while permitting of the new Phase 2 Hope Bay Belt Project proceeds is an important feature of the sequential development of the belt. This incremental, sequential approach will among other things limit the potential for a production gap between phases of the overall development. A production gap would have associated significant negative socio-economic impacts for Nunavut as well as negative economic impacts for Newmont and HBML. For example, all direct and indirect benefits of the mine would be suspended during the closure period, and there would be significant disruption to the lives of workers. HBML anticipates that within the Phase 2 Hope Bay Belt environmental process, NIRB will consider any potential for issues related to incremental development and cumulative effects before Phase 2 would be permitted to proceed.

2. Overview of Updated Mine Plan

There are two sub-deposits associated with the Doris North Deposit (called Doris Connector and Doris Central), which have the potential to be mined in addition to the deposits that were described in earlier Phase 1 Doris North Mine plans. In addition, preliminary exploration shows that the Doris North deposit likely extends to depth. Mining these deposits will potentially increase the gold resources mined from the Doris North Portal, and in turn extend the near term life of the mine. In order to mine the deposits, further exploration and definition by detailed drilling is required. To complete this exploration, an underground drift will be extended parallel to Central and Connector. From this drift, diamond drill holes will be drilled into the sub-deposits where geologic and grade models have identified zones in the deposits that could potentially be mined. Once the exploration drilling has been completed and the geological and grade models have been updated with the new information, a decision will be made on feasibility and if appropriate detailed mine plans will be finalized and the extraction of ore can commence.

The underground development method for the additional deposits will be the same as previously proposed by Miramar: conventional drill and blast. The development of the deposits will start by driving a drift parallel to the two deposits accessed from the Doris North Portal. This drift will initially be used as an exploration drill platform to further define the arrangement of mining stopes in the two deposits by underground diamond drilling. If successful, additional drifts and ramps will then be driven towards the stopes to allow mining. At the south end of the drift there will be another drift driven towards the western shore of Doris Lake at 100 m below the bottom of the lake. Once the drift reaches shore, a ventilation raise will be driven to surface, creating a ventilation circuit and a secondary/emergency egress for the crews. Figure 2-1 illustrates the general layout of the mining shapes and the locations of potential stope areas. It is expected that the actual number of stopes that are developed in this phase of mining will be limited by the amount of subaqueous tailings storage that is available based on the current designs for the TIA.

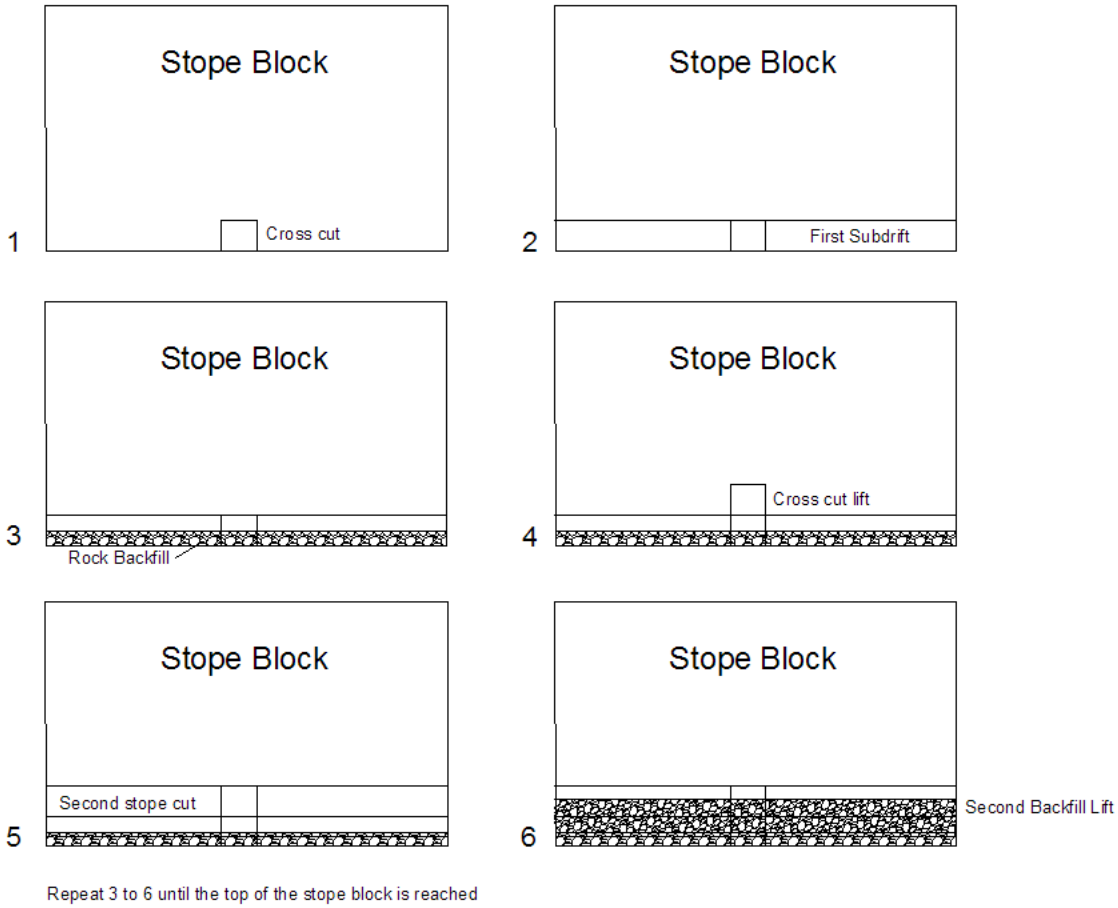
Figure 2-1. General Layout of Mining Shapes and Potential Locations of Stope Areas



Two mining methods suitable for deposits of this style were evaluated: long hole and mechanized cut and fill. Mechanized cut and fill has been chosen as most suitable primarily for two reasons. First, the method provides more flexibility when extracting complex vein systems. Second, the method is a person-entry method allowing the mine to deal with any potential water inflows from diamond drill holes very quickly. Being able to accommodate diamond drillhole water inflows is important since both the Connector and Central deposits are directly under Doris Lake and talik water will be present.

The mechanized cut and fill method can be described as follows. First, a stope access is driven at a gradient of about -15% from the main haulage drift intersecting the stope block (Figure 2-2). Next, a flat drift along the bottom of the stope block is driven, creating an undercut. During this work ground support is installed to protect the miners. Once the end of the stope is reached, waste rock is brought into the undercut filling it up to about 3 m from the top of the drift. Next, a 5 m cut is taken directly above the undercut. The ore is mucked out and then more fill is brought in to fill the void, again to 3 m from the top of the drift. The stope access is then slashed to gain access at a 5 m higher elevation allowing the next lift to be mined. The slashing of the stope access and the mining of the lifts continues until the stope is mined out.

Figure 2-2. The Mechanized Cut and Fill Method of Mining



The mining rate is variable and highly dependent on the number of stopes available and the width of the deposit. A mining rate of up to 1,000 tpd is considered achievable for the Connector and Central deposits, but rates could grade up to a 1,600 tpd milling average and a mining rate of up to 2,000 tpd.

Table 2-1 shows the preliminary mining schedule for Doris North, Central, and Connector. The schedule is approximate and projections will be revised as further information from the exploration programs becomes available over time. Contingency for additional temporary waste rock storage is required to accommodate changes in the mine development schedule or mine plan. Plans for a new waste rock storage area that could accommodate up to an additional 540,000 tonnes (t) of rock located to the west of the existing area are included in this application (see Appendices 18 and 19 for further design details). It is possible HBML will not find it necessary to construct the full complement of proposed pads, but it is important to maintain this option.

Table 2-1. Preliminary Mining Schedule for Doris North, Connector, and Central

Year [Based on Doris North Production = P]	Ore (tonnes)			Waste Rock and Backfill (tonnes)		
	Doris North	Central Connector	Total Ore	Total Waste Production	Backfill	Waste Stockpile
P - 4 years	0	0	0	6,000	0	6,000
P - 3 years	10,000	0	10,000	182,000	0	188,000
P - 2 years	0	0	0	215,000	0	403,000
First Production Year (P)	70,000	0	70,000	173,000	53,000	523,000
P + 1 year	280,000	15,000	295,000	233,000	197,000	599,000
P + 2 years	201,000	72,000	273,000	177,000	182,000	554,000
P + 3 years	0	338,000	338,000	186,000	225,000	515,000
P + 4 years	0	365,000	365,000	31,000	243,000	303,000
Totals	561,000	790,000	1,351,000	1,203,000	900,000	303,000

Backfill requirements for the stopes are assumed to be two thirds of the tonnes mined. Mineralized waste material stockpiled on surface will be used for backfill first followed by the non-mineralized material. Current projections indicate that approximately 303,000 t of non-mineralized waste rock will be left on surface after the Connector and Central deposits are mined out. This material will be handled and reclaimed as specified in the Waste Rock and Ore Management Plan (SRK 2010) submitted to the NWB and KIA in December 2010 and as updated with Nunavut Water Board approval from time to time. (We note that the Nunavut Water Board is currently considering Doris North Water Licence amendments related to waste rock management.) If appropriate and approved by the Nunavut Water Board, the non-mineralized waste rock will also be used for construction. It is anticipated that the geochemical characteristics and proportions of the waste rock from the additional development will be similar to that of Doris North (see section 3.2 of this application for further details). As exploration and development advances, HBML will periodically revise the Waste Rock and Ore Management Plan to reflect the updated mine plans.

As previously proposed, groundwater will be pumped directly to the TIA. However, as noted earlier in this application greater volumes of groundwater flows are now anticipated and more is known regarding the composition of the groundwater. To prevent excessive groundwater inflows a grouting program will be put in place during mining. This will consist of drilling test holes for water in advance of development and if substantial inflows are anticipated a grout curtain will be put in place prior to blasting of the rounds. Any leaking drillholes that are encountered will be plugged, likely using Margo type plugs. Initial inflow estimates are in the range of 100 L/s when the Mine is fully developed but this is expected to be managed to significantly lower levels with a grouting and plugging program in place.

During development fresh air will be supplied from the existing Doris North vent raise and forced into the headings with auxiliary fans and ventilation tubing. As the development advances to the completion of the new Doris Central raise a 250 HP fan and a 24 MBTU/hr heater arrangement will be installed near the top of the new Doris Central raise to force fresh air down and into the ramp system. Auxiliary fans and ventilation tubing will be used to force air into the headings. All the expired air will eventually exhaust through the existing Doris North Portal.

A new pad with a surface area of 13,252 m^2 will be required on surface at the new Doris Central raise breakthrough to facilitate the fan and heater arrangement, a 75,000 L fuel tank, air compressors, and an electrical transformer and switchgear. An access road to the pad leading from the Doris-Windy all weather road will also be required. The Doris Central site changes are generally illustrated in Appendix 16.

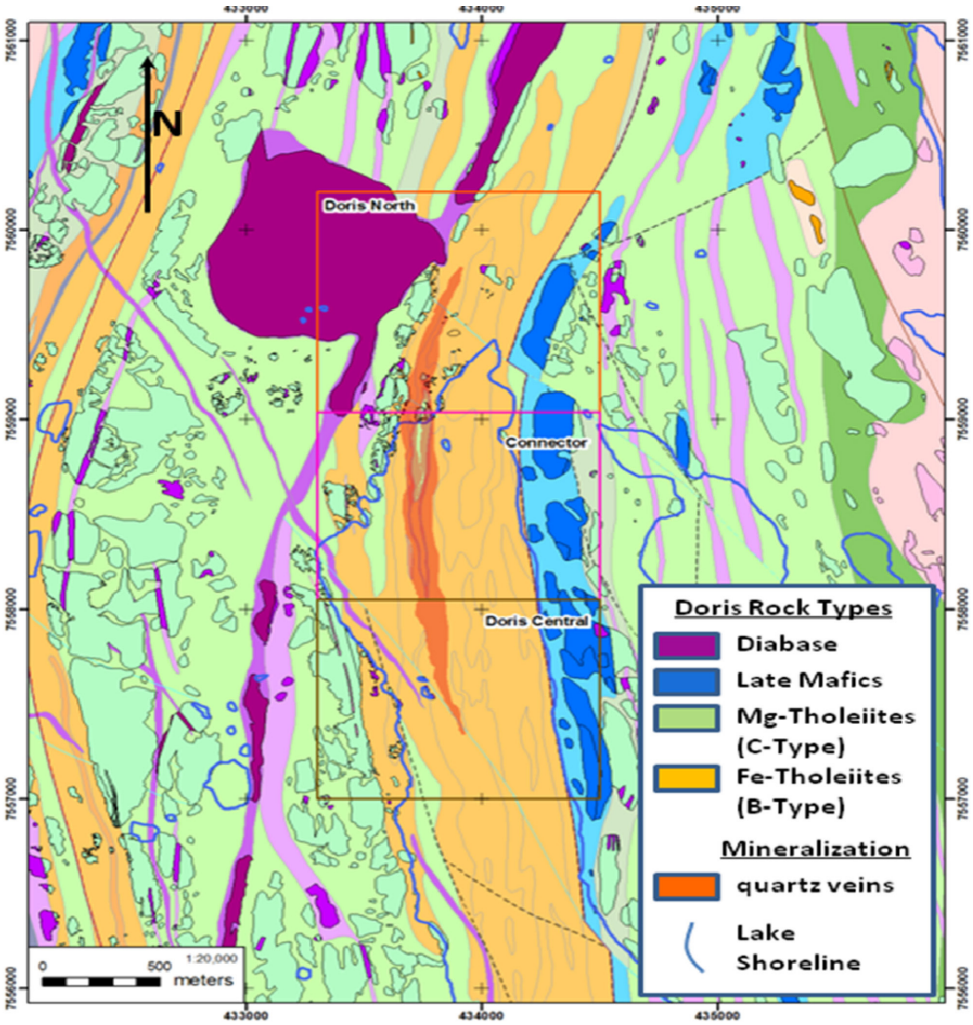
3. Geology and Geochemistry

3.1 Geology

The Hope Bay Belt is located in the Slave Structural Province, a geological sub-province of the Canadian Shield. The region is underlain by the late Archean Hope Bay Greenstone Belt, which is 7 to 20 km wide and over 80 km long in a north-south direction. The Archean Hope Bay Greenstone Belt lies entirely within the faulted Bathurst Block forming the northeast portion of the Slave Structural Province. The belt is mainly comprised of mafic metavolcanic (mainly meta-basalts) and meta-sedimentary rocks that are bound by Archean granite intrusives and gneisses. Archean volcanic greenstone hosts many of Canada's precious and base metal mines (i.e., Yellowknife, Timmins, and Rouyn-Noranda).

The Phase 1 Doris North Mine area is located on the north end of the Hope Bay greenstone belt and consists of a steeply dipping, over 3 km long quartz vein system that is hosted in folded and metamorphosed pillow basalts. The Mine can now be further divided into three sub-deposits from north to south: Doris North, Doris Connector, and Doris Central (Fig. 3.1-1). All three related deposits are hosted within the same lithologies and share the same alteration and mineralization assemblages.

Figure 3.1-1. Surface Geology around the Doris Deposit with the Deposit Area Outlines, and the 2009 Vein Shapes Projected to Surface

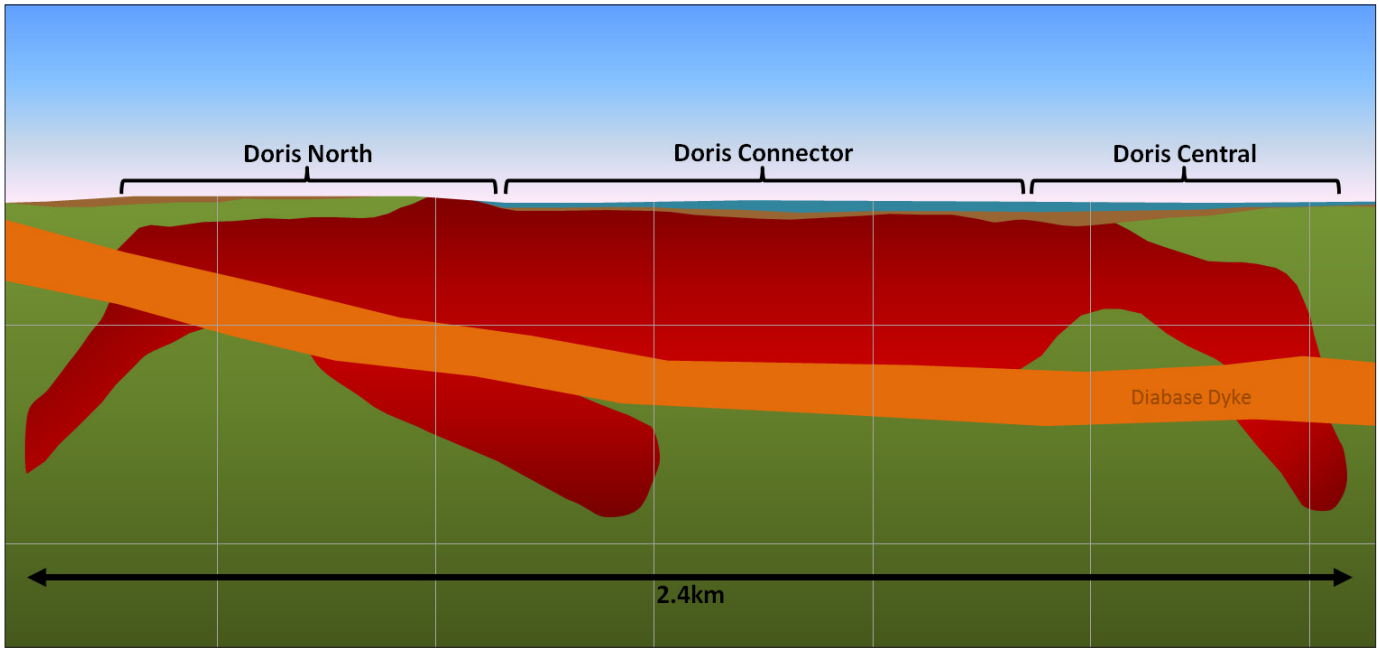


Lithology consists of mafic volcanic and plutonic lithologies with minor intercalated sediments. Mafic lithologies can be subdivided into Mg-tholeiites (C-type) and Fe-tholeiites (B-type) based on lithogeochemistry analyses. Felsic units such as the feldspar porphyry make up a minor component of stratigraphy and consist of a fine to medium grained pink moderately foliated dike intercepted in Doris Connector and Doris Central but not observed at Doris North.

A series of Proterozoic diabase dikes intrude the area and clearly crosscut all stratigraphy. The dikes vary in size, are coarse grained and display a felty texture. The largest dike is approximately 100 m thick and dips up to 30° east. The diabase dikes are pristine and do not appear to be offset by late faulting.

Early deformation of the Doris system caused a tight isoclinal fold of the mafic basalt stratigraphy. The fold axis of this isoclinal anticline strikes approximately north-south and is doubly plunging. The core of the anticline consists of more massive Mg-tholeiitic basalt with Fe-tholeiitic basalt out board of this unit. Belt-wide deformation associated with the gold event caused a localized near vertical extension along this contact in the anticline hinge and limbs where the Doris vein was formed. The regional fabric changes from a north-south orientation within the Central and Connector areas of Doris to a north-northeast orientation within Doris North area. Later movements within this stress field caused the vein to dislocate along foliation parallel shear planes. At a later point in time, the Doris vein has been broken and sinistral offset along northwest-striking brittle faults. In recent geologic time, a diabase dike has bisected the Doris system (Fig. 3.1-2).

Figure 3.1-2. Long Section of the Doris Geology with Deposit Area Outlines, and the 2009 Vein Shapes Looking East



Two types of alteration systems are present within the region, a weak “distal” and a strong “proximal” system. The weak “distal” alteration system is defined by Mg-Ca carbonate alteration overprinting basaltic rocks and calcite-leucoxene alteration overprinting gabbroic rocks. A strong “proximal” hydrothermal alteration system is directly related to mineralized quartz veins. Alteration consists of iron dolomite-sericite-paragonite and quartz flooded zones. Sulphidization accompanying gold includes up to 5% pyrite, minor chalcopyrite, and arsenopyrite. Alteration intensity decreases away from veining with vein size directly reflecting the size of the alteration envelope. Alteration may extend up to 45 m above the crest of the fold and can range from 0 to 20 m along the limbs.

Mineralization in the Doris system is typical of “Archean Lode” deposits. Visible and disseminated gold is found primarily within quartz veins that range from a few centimetres to about 10 m in scale. Gold is commonly associated with narrow tourmaline-chlorite septa oriented parallel to and along the vein margins. Veins contain high-grade intersections but are not consistently mineralized along strike. Visible gold (VG) mineralization consists of coarse, leafy, free-milling grains located along vein margins, tourmaline septa, wallrock fragments and is associated with pyrite. Disseminated sulphides consisting of trace to 2% pyrite, trace chalcopyrite, rare sphalerite and pyrrhotite, occur along the vein and septa margins as well as in clusters within the vein. Occasionally gold is present within brecciated zones adjacent to the quartz veins. Whole rock analysis has shown mineralization to be situated at the contact between titanium rich Fe-tholeiites and Mg-tholeiites (Kleespies and Mercer 2001).

Doris Connector and Central mineralization has a strike-length of approximately 1.8 km which extends to the south beneath Doris Lake. Connector veins extend from the lake bottom, but the anticline hinge is eroded away (Fig. 3.1-3). At Doris Central, the hinge begins to reappear as the anticline plunges gently to the south (~10°), but the fold tightens and the limbs begin to coalesce (Fig. 3.1-4). Lithology and mineralogy in Doris Lower is relatively similar to that found in Upper Connector and Central.

Figure 3.1-3. Doris Connector Cross-section

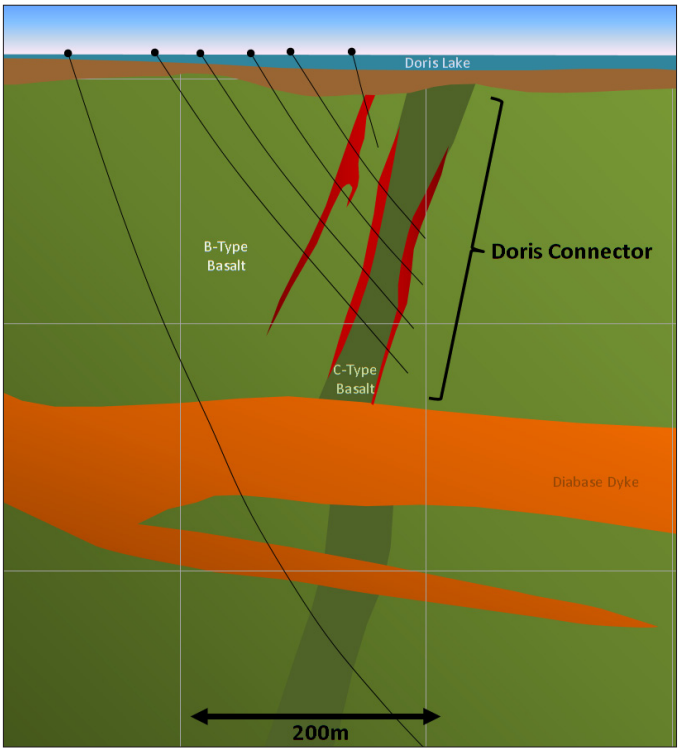
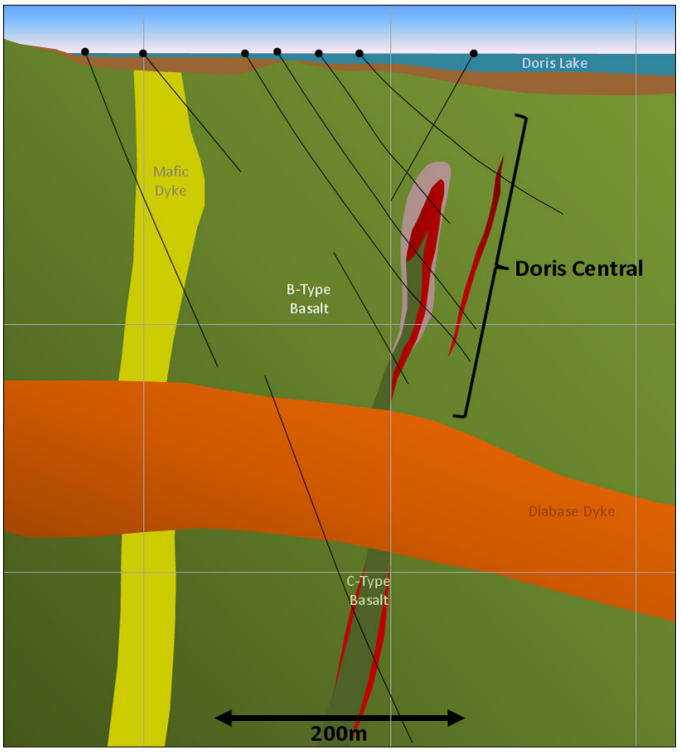


Figure 3.1-4. Doris Central Cross-section



3.2 Geochemistry

HBML has undertaken a comprehensive geochemical characterization program of mine waste at the Doris and a number of other gold deposits in the Hope Bay Belt. The reports at Appendices 6, 7, and 8 provide an assessment of the acid rock drainage and metal leaching (ARD/ML) potential of waste rock and ore that would be produced as part of the proposed underground mining activities.

In Summer 2010, a geochemical characterization program was conducted for Quarry I. The report summarizing the results of these investigations is attached at Appendix 6. Using a backpack-type drill, the program consisted of obtaining shallow drill core samples across the strike of the geology, with the objective of examining geochemical variability according to lithology and/or sample location. A total of five samples were analysed for elemental analysis by aqua regia digestion with ICP finish and acid-base accounting (ABA) parameters, including paste pH, total sulphur, sulphate sulphur, total inorganic carbon (TIC), and modified NP. The mapping indicated the geology was consistent across strike. Accordingly, the samples were representative of the Quarry I materials. Based on the geochemical characterization program,

the material from Quarry I was considered to have a low potential for acid rock drainage (ARD) generation based on NP/AP and TIC/AP ratios and low sulphur content. Accordingly, materials from these quarries are considered suitable to be used as construction material.

The report in Appendix 8 also provides an assessment of the acid rock drainage and metal leaching (ARD/ML) potential of waste rock and ore that would be produced as part of the proposed additional underground mining activities at Doris Central and Connector. The findings are based on a compilation of static (e.g., ABA) and mineralogy data (XRD) obtained from various sources, including previous studies, samples recently characterized by SRK, and data generated internally by Newmont. The different testing campaigns used different analytical and data interpretation methods. A comparison of data was made to reconcile the different analytical methods and to select surrogate parameters for the assessment of ARD. Data analysis was performed according to deposit, deposit zone and rock type. Rock types were assigned to each sample using HBML's 2008 standard lithology codes. Key results from the static testing program are summarized as follows:

- From an ARD/ML perspective, the most significant finding from the mineralogy data is that carbonate minerals are abundant in most rock types. Ferroan dolomite ([Ca,Mg,Fe]CO_3) was the dominant carbonate mineral, although calcite ($CaCO_3$) and to a lesser degree, siderite ($FeCO_3$) were also present. Pyrite was the only sulphide mineral detected using XRD methods.

- The static testing results show that, in general, samples from Doris are characterized by high levels of neutralization potential (NP) and total inorganic carbon (TIC). As a result, most samples were characterized as not-potentially acid-generating (non-PAG; i.e., ratios of NP to acid potential [AP] or TIC/AP greater than 3). That said, the potential for localized ARD cannot be eliminated because a small proportion of samples was classified as potentially acid-generating (PAG; [NP or TIC]/AP < 1).

- A comparison of the 90th percentile levels of solid-phase elemental data with five times the average crustal abundance for basalt (Price 1997) indicated that a number of elements that could be mobile under neutral and alkaline pH conditions were present at elevated concentrations in the solid phase. These parameters include arsenic, boron, cadmium, molybdenum, antimony and selenium. Although selenium was identified as elevated in most rock types, the detection limits were high for selenium relative to the average crustal abundance. Some samples contained relatively high concentrations of sulphur in the form of sulphide minerals, suggesting that metal leaching under neutral to alkaline pH conditions may be a concern with respect to water quality.

Kinetic test work has been carried out to assess metal leaching rates. An interim report on the findings is provided at Appendix 7. The kinetic test program for Doris included 21 humidity cell tests and five barrel tests. Four humidity cell tests were operated by Rescan (2001), and the remaining 17 samples were from more recent geochemical characterization programs by SRK in collaboration with Newmont. Sample selection was based on lithology, economic classification (ore or waste), and ABA characteristics. Samples representing material with typical and higher than average sulphide concentrations were selected for testing. Trace elements (e.g., arsenic) were also considered during sample selection, but were a secondary consideration to ABA. Detailed mineralogical testing was also completed on the more recent samples selected for humidity cell testing. Key findings from the kinetic testing program are summarized as follows:

- The leachates from all samples were neutral to alkaline. Stable sulphate release rates were low and ranged between the limit of analytical detection (0.4 mg/kg/week) to 6 mg/kg/week. Samples with higher sulphide contents tended to exhibit higher stable sulphate release rates.

- Overall, metal concentrations were low for all of the humidity cell tests. Late gabbro samples with elevated sulphur levels had higher levels of antimony, arsenic and cobalt as compared to the other Doris waste rock samples. Mafic volcanics with elevated sulphur, and mafic volcanics combined with quartz vein also had elevated levels of cobalt relative to the other samples. All samples were predicted to be non-PAG on the basis of AP and NP depletion times and/or low stable sulphate release rates (less than 6 mg/kg/week).

- For the barrel tests, leachate concentrations were comparable to the humidity cells, however loadings were one to two orders of magnitude lower (e.g., sulphate was 0.007 to 0.2 mg/kg/week). The lower release rates for the barrel tests reflect the lower operating temperatures and the larger grain size of the test material.

- The more detailed mineralogical characterization has shown that pyrite is the most dominant sulphide mineral. However trace amounts of cobaltite (CoAsS), chalcopyrite ($CuFeS_2$), galena (PbS), gersdorffite ((Fe,Co,Ni)AsS), pyrrhotite (FeS), sphalerite (ZnS), and tetrahedrite (Cu_3SbS) were found in some samples.

The data from the kinetic test program have been used to validate inputs used for water quality predictions from the waste rock and ore. As noted in the preceding section, all waste rock will be managed according to the protocols outlined in the Doris North Waste Rock and Ore Management Plan (SRK 2010) and as revised from time to time with approval of the Nunavut Water Board. The more mineralized rock, including any PAG rock will be segregated and stored in a separate mineralized waste rock pile until it can be used as backfill in the underground mine. At closure, the backfilled rock will be flooded and inundated by permafrost, and is not expected to result in any long-term closure issues. The waste rock that will remain on surface will be non-PAG rock with limited potential for metal leaching and/or ARD issues, and will be reclaimed in place.

4. Description of Proposed Doris North Mine Changes

The following section provides a detailed overview of the proposed changes to Phase 1 Doris North Mine. The footprint of these changes is illustrated in Appendix 24.

4.1 Extended Mine Life

HBML now plans to access the Doris Central and Connector mineral deposits via the Doris North Portal. Originally, Miramar anticipated these resources would be accessed via additional underground portals or by open pits. This change to the Doris North Mine Plan will potentially result in a 2 to 4 year extension of the Mine life.

4.2 Increase to Mining and Milling Rate

In this application, HBML anticipates an initial mining rate of up to 1,000 tpd (yearly average ore mining rate) and that ore from these deposits will be processed by the existing mill at up to 800 tpd (yearly average). These rates may grade up to a 1,600 tpd milling average and mining rate of up to 2,000 tpd if further exploration proves up additional deposits.

4.3 Cyanide Treated Tailings to Tailings Impoundment Area

In the original application for the Type A Water Licence, it was stated that the cyanide destructed slurry would be filtered and trucked to the underground stope for final deposition and the flotation tails would be pumped to the TIA for subaqueous deposition. HBML now proposes that the cyanide destructed slurry will be pumped to the flotation tailings pump box where it will be blended with flotation tailings prior to discharging in the TIA. The proposed co-disposal of combined cyanide destructed tails with flotation tails in an engineered TIA has been practiced at numerous gold mines across Canada and around the world. Co-disposal of tailings offers several advantages over the previous proposal, including:

- reduced potential for contamination of groundwater during operations that could result from ARD and/or metals released from the cyanide destructed tailings;
- disposal of all tailings in an engineered facility; and
- the high neutralization potential of flotation tails will provide sufficient neutralization to the sulphide-rich cyanide destructed tails and prevent the formation of ARD.

Cyanide destruction will be performed using the SO_2-Air Process, a process that was previously successfully tested. Recent testwork conducted by HBML confirmed previous findings that the concentration of WAD cyanide could be reduced to less than 0.5 mg/L prior to mixing with the flotation tails for co-disposal in the TIA. At a concentration of less than 0.5 mg/L, both the tailing delivery system and the TIA will not be classified as Cyanide Facilities by the International Cyanide Management Institute (ICMI). It will also meet all Canadian requirements, including those set out in the *Metal Mining Effluent Regulations*.

4.4 Changes to TIA Water Management

4.4.1 Overview of Change to TIA Water Management Strategy

Currently, the Type A Water Licence indicates that TIA water is initially to be discharged into Doris Creek, which in turn discharges to Robert Bay.

HBML is proposing to amend its tailings water management strategy. As previously permitted, the mine water will report to the TIA. However, the revised strategy will have a single discharge from the TIA to the marine environment in Roberts Bay. The TIA water will be treated as needed and then discharged as necessary to meet *Metal Mining Effluent Regulations* thresholds within the pipeline and then via a subsea pipeline and diffuser to Roberts Bay. HBML proposes to monitor water quality near the diffuser to confirm that Canadian Council of Ministers of the Environment (CCME) thresholds are met within Roberts Bay.

Treated TIA water will be discharged to Roberts Bay year round and discharge works will be sized accordingly. The treated TIA water is expected to disperse throughout Roberts Bay in the winter months and flush completely into Melville Sound water during the summer open water season.

As well, more groundwater will be encountered than originally anticipated by Miramar. Deep groundwater below permafrost in Doris Lower and talik water under lakes will be encountered during underground mining of the Doris Central and Connector deposits. Groundwater will report to the TIA. Due to its salinity, this water could be detrimental to freshwater ecosystems if directly discharged (as currently permitted) into Doris Creek. This water is similar in contingency to seawater, and as such, a more environmentally appropriate initial receiving environment is Roberts Bay.

To provide further detail on the changes to mine water management, the various supporting appendices relating to the revised TIA water management strategy are shown below in sequential order of water flow:

- Appendix 9: Groundwater inflows and Inflow Water Quality Used for the Revised Doris North Mine Amendment Package No. 3 to Water Licence No. 2AM-DOH0713 (SRK, June 2011);
- Appendix 10: Water Quality Model, Hope Bay Project, Nunavut, Canada (SRK, August 2011);
- Appendix 11: Tailings Impoundment Area – Excess Water Transfer System (Hatch, September 2011);
- Appendix 4: Doris North Gold Mine Roberts Bay Report (Rescan, October 2011); and
- Appendix 5: Doris North Gold Mine Project No Net Loss Plan for the Roberts Bay Subsea Pipeline and Diffuser (Rescan, October 2011).

4.4.2 Changes to Inputs to TIA and Water Transfer System

As previously permitted, inputs to the TIA will include mill effluent, mine water, surface runoff water, ground water, and natural flows. Additionally, talik and deep ground water in more significant volumes than previously estimated will now be directed to the TIA as it is encountered during underground mining. Some treatment of effluent to the TIA will occur in order to ensure regulatory parameters and monitoring criteria are met. Decant from the TIA will accommodate all inflows in a manner that will maintain sufficient water cover over deposited tailings solids taking into account the effects of wind or ice scouring. Excess water will be pumped from the TIA to a treatment plant located at the Doris Camp site and then pumped via a pipeline along existing corridors to the subsea pipeline and diffuser system in Roberts Bay.

The mine water transfer system has five components:

- tailings slurry pre-treatment in the process plant to remove zinc;
- a pipeline through which treated tailings slurry is pumped from the process plant to the TIA;
- a pipeline through which excess water is pumped from the TIA to a treatment plant located beside the process plant;
- a treatment plant that removes suspended solids from the excess TIA water; and
- a pipeline through which treated TIA water is discharged to a subsea diffuser located in Roberts Bay.

These five components were based on a site water management plan that has taken into consideration all aspects of site water management. The plan incorporates water recycle, fresh water make up, proper effluent disposal, and energy conservation to minimize the impact to the local environment (Appendix 4).

The plan is supported by a water balance model that predicts TIA discharge water quality (Appendix 10). Metallurgical testing has been completed on representative samples from each of these deposits, and the solids and process waters have been subjected to detailed geochemical characterization testing, including acid base accounting, kinetic testing, characterization of process waters, and aging tests on tailings slurries. The geochemical characteristics of the new ore zones are similar to that of Doris North. Tailings will be stored in the TIA, where they will be permanently flooded. Underwater disposal limits the potential for oxidation of sulphide minerals, and therefore the release of sulphate and metals from the tailings solids. The potential effects of the tailings process water on pond and therefore discharge water quality were assessed using a water and load balance model (Appendix 10). The results of the model were used to establish water management requirements for the Mine.

All efforts will be made to recycle as much of the process water from inside the milling, grinding and gold recovery areas of the plant as possible. A portion of the process water will leave with the tailings as a slurry to be deposited in the TIA.

The water and overall mass balance will be managed inside the process facility using recycle water through the use of thickeners etc. to reduce the amount of water being pumped from the mill to the TIA. All efforts will be made to select the optimum balance between recycle, process effluent treatment and fresh water make up to balance metals and other contaminants within the plant. Make up water from Doris Lake will continue to be used to offset the water consumed in the process.

Excess water from the TIA will need to start being pumped out of the TIA within approximately 2 years of mill operation. This excess water will be pumped from the impoundment via pumps to a treatment plant, located at the Doris Camp site, where the water will be treated to meet discharge standards. The line pressure will then be boosted via centrifugal pump inside the water treatment facility to allow the treated water to transfer to Roberts Bay for discharge via the subsea outfall and diffuser system.

4.4.3 Water Treatment

The discharge criteria for the treated TIA water are listed in Tables 4-1 and 4-2 of the water balance modelling report prepared by SRK (Appendix 10). The proposed treatment of TIA water has been designed so that CCME guidelines for the protection of marine aquatic life will be met within Roberts Bay. HBML will monitor the water quality in the TIA and Roberts Bay and revise as appropriate any treatment scheme implemented during the initial construction phase.

Based on modelling by SRK, the expected water quality in the TIA indicates that treatment to remove one or more metals will be required prior to discharge of process water to the TIA. Zinc is the main metal which is anticipated to be elevated because it is used as a dosing agent in the Merrill-Crowe gold recovery process, but copper and cadmium are also anticipated to be elevated.

The following process description provides the details for an effluent treatment plant (ETP) for removal of zinc from the mill effluent. The process for zinc removal will also remove other metals such as copper, if required. A portion of the mill effluent, specifically the cyanide detoxified barren (so-called because the cyanide has been destroyed and the gold has been extracted), will be directed to the primary pH adjustment tank and potassium permanganate will be injected with an in-line mixer in order that any complexes formed between the cyanide and zinc are eliminated. Provision will be made to inject additional reagents prior to the lime tank if other metals besides zinc need to be controlled, such as cadmium or copper introduced through the Merrill-Crowe process and cyanide detoxification. To minimize the zinc in solution the optimal pH must be adjusted in the field, however, it is anticipated based on test work to be around 10 to 10.5. A lime solution will be fed to the agitated primary pH adjustment tank to increase the pH of the solution. The reactor will be sized for a 30 minute retention and will then be directed by gravity to a clarifier where flocculent will be added to enhance liquid-solid separation. The settled solids will be periodically pumped through a bag filter or a recessed plate filter to collect the precipitate, while the filtrate will be recycled back to the primary pH adjustment tank, if necessary. Provisions will be in place to recycle the underflow solids as required to the primary pH adjustment tank to aid in producing denser floc. Tailings will be pumped from the plant site to the TIA and deposited during both summer and winter months.

If future investigation reveals that the zinc will not become soluble again at the pH anticipated in the tailings thickener, then the clarifier underflow filtration process could be eliminated. The clarifier underflow will then report to the tailings thickener for final solids liquid separation prior to TIA disposal.

The expected water quality in the TIA suggests that a final filtration stage for the discharge of the TIA will be required to meet an acceptable discharge standard. Since effluent discharge from the TIA is not expected to occur during the first 2 years of mill operation, it will be possible to closely monitor the water quality over that time to determine if any additional treatment is required. It is, however, predicted from water balance modelling that effluent to be discharged from the TIA will require only filtration to reduce total suspended solids (TSS) with the backwash solids recycled back into the tailings thickener underflow in the process plant. If necessary, additional equipment may be added to the treatment facility, such as mixed media filtration and pH adjustment. All thickened backwash underflow will be returned to the mill tails thickener underflow.

Based on the initial test work and modelling, direct filtration is expected to be sufficient to reduce TSS to below the *Metal Mining Effluent Regulation* limits. It is expected that the effluent treatment plant equipment will be installed at the Doris Camp in a new multi-purpose building.

4.4.4 Pipelines and Flows to Roberts Bay

The mill processing plant waste streams will be combined into a tailing thickener where the overflow water will be reused in the process and the underflow will be transferred to a tails box and pumped to the TIA through a double-walled pipeline. The pipeline will be equipped with heat tracing, insulation and low point drains to HDPE containment and recovery tanks.

The pressure required to overcome the friction and head requires that the initial 1.1 km section of the line be rubber lined carbon steel. After 1.1 km, the piping material will be changed to HDPE.

The piping will be routed the most convenient way across the plant-site and then follow the tailings road to the TIA. The pipeline route has been designed to minimize low points. Two low point drainage points have been designed to accommodate the pipeline contents in the event of an emergency. The low point drains will transfer the pipeline contents into HDPE containment recovery tanks. The tailing will be discharged into the TIA. All piping will be above ground and easily accessible for visual inspection and if needed, repair.

Excess water cover will be removed from the TIA through a single point of discharge. Based on modelling, it is expected that a nominal flow rate of 120 L/s will be discharged from the TIA to the ocean. To ensure that the effluent treatment plant is sized adequately for the operation, the maximum rate is designed to operate throughout the year. In years requiring lower volumes of discharge the discharge pumps may simply be shut down for periods of time. The HDPE pipeline from the TIA to the discharge treatment plant will also be double-walled, heat-traced and insulated.

4.4.5 Subsea Outfall/Diffuser System

The subsea outfall system consists of an overland HDPE pipe from the effluent fllter plant to Roberts Bay, then connecting to a subsea pipeline and diffuser installed on the sea floor within Roberts Bay (Appendix 4). The pipeline will be heat-traced and insulated. A critical component of the outfall, both in terms of environmental impacts and constructability, is the shoreline crossing traversing the riparian zone adjacent to Roberts Bay to a point below the expected depth of freezing (approximately the 3 m isobath).

The subsea pipeline will daylight at the 4 m isobath in Roberts Bay. It will then run approximately 2.4 km along the bottom of Roberts Bay, to a multipart diffuser located at the 40 m isobath. In order to avoid disturbing sensitive shoreline fish habitat, the pipeline will be installed along the existing jetty in Roberts Bay, emerging at the toe of the jetty. The pipeline itself will not touch the seafloor; rather the pipe will be supported by concrete ballast weights designed to produce fish habitat (Appendix 5). It is expected that the underside of the pipe will provide cover for fish, including Arctic flounder, longhead dab, and starry flounder.

It is anticipated that the transition from the overland pipe to the subsea pipe can be achieved within the existing jetty footprint, and could be installed during the planned sheet pile work currently approved and scheduled for the winter of 2011/2012. The work will be done in compliance with the jetty repair Fisheries Authorization (DFO No. NU-10-0028) and during the winter to minimize potential environmental effects. If the preferred discharge system is not approved by regulatory authorities, then the pipe within the jetty will simply be capped off and not attached to any other equipment. The pipe would simply become part of the Jetty itself.

Both the sedimentation and access issues will be addressed by maintaining the area clear of snow in the early part of the winter, and removing portions of the ice to promote freezing to full depth. It may then be possible to complete the excavation “in the dry.” By isolating the excavation using ground freezing, any required excavation could be undertaken with limited potential effects to marine habitat (Appendix 11).

Accidents that could potentially cause damage to the subsea pipeline or diffuser will be limited to ice and/or anchor impacts. The subsea pipeline and diffuser have been sited to avoid such impacts by ensuring that there is a minimum water cover of 4 m and that the alignment avoids active anchorages.

Ballasting will be used to stabilize the pipeline and diffuser against wave forces projected to occur less frequently than once in 100 years.

The system will operate at relatively low pressures. Leakage from normal operating modes is therefore highly unlikely. In the event that the outfall/diffuser system does sustain damage, subsea repairs can be conducted. In the worst case, these might entail replacement of a pipe section with a premeasured spool piece fitted into the damaged section and connected to the undamaged section by clamps. Spare pipe sections can be stored on site to expedite such repairs.

4.5 Reduction of Water Cover in Tailings Impoundment Area

Tailings for this Project will continue to be sub-aqueously deposited in Tail Lake, which will continue to be contained with the construction of two dams (north and south dams) assessed as part of the Miramar FEIS in 2006.

SRK previously completed a design of the minimum water cover needed at closure to prevent re-suspension of tailings with subsequent water quality effects (SRK 2005). That analysis concluded that the minimum water cover should be 2.42 m, a number which was defined by winter ice thickness. At the time the maximum amount of tailings planned for deposition in Tail Lake was about 458,200 t, and based on bathymetric surveys, this left a final water cover of 4 m, a number that well exceeds the minimum water cover required to protect tailings. Given the volumes of tailings anticipated at that time, it was not necessary to consider the issue of maximum tailings capacity in great detail. Given that HBML now plans to maximize use of the TIA by depositing more tailings than originally estimated, SRK has re-evaluated the design of the water cover, taking into consideration additional baseline data obtained since 2005, as well as re-evaluating some of the assumptions in the previous assessment. Appendix 14 provides further details regarding this re-analysis and confirms that a final water cover of 2.3 m is adequate to prevent re-suspension of tailings under all conditions, and thus more volume of tailings can be deposited while maintaining the current closure plan.

4.6 Doris Central Vent Raise Pad and Road

Under the proposed Project revisions a vent raise pad will be constructed within Quarry I east of the Doris-Windy all-weather road, south of Doris Camp and north of Windy Camp. The Doris Central Access Road will be constructed to provide access to the Doris Central Vent Raise Pad from the Doris-Windy all-weather road.

The new Vent Raise Pad will cover an approximate total area of 13,252 m^2 and will house a fuel transfer station, diesel generator, vent raise infrastructure and an emergency shelter. Rock blasted from Quarry I during development of the pad footprint will be used to construct the pad and will subsequently be covered with at least a 0.15 m-thick layer of crushed surfacing material. As noted in Section 3 of this document, geochemistry of the rock from this quarry has been characterized and shown to have a negligible potential for metal leaching and ARD. The pad will be constructed to be free draining away from Doris Lake and the surfacing material specified will likely be a 1¼" crushed rock.

The design criteria for the vent raise pad are as follows:

- The Vent Raise Pad will be constructed on a drilled and blasted bedrock surface.
- The proposed drilling and blasting zone will not be breached and will be housed entirely within the proposed Quarry I limits.
- A surfacing layer will be required for infrastructure and will be placed on the pad as a levelling course.

The Doris Central Access Road is an extension of the existing Doris Windy AWR and provides access to the Doris Central Vent Raise. The 675 m long access road will not be paved and will have one turn-out location. The road will also connect to a sedimentation control berm (approximately 240 m long) that will be located east of the overburden storage area. This road is not designed to meet the requirements of a mine haul road or a public road. Dual lane traffic is only allowed for pick-up truck type vehicles with an overall outside width of 2.3 m and smaller.

Except for reduced-speed zones, the maximum design speed for any vehicle is 50 km/hr. The road design requirements are similar to those used for the Doris-Windy all-weather road. The Doris Central Access Road will also provide access to a designated Overburden Storage Area that will be located approximately 100 m west of the Doris Central Vent Raise Pad.

Appendix 16 illustrates the Doris Central Vent Raise Pad and Access Road.

4.7 Expanded STP Allowing Increase in Camp Capacity to 360 Beds

In addition to expanding the footprint of the camp to permit the installation of additional beds (Appendix 22), the expansion of the Sewage Treatment Plant (STP) will involve increasing flow through the two existing 180-person capacity plants operating at Doris to reach a 360-person capacity. In 2010, NWB authorized HBML to install the second STP as a backup to allow HBML to bring the system down for maintenance, but the throughput capacity was maintained at 180 persons as per the existing licence. Additional backup STP capacity

may be added to allow the main systems to come down for periodic maintenance, or if HBML determines additional STPs are needed to accommodate the needs of camp.

The temporary discharge location for the expanded sewage treatment plant that will now become the emergency discharge will remain the same as the current location. By separate notification the diffusers on this line will be upgraded in 2011 to better disperse effluent. The discharge pipe is moved periodically to avoid significant ponding that could damage the permafrost. As per the current Part G of the Type A Water Licence, the primary discharge will move to the TIA once that facility is constructed. HBML is requesting that tundra discharge may continue from time to time as needed to allow for activities such as tailings line maintenance.

4.8 Expanded Pad U

Construction of the full extent of Pad U allows for permanent, above-ground storage of up to 375,000 t of waste rock. Waste rock from the underground mine is anticipated to be primarily non-acid generating (Appendices 7 and 8). The waste rock will continue to be managed as described in the Waste Rock and Ore Management Plan (SRK 2010), with segregation and preferential backfilling of any mineralized rock such that the rock remaining on the pad at closure would be non-acid generating, with a relatively low sulphide concentration and low potential for long-term metal leaching. Waste rock placed on these pads will not be characterized as having potential for generating ARD and will therefore not necessitate installation of a cover system or long-term collection and treatment of runoff or seepage from the pile. It is noted that the revised water and load balance includes the additional loadings that could originate from increased amounts of waste rock storage.

When completed the U pad(s) will provide up to approximately 1.2 ha of pad storage area. The expanded waste rock storage area is located approximately 100 m east of the original waste rock storage facility location indicated in the 2007 Mine Closure and Reclamation Plan. Consistent with the original design intent, runoff from the Waste Rock Pile Storage Area will be directed towards a designed pollution control pond located south of the expanded pad.

Descriptions of the design criteria for the expanded Waste Rock Pile Storage Area in addition to the associated detail design drawings are provided in the design brief prepared by SRK (Appendix 19).

4.9 Expanded Pad T

As part of the proposed Project changes a new general laydown facility and ore storage area will be developed adjacent to Pad R, Pad D, and Pad Q. The new area, designated as Pad T (which may consist of up to three pads, Pad T1, Pad T2, and Pad T3), will have a storage surface area of up to approximately 3.6 ha and accommodate both temporary storage of additional ore, or use as a general laydown area during operations. The component pads will be constructed from run-of-quarry (ROQ) fill overlain by surfacing material (or from underground rock, if the changes to the Type A Waters Licence contemplated in Amendment Application No.3 proceed). The surface of Pad T will be graded to direct surface runoff and infiltration towards the infrastructure pads adjacent to the south perimeter of Pad T which will ultimately report to the Pollution Control Pond located down-gradient of these infrastructure pads.

Descriptions of the design criteria for Pad T, in addition to the associated detail design drawings, are provided in the design brief prepared by SRK (Appendix 18).

4.10 Use Rock from Quarries A, B, D, and I at Doris North

HBML plans to use rock from the existing Quarries A, B, and D (currently permitted by KIA Land Use Licences and 2BE-HOP-0712 Type B Water Licence) as well as new quarry I for general construction use for construction and maintenance of Doris North Mine facilities.

4.11 Potential Relocation of Waste Management Facilities

HBML is considering consolidating waste management facilities and as such, may at a future date move all facilities (including materials handling and incinerators) from current locations near Roberts Bay to Quarry A where HBML proposes to install the yet to be constructed landfill (Appendix 12). HBML requests that it be permitted to make this change as HBML deems necessary on notice to the NWB. This change is illustrated in the drawings attached at Appendix 20. It is noted that if HBML elects to proceed with this option, it will implement the mitigation measures identified by Points West (Appendix 13) to ensure no adverse impacts on nearby archaeological sites.

4.12 Potential Relocation of Camp Water Source from Doris Lake to Windy Lake

Due to persistent naturally occurring blooms of blue-green algae in Doris Lake, HBML may in the future switch the water source for Doris Camp to Windy Lake. HBML requests that it be permitted to make this change as it deems necessary on notice to the NWB. Supporting drawings are located at Appendix 21.

4.13 Roberts Bay: Laydown, Water Intake, Accommodation Barges, and Winter Fuel Barges

As part of the proposed Project changes, three new laydown areas will be constructed at Roberts Bay. The three laydown areas (designated as Roberts Bay Expanded Laydown Areas West, Southwest, and Southeast) will provide up to an additional 4 ha of general laydown area. The West Laydown Area will be located adjacent to the south perimeter of the existing Beach Laydown Area. The Southwest and Southeast Laydown areas will be located adjacent to the Primary Road, south and east of the existing Roberts Bay Tank Farm.

Descriptions of the design criteria for the Roberts Bay Laydown Expansion, in addition to the associated detail design drawings are provided in the design brief prepared by SRK (Appendix 17).

HBML proposes to install a water intake at the jetty in order to provide seawater for fire suppression purposes in case of fire at the Doris North Mine. Water will only be required when there is a fire or for regular maintenance flushing of the intake and fire water supply system.

HBML plans to continue to use the accommodation barges that are currently on-site in Roberts Bay. These barges have been critical for housing personnel, and HBML plans to maintain the option of keeping them on-site for the duration of the Doris North Mine. The accommodations barges are located directly east of the Jetty, approximately 70 m offshore, moored in 2 to 5 m of water. The accommodations barges are accessed by a floating walkway which connects them to the Roberts Bay laydown area.

During 2010-2011, HBML temporarily stored fuel in an Arctic class double hull ship frozen into the ice in Roberts Bay, as there was not enough available tankage on site. This activity was carried out in compliance with Transport Canada regulatory requirements and industry best practices. HBML plans to maintain the option of bringing in additional fuel in this manner in the future to allow flexibility. If this option is utilized, HBML will continue to ensure that any ship that is retained is fit for this purpose and that this activity occurs in full compliance with all applicable regulatory requirements.

5. Overview of Regulatory Requirements

Some of the proposed changes to the Mine will require amendments to HBML's existing Project Certificate and Type A Water Licence, as outlined in sections 5.1 and 5.2 below.

HBML has not identified that the subsea pipeline and diffuser works will require a *Fisheries Act* Authorization, but this is being confirmed with Department of Fisheries and Oceans (DFO) representatives. All work would proceed in accordance with applicable DFO Operational Statements.

Similarly, HBML is determining in consultation with Transport Canada whether *Navigable Waters Protection Act* approvals will be required in relation to the subsea pipeline and diffuser.

The discharge will take place in compliance with the criteria set out in the *Fisheries Act* and *Metal Mine Effluent Regulations* ("MMER"). Under section 4, the MMER permits a mine to deposit an effluent that contains a "deleterious substance" (as defined in the MMER) in waters frequented by fish if the following criteria are met: (a) the concentration of the deleterious substance in the effluent does not exceed the authorized limits set out in Schedule 4; (b) the pH of the effluent is equal to or greater than 6.0 but is not greater than 9.5 (c) the deleterious substance is not acutely lethal effluent. In addition to meeting these criteria, HBML will also continue to comply with the testing and reporting requirements set out in sections 6 to 27 of the MMER. The Mine will continue to operate in compliance with the *Arctic Waters Pollution Prevention Act*. As confirmed in the supporting appendices, water released to Roberts Bay will not cause negative impacts.

Negotiations are also currently underway with the Kitikmeot Inuit Association (KIA) with respect to restatement of the existing Doris North Mine Inuit Impact and Benefit Agreement (IIBA) and Commercial Land Lease. HBML has not identified any additional requirement for water compensation to Inuit in accordance with Article 20 of the *Nunavut Land Claims Agreement* view, but this view will be confirmed with the KIA.

5.1 Proposed Amendments to NIRB Project Certificate No. 3

HBML has identified the following amendments to the NIRB Project Certificate that will be required in order to implement the proposed changes to the Mine:

- Section 2.1: Update description of Project to reflect project changes.
- Section 4.9: Remove requirement to fund and install an on-site laboratory for continuous monitoring of water quality. The revisions that HBML is requesting to the TIA, in particular the addition of water treatment, will ensure that discharge meets required criteria and as such, the on-site laboratory previously proposed by Miramar and described in the Project Certificate is no longer necessary.
- Section 4.10: Revise monitoring requirement as appropriate to reflect discharge to Roberts Bay rather than Doris Creek.
- Section 4.15: Revise as appropriate to reflect discharge to Roberts Bay rather than Doris Creek.
- Appendix A:
    - Revise reference to mine surface footprint area (see page 3 of 28).
    - Revise commitment relating to use of chemical dust suppressants to indicate such substances may be used provide the proponent does so in accordance with relevant Northern and Nunavut policy (see page 3 of 28).
    - Remove reference to release of TIA decant water into Doris Outflow. HBML proposes to revise this commitment to refer to Roberts Bay (see page 11 of 28).
    - Remove obligation to monitor water quality at discharge release into the Doris Outflow and downstream of the waterfall. HBML proposes to move the monitoring point to correspond with the new proposed point of ocean deposition in Roberts Bay (see page 12 of 28).

5.2 Proposed Amendments to Type A Water Licence No. 2AM-DOH0713

HBML has identified the following amendments to the current Type A Water Licence that will be required in order to implement the proposed changes to the Mine:

- The installation of a new diversion pipeline to divert water from the tailings impoundment area to Roberts Bay is a diversion of surface waters which requires amendment to the Licence.

- Scope: Update description of Project to reflect approved project changes.

- Part G1: Currently, HBML is required to give the Inspector at least 10 days notice prior to any planned discharge. HBML proposes to reduce this notice period to 5 days to permit more efficient water management on site.

- Part G22(b): Since HBML is proposing to move the landfill location, the discharge location will be changed from east of Quarry 2 to an area closer to Quarry A.

- Part G24(l): Since HBML is proposing to place filtered cyanide leach residue into the TIA, HBML requests removal of the licence requirement to place filtered cyanide leach residue underground.

- Part G24(m): HBML will no longer be discharging to Doris Creek and so requests removal of the requirement to provide notice to discharge to Doris Creek.

- Part G26: The TIA discharge parameters were set with regard to MMER parameters as well as Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life. These parameters should be revised as appropriate for the marine receiving environment.

- Part G27, 28, Part J4: This section of the licence refers to monitoring stations for Doris Creek. Given that the discharge will no longer be directed to Doris Creek, HBML proposes the monitoring stations be moved to Roberts Bay. Suggested locations are described in Appendix 4. As per the above, parameters should be revised with consideration of the marine receiving environment.

- Part G29: HBML proposes to reduce the required water cover from 4 m to 2.3 m, in order to ensure a protective cover while providing for maximum capacity of tailings within the existing footprint of the TIA.

- Part G30, J2: HBML no longer plans to discharge to Doris Creek and so it proposes this clause should be removed.

- Part J8(a): Revise clause to permit testing for Acute lethality to Rainbow Trout, Oncorhynchus mykiss or such other aquatic species acceptable to Environment Canada (in accordance with Environment Canada's Environmental Protection Series Biological Test Method EPS/1/RM/13). This change will permit HBML to carry out lethality tests on species as appropriate to the salinity of discharge waters.

- Part J8(a): Revise clause to permit testing for Acute lethality to the crustacean, Daphnia magna or such other aquatic species acceptable to Environment Canada (in accordance with Environment Canada's Environmental Protection Series Biological Test Method EPS/1/RM/14). This change will permit HBML to carry out lethality tests on species as appropriate to the salinity of discharge waters.

- Part J11: HBML proposes this clause should be removed because HBML will be installing water treatment processes.

- J20(f): The qualification with respect to sewage discharge to the tundra during the construction phase, should be revised so that discharge can continue from time to time as necessary during the operational phase.

- Schedule G: As above, revise as appropriate to reflect marine receiving environment.

- Renewal of Type A Water Licence for a 10-year term with a license expiry date of 2022. This date will permit the term of the Type A Water Licence to encompass Phase 1 Doris North Mine production while providing HBML with flexibility with respect to construction schedule and production commencement dates.

As well, HBML noted that the following definitions set out in Schedule A will need to be updated to reflect the new facility designs:

- Beach Laydown Area;
- Landfill;
- Ore Stockpile;
- Quarry;
- Tailings Water Management Strategy; and
- Temporary Waste Rock Pad.

6. Public Consultation

HBML has undertaken a range of consultation and communication activities with local communities, regulators, and resource managers over the past several years, including proposed changes to the Mine described in this document. In order to specifically address the proposed Mine changes, a round of community meetings were held in June 2011. The results of the June 2011 consultation are summarized below.

HBML visited five communities in early June 2011: Cambridge Bay, Gjoa Haven, Kugaaruk, Kugluktuk, and Taloyoak. Specific information pertaining to this amendment application was presented. Table 6-1 summarizes the communities that were visited and the estimated number of attendees.

Table 6-1. Public Meeting Dates and Attendance, June 2011

Date	Community	Attendance*
Monday, June 6, 2011	Kugluktuk	5
Tuesday, June 7, 2011	Cambridge Bay	13
Wednesday, June 8, 2011	Kugaaruk	15
Thursday, June 9, 2011	Taloyoak	19
Friday, June 10, 2011	Gjoa Haven	Postponed due to weather

**Attendance numbers estimated from draw prize entries and visual counts.*

Comments and feedback pertaining to the information presented were documented and where practicable responses were provided by HBML staff in attendance. The overall attendance totalled 52 individuals, with the largest attendance being in Taloyoak. Meeting attendance was lower than anticipated in Kuglukuk as many residents were away fishing. Elders were present at the meetings in Kugaaruk and Taloyoak.

Comments, questions, and responses pertaining specifically to the proposed Mine changes were discussed in Cambridge Bay, Kugaaruk, and Taloyoak and have been summarized here.

Cambridge Bay:

A question was asked regarding the limited bed capacity at camp, being approximately 180 beds plus those on the floating barge, and if camp expansion was tied to the amendment. This was confirmed by HBML staff.

Kugaaruk:

Concerns were raised by an Elder about the salt and water being diverted from Tail Lake into Roberts Bay and whether the water will impact fish or fish habitat. An explanation was given that water will pass through a treatment system in the process plant which will remove metals such as zinc and copper and the discharge water from the TIA will pass through a second treatment plant that will filter out total suspended solids from the water before being diffused into Roberts Bay.

Taloyoak:

- A meeting attendee wanted to know if the tailings and water in Tail Lake were dangerous. An explanation was made by HBML staff explaining that tailings are not dangerous but that they do contain metals and sediment. It is also likely that the water will have some salt content which is expected to be close to that of seawater.

- A meeting attendee wanted to know if a fence will be erected around Tail Lake to keep wildlife out. No fence is currently planned; however, the facility will include a road running down one side along the east side so that the pond can be patrolled.

- An Elder wanted to know if the Nunavut Water Board did routine inspections. It was explained that the Nunavut Water Board does not have inspectors but inspections are conducted by Aboriginal Affairs and Northern Development Canada (AANDC; previously known as Indian and Northern Affairs Canada [INAC]), Environment Canada, Department of Fisheries and Oceans, and by the KIA. However, the Nunavut Water Board presents all inspection results in their annual reports and all water monitoring and testing records are filed with NIRB and are available through their website or at their regional offices.

- An Elder asked if fish in the area were regularly inspected and tested. Fish sampling is conducted each year as well as sampling and testing of small aquatic organisms on a periodic basis.

Other general comments and questions discussed at the meetings pertained to employment opportunities, training, mine production timelines, Inuit benefits, environmental testing, and potential effects on human health and social issues. This feedback will be incorporated into future discussions and considered during on-going Project planning.

Previous consultation efforts were carried out in August 2010 when HBML conducted a community tour, in which the proposed amendments planned at that time were presented and discussed with meeting attendees. These included the camp expansion and mine life extension. Environmental baseline studies conducted in the Doris North area were also presented and discussed. Communities visited during the August 2010 meetings included Cambridge Bay, Gjoa Haven, Kugaaruk, Kugluktuk, and Taloyoak, with the overall attendance totalling approximately 121 attendees and the largest attendance being in Gjoa Haven. Community Elders were in attendance at Gjoa Haven, Taloyoak, and Kugaaruk. No specific questions were asked regarding the proposed changes to the Doris North Mine. For the three communities where Elders were present, the following topics were discussed:

Gjoa Haven:

- Discussion topics included opportunities for work, employment requirements, scheduling, and activities in the Windy Lake area.

Taloyoak:

- Discussion topics included climate change, possible site visits for local residents, mine abandonment, training and opportunities for youth, helicopter use and wildlife, and potential effects on human health.

Kugaaruk:

- Questions were primarily on training and employment opportunities and applications.

In July 2011, 24 KIA staff were provided a Site tour, including Community Liaison Officers. The tour was intended to familiarize KIA staff with the Hope Bay Project such that accurate information regarding the project could be provided to Beneficiaries through KIA representatives. In August 2011, two Cambridge Bay Elders participated in archeological field studies.

In addition to community tours, a community newsletter was published and distributed in October 2010. The newsletter presented information pertaining to the 2010 sealift, summer field work, and employment information. It is hoped that this publication will reach a larger audience, including those who may not be able to attend the community meetings or site visits.

7. Environmental Effects Assessment

HBML retained Rescan Environmental Services Ltd. ("Rescan") to prepare four reports which consider the potential for environmental effects arising from the proposed changes to the Phase 1 Doris North Mine.

- The Doris North Project Mine Infrastructure Changes Supporting Memo (the "Water Licence Support Memo"), which considers the potential for changes to environmental effects and cumulative effects predicted in the Doris North Project Final Environmental Impact Statement (FEIS) arising from the remaining proposed changes to the Mine (attached as Appendix 3). The memo presents information that was identified in the Supplementary Information Guidelines prepared by the Nunavut Water Board. This memo addresses all of the proposed operational and facilities changes, with the exception of the proposed subsea pipeline system and the proposed discharge of treated TIA water to Roberts Bay.

- The Doris North Gold Mine Project Roberts Bay Report (the "Roberts Bay Report"; attached as Appendix 4) which provides a detailed overview of the proposed subsea pipeline and diffuser system, potential environmental effects, mitigation measures, and proposed monitoring programs.

- The Doris North Gold Mine Project No Net Loss Plan for the Roberts Bay Subsea Pipeline and Diffuser (Appendix 5), which provides a fish habitat compensation plan for fish habitat along the seafloor that may be altered or lost as a result of installing the subsea pipeline and diffuser.

- The Screening of Socio-Economic Effects for Proposed Doris North Infrastructure Changes (Appendix 23) which provides: 1) information on recent socio-economic baseline conditions and description on changes that have occurred since the 2005 Doris North Final EIS submission (Miramar 2005); 2) information on the expected direct employment and expenditures by the Project; 3) review of the 2005 Doris North Final EIS mitigation and effects assessment conclusions; and 4) a screening of the effects of the proposed changes in the Project in relation to the identified mitigation and effects assessment conclusions.

HBML also retained Points West Heritage Consulting Ltd. to specifically consider potential for impacts on heritage resources (Appendix 13).

As concluded in these reports:

- The proposed activities that result in expanded footprint do not change the predicted environmental impacts as originally assessed in the Doris North Project FEIS.

- The footprint disturbances associated with the TIA water management, the Doris Central vent raise pad and road, the expanded Doris Camp, the expanded Pad U and T, and the Roberts Bay laydown area expansion are not expected to cause archaeological conflicts.

- The potential relocation of waste management facilities has potential for indirect effects on heritage resources, but the chances of direct impacts are reduced by waste management facilities being on the other wide of the road. As well, the potential for impact could be mitigated by installation of fencing along the east side of the road.

- The existing Doris North Mine management and monitoring programs include the geographical area and activities associated with the proposed amendments in this package.

- The proposed ore storage pads lie directly north of Doris Camp. There was no surface water in this area and therefore no fish or fish habitat present.

- The proposed waste rock and ore storage pad extensions will be placed in an area of Eriophorum Tussock Meadow. The Eriophorum Tussock Meadow ecosystem is the most common ecosystem in the study area, and is not preferentially used by wildlife because the sedges offer poor nutrition compared to other vegetation types.

- The expansion of the Roberts Bay laydown area will cover an additional 3.9 ha. This area is composed primarily of lowland vegetation types (68%) and upland vegetation (31%) with a small component of marine and beach communities (1%). Each of these communities is relatively common within the local and regional study areas. These areas were mapped using Terrestrial

Ecosystem Mapping from aerial photos and field studies during 1998 and 2010. The majority of the footprint expansion is composed of Wet Meadow (56%) and Dryas Herb Mat (29%). These two ecosystem types are the most common types in the coastal area near Roberts Bay. Wet Meadow is also the third most common vegetation type in the Local Study Area, while Dryas Herb Mat is the fourth most common. None of the landforms represent rare ecosystems, and no rare plants were observed during field studies to support vegetation mapping. Given the small area of relatively common ecosystem affected, no additional impacts associated with these expansions are anticipated.

- The proposed expansion to the Roberts Bay laydown area involves two sections, one to the east, near the airstrip and another, smaller area to the west near the jetty. There are no water bodies or fish habitat in the western section. There is a single stream in the eastern Roberts Bay laydown area, flowing from the high ground near the airstrip north into Roberts Bay. Fish were found in the lower reaches of this stream, about 700 m from the proposed expansion area. However, the stream flows subsurface to the north of the laydown expansion area and fish do not appear to access the upper reaches near the proposed expansion area.

- The additional water withdrawal from Windy Lake (if HBML elects to switch camp water source) will be within the normal variation of Windy Lake's live storage capacity, will continue meet DFO Operational Statements for Water Withdrawals, and is not expected to cause any significant downstream effects.

- Addition of a fire water intake in Roberts Bay will represent a negligible withdrawal of water from Roberts Bay. There will be no associated impacts to water level, biological impacts to marine communities, or general circulation within Roberts Bay.

- The Mine has been designed such that the water quality in Roberts Bay will meet CCME guidelines for the protection of marine and estuarine aquatic life for the duration of the operation of the TIA.

- An evaluation of the potential effects of discharging treated TIA water into Roberts Bay resulted in no expected significant adverse effects on water quality, sediment quality, marine fish, marine fish habitat, marine wildlife, or caribou.

- For employment and economy, the proposed amendment to extend the mine life does change the predicted environmental impacts of the undertaking in that the total benefits are predicted to increase. There does remain the potential for there to be an adverse effect on other community employers, such as local government, if the labour demands of the Project result in a shortage of skilled workers resulting in an inability to fill certain positions; however, the effect is predicted to remain minor and be increasingly alleviated over the longer term. The mitigation measures in place for the Doris North Project remain appropriate to address adverse effects and enhance the positive effects on employment and income, education and training, and business opportunities. The residual effects assessment conclusions remain valid.

- With respect to community services and infrastructure, minimal adverse effects are predicted on health care services, community well-being and delivery of social services, and public safety and protection services. The mitigation measures in place for the Doris North Project are appropriate to address the predicted adverse effects on health services, social services, and safety and protection services. The residual effects assessment conclusions remain valid.

- In sum, it is predicted that the adverse socio-economic effects based on the revised Project plan, as addressed in the amendment package, will be able to be managed with the mitigation and monitoring as previously identified (Miramar 2005). The extension of the mine life and mining rate are predicted to increase the socio-economic benefits of the project because of the increase in employment, income, and business activity.

8. Reclamation and Closure

The memo attached as Appendix 15 describes changes in closure planning components associated with the site changes described in this document. Specifically, the memo describes detailed changes in design criteria or planning for the following mine infrastructure or components:

- Doris Central Vent Raise Pad and Access Road;
- Pad U Waste Rock Expansion Area;
- Pad T Ore Storage Expansion Area;
- Roberts Bay Laydown Expansions; and
- Post-operations water management at the Doris North site.

Where facilities are described in the 2007 Mine Reclamation and Closure Plan that was submitted in support of the existing Water Licence, the memo summarizes the material changes impacting the associated estimate of closure liability. Closure methods for new site development or infrastructure that were not included in the 2007 Mine Closure and Reclamation Plan are also described. However, in cases where infrastructure or site development at the Doris North Project site are consistent with descriptions provided in the 2007 Mine Reclamation and Closure Plan, reclamation criteria for these sites are consistent with the requirements specified in the 2007 Mine Reclamation and Closure Plan. Where new or expanded facilities have been proposed, the applicable closure methodology is cited and an estimate of closure liability provided.

Note that this package does not provide an overall update of site reclamation security. As previously committed by HBML, this analysis is under way and will be submitted to the NWB and KIA at a later date.

Appendix 15 summarizes changes in reclamation security for each infrastructure change or expansion. Water management will be required during the post-closure period at the Doris North site to enable water quality in the TIA to meet target closure criteria as set out in Clause 28 of the Type A Water Licence. This is described in Appendix 15 in detail, but post-closure water management at the Doris North site is currently anticipated to entail the following:

- Pumping of groundwater from the underground mine workings to the TIA for the first 6 months of the post-operations period.
- Routing of accumulated runoff from the Pad U Pollution Pond into Doris Creek. Results from the current water balance indicated that the predicted change in Doris Creek water quality associated with flow contributions from the Pollution Pond is negligible. It is anticipated that this routing will remain until required target closure criteria for the TIA has been achieved at which point the Pollution Pond will be breached to allow natural return of runoff from this area into Doris Lake.
- Annual pumping of approximately 480,000 m^3 of water from Doris Lake into the TIA during the winter period (November to April). Current water balance modelling predictions suggest that target water quality closure criteria can be met after 7 years of flushing the TIA with annual water inflows of the indicated volume from Doris Lake.
- Pumping of water from the TIA via a pipeline to a diffuser located on the floor of Roberts Bay. It is anticipated that water will be pumped for the duration of the post-closure period (approximately 9 years) at a rate of 120 L/s during the annual open water season (June to October). Once target water quality closure criteria for the TIA have been achieved, the North Dam of the TIA will be breached to allow natural outflow of water from the impoundment area into the Doris Creek catchment.

Appendix 15 summarizes water management components for the post-closure period at the Doris North Mine that have been used to develop the closure cost estimate for post-closure water management.

9. Monitoring and Management Plans

The Mine has numerous existing management and monitoring plans that will encompass the proposed amendment activities. The following paragraphs provide an overview of the plans that will apply to the changes, or require revision in order to proceed with the proposed changes. Where updates to existing plans are triggered by the changes, HBML proposes to submit updated plans once regulatory review is complete.

An updated Waste Rock Ore Management Plan will be prepared and submitted to the Nunavut Water Board before HBML proceeds with the new Mine plan. HBML also anticipates some changes to the monitoring of process water inputs (to assess model validity and anticipate changes), groundwater flow and chemistry inputs. The construction of the waste rock storage, ore storage, and Roberts Bay laydown areas may result in additional monitoring locations. Any new monitoring locations will be part of the site seepage/runoff monitoring program, which will be updated. Monitoring locations wills be identified in consultation with the AANDC inspector.

HBML is proposing to expand the Aquatic Effects Monitoring Program (AEMP) in the marine environment to include the geographical area of the proposed diffuser and potential area of influence of the treated TIA water in Roberts Bay. HBML proposes to add some radial CTD stations. An additional marine reference site is also proposed. There are currently two AEMP monitoring stations in Roberts Bay, and a marine reference site in Reference Bay. The proposed new AEMP monitoring locations are adjacent to the proposed diffuser location (100 m) and about 2 km seaward of the proposed diffuser location, half way between the southern shoreline of Roberts Bay and Melville Sound. The final marine AEMP sites will be determined in consultation with Environment Canada. The AEMP monitoring will determine whether the water quality in Roberts Bay is remaining below marine CCME guidelines, whether dissolved oxygen concentrations remain above marine CCME guidelines, whether phytoplankton biomass levels are being influenced by nutrient input, whether sediment quality or benthic communities are being influenced by the TIA water, and whether the discharge of TIA water is causing any changes in marine bivalve metal concentrations. If results from the AEMP show that adverse environmental changes are occurring, HBML can implement adaptive management measures that could potentially change the quality, quantity, or timing of the treated TIA discharge to Roberts Bay. Examples of potential adaptive management measures are set out in Appendix 4.

With respect to fish habitat, as part of ensuring that there is no net loss of productive fish habitat associated with the presence of the subsea pipeline in Roberts Bay, it is proposed HBML will conduct a pipeline/ballast utilization monitoring program to confirm the utility of the concrete ballast weights in providing fish habitat. The monitoring will occur 1 year following the installation of the pipe, and again 3 years post-installation. If the monitoring shows that the ballasts are not being colonized and used as fish habitat, HBML could adapt by discussing results with DFO and determining whether the monitoring program could be modified, and/or additional mitigation measures should be considered. Appendix 5 provides further details on the No Net Loss monitoring program.

The Hydrology Monitoring Program in the area includes locations within the Doris Watershed, Windy Watershed, Roberts Watershed, and reference watersheds. Hydrometric monitoring has included two locations within the Windy Watershed; one station at the outlet of Windy Lake, and one station at the outlet of Glenn Lake. The continued monitoring of Windy Outflow can be used to ensure that there are no significant water level decreases that could affect fish habitat in Windy Outflow during dry years.

Reports have been filed with NIRB under the Wildlife Mitigation and Monitoring Program (WMMP) since 2007. This program has undergone refinements in recent years based on discussions between HBML, NIRB, the Canadian Wildlife Service (CWS), and the Government of Nunavut, Department of Environment. The geographical areas associated with the proposed amendments are included in the monitoring area covered in the WMMP. The WMMP includes the monitoring of caribou, muskox, breeding birds, raptors, waterfowl, seabirds, grizzly bears, and wolverine. Monitoring evaluates the population and breeding success of wildlife populations adjacent to the mine site and at a greater distance (i.e., in reference areas). Mitigation for wildlife will include scheduling construction activities during the least risk work timing windows. Wildlife monitoring activities will occur during construction activities that have the potential to cause negative impacts on wildlife or their habitat and will be conducted by qualified environmental monitors. Pre-construction surveys will also be required to ensure that no incidental wildlife or nests were present.

The Noise Abatement Plan is closely associated with the WMMP, as it includes the noise abatement mitigation measures to reduce or eliminate the potential effects of noise on wildlife. Again, this plan encompasses all of the current Doris North Mine activities, and the activities associated with the proposed amendments will be covered in the existing Noise Abatement Plan.

The Socio-economic Monitoring Program for the Doris North Mine defines a number of indicators that have been selected based on the impact predictions and mitigation measures in the FEIS. For each social and economic indicator, specific measures, data requirements, and data sources have been identified, and data collection and reporting is on-going. The Socio-economic Monitoring Program allows for both early detection of adverse effects on valued socio-economic components (VSECs) and reporting of impact and benefit objectives for the Project. The Socio-economic Monitoring Committee (SEMC), which includes members from key government and stakeholder agencies, provides additional oversight to help ensure that on an on-going basis the monitoring program meets its objectives.

Extension of the Doris North Mine life is not expected to result in the need to change the monitoring program given that there are no material differences in the nature of the predicted residual effects.

The expansion of the sewage treatment plant (STP) to accomodate additional workers will not require any additional monitoring sites. Monitoring sites are already in place for the area where treated sewage effluent is currently being discharged. In the future, the site-specific monitoring location may change if the discharge method is changed to revise distribution of the effluent. These site-specific decisions can be made with the help of the AANDC site inspector if and when the discharge method is changed.

For the proposed change in the potable water source from Doris Lake to Windy Lake, the existing water intake site that has been used for Windy Camp will be used for the Doris Camp water intake. It is proposed that any monitoring requirements for camp potable water be applied to the Windy intake location.

In addition to the above programs and plans, the following plans are also in place for the Doris North Mine:

- Oil Pollution Prevention Plan/Oil Pollution Emergency Plan;
- Emergency Response Plan;
- Hazardous Waste Management Plan;
- Incinerator Management Plan;
- Doris North Landfarm Management and Monitoring Plan;
- Spill Contingency Plan;
- Quality Assurance and Quality Control Plan;
- Hope Bay Quarry Monitoring Plan; and
- Doris North Infrastructure Project Management Plan.

Although some of these will require revision in order to reflect side layout changes, it is not anticipated that significant changes to these are required as a result of the proposed changes to the mine.

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