

NWB Annual Report

Year being reported: 2005



License No: NWB2HOP0207

Issued Date: March 11, 2002

Expiry Date: March 10, 2007

Project Name: Madrid Project

Licensee: Miramar Hope Bay Limited (MHBL)

Mailing Address: Miramar Hope bay Limited
300-889 Harbourside Drive
North Vancouver, BC V7P 3S1

Name of Company filing Annual Report (if different from Name of Licensee please clarify relationship between the two entities, if applicable):

same as above

General Background Information on the Project (*optional):

The focus for MHBL continues to be on the Hope Bay project. MHBL is committed to a strategy of advancing the Hope Bay project to a production decision while continuing to expand gold resources. The staged development strategy will focus first on the high-grade gold Doris North project, with the goal of generating cash flow to pay for site infrastructure and to fund the continued exploration and development of other resources on the Hope Bay Belt. MHBL plans to pursue extensions and expansions to the initial phase of production through mining of other resources on the Hope Bay Belt.

MHBL's exploration strategy will focus on expanding and increasing the confidence level of existing deposits and on continued exploration for new gold resources in order to support a sustained intermediate production profile. MHBL will continue to conduct grassroots exploration in cooperation with strategic partners. To achieve these objectives, MHBL needs to successfully: a) complete the current permitting process for the Doris North project; b) complete a positive feasibility study during 2006 for Phase 2 expansion; c) complete financing for mine construction; d) successfully construct and place into production the Doris North deposit; e) complete development of Boston, Doris, and Madrid (Naartok, Perrin, Rank & Suluk) deposits; and f) identify additional resources along the Hope Bay Belt.

Licence Requirements: the licensee must provide the following information in accordance with

Part B	▼	Item 1	▼
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A summary report of water use and waste disposal activities, including, but not limited to: methods of obtaining water; sewage and greywater management; drill waste management; solid and hazardous waste management.

Water Source(s):	Windy Lake	
Water Quantity:	50 per day	Quantity Allowable Domestic (cu.m)
	NA	Actual Quantity Used Domestic (cu.m)
		Quantity Allowable Drilling (cu.m)
		Total Quantity Used Drilling (cu.m)

Waste Management and/or Disposal

- ☒ Solid Waste Disposal
- ☒ Sewage
- ☒ Drill Waste
- ☒ Greywater
- ☒ Hazardous
- ☐ Other:

Additional Details:

Solid Wastes: Solid wastes management is a challenge because of steady accumulation over the years prior to MHBL involvement at Windy Lake Camp. However, over the last 12 months (exploration season), significant progress have been made in managing this challenge. A segregation system of kitchen waste has been implemented at Windy Lake Camp. Pops cans are placed in a separate bin while combustible wastes are placed into another bin. The combustibles are incinerated daily in an incinerator-installed onsite. Ashes are collected daily and stored in 45-gal drums. Empty 45-gal drums are consistently removed from site during backload flights in 2005. This process will continue in 2006. Other non-combustible wastes are stored on pallets east end of Windy Lake Camp. **Sewage -RBC greywater and Sludge:** The RBC greywater is released over the hill east of Windy camp into the tundra. During 2005, the release line was extended further past the old core boxes lay down area. MHBL is looking for ways to reduce the microbiological organisms in the release effluent to comply with permitting requirements. Note: chlorine is not used in this treatment facility.

Drilling Waste: Drilling Waste, as per Part A of the WUP # NWB2HOP0207 means all materials or chemicals, solids or liquid, associated with drilling of bore holes and includes bore hole cuttings. During 2005 exploration program, MHBL conducted most of its drilling using hot water drilling methods. This involves using hot water to melt the permafrost allowing limited amount of drilling salt to be used at all drilling rigs. This process allowed MHBL to look for alternative ways of managing drill cuttings and waste water generated from the drilling process. Discussion with KIA enabled MHBL to identify natural depression, sink holes or cracks in outcrops as possible site for storing drilling wastes.

Hazardous Wastes: Contaminated Fuel – Contaminated fuel, Jet A/B, and oil are stored in 45-gal drums. Most of these drums have been accumulated over the years prior to MHBL involvement at Windy Lake Camp. During 2004, approximately 19,000 L of fuel spilled into the environment. A significant portion of this material was recovered. The recovered fuel was later re-claimed and used for camp heating process in 2004 and 2005. All contaminated fuel from 2004 spill has now being used for camp heating purposes. During summer of 2005, work started on identifying the remaining stock of waste fuel drums. These drums were either Jet A/B drums that were deemed unsafe for use due to expiry date and drums that were used to store used absorbents pads and waste oil containers. The Jet A/B drums were identify and properly labelled. Some Jet A/B was used together with recovered fuel for camp heating purposes. Open drums that were used as storage for used absorbent pads and waste oil drums were carefully checked as these drums posed the most significant risk of a spill. Drums closed to overfilling were decanted into a new drum, capped and properly labelled. Open-end drums were covered with a tarpaulin to prevent rain and snow from entering. Work will continue in 2006 to manage and clear the lay down area. **Petroleum Contaminated Topsoil** - In 2004, a land treatment area (LTA) was built for use to store and treat petroleum contaminated topsoil. Approximately 100 m³ of topsoil are stored in this treatment area. The facility is proving beneficiary, as contaminated topsoil are no longer stored in 45-gal barrels. Topsoil previous stored in 45-gal barrels will be emptied into this facility for treatment. Treated topsoil once deemed safe would be used for reclamation purposes around the property. **Batteries** – At the beginning of the 2005 exploration program, there were 32 wet cell batteries counted in the solid waste lay down area. All 32 batteries were packed in approved containers and sent offsite to facilities in Yellowknife for proper disposal. All dry cel batteries are collected. When sufficient volume is reached, the batteries will be packed and removed offsite for proper disposal. **Broken Drilling Salt Bags** – Drilling salts (NaCl & CaCl) bags that were found placed on tundra were restacked on pallets. Bags that were broken due to handling were re-bagged and properly labelled. **Solidified Cement Bags** – Solidified cement bags were removed and stored on high ground away from water drainage systems. Discussion is ongoing with KIA to get their inputs to as how MHBL would prefer to use this material as a fill-in for low depression areas along tracks and walkways in high traffic areas around the camp.

Windy Lake Camp Lined Secondary Containment Ber: Hard copies for the approvals to construct lined secondary containment berms at Windy Lake and Patch Lake were obtained from NWB in July 2005. Construction of the lined secondary containment for AST tanks at Windy Camp and Patch Lake proceed under approval number (Motion # 2005-24). Construction at Windy Camp took place immediately. Kitnuna Construction personnel supervised by Biogenie Consulting engineers carried out the construction. Contaminated topsoil dug out was placed in the LTA for treatment. Turning of the soil in the LTA was not possible as no proper equipment was available to carryout such task. After completion of the farm, the 70,000 L & an empty 50,000 L AST tank will be re-located into the enclosure. Due to bad weather, it took approximately 5 days to complete construction of the berm. This created a situation where sediment runoffs from disturbed areas into Windy Lake were possible. To manage this challenge, grass cover materials removed from the construction site was placed along areas identified as being sensitive north of the LTA. The objective was to form a natural barrier with materials locally available to: (i) slow down sediment runoffs; (ii) apply corncobs and peat moss over the natural barrier to absorb any petroleum products carried by the runoffs; and (iii) utilize natural grass and shrubs as a means for erosion mitigation process. The natural barrier was effective in achieving the above objectives. **Patch Lake Lined Secondary Berm:** At Patch Lake another lined secondary containment berm was constructed. Major Drilling personnel supervised by Biogenie Consulting engineers carried out the construction. Due to bad weather, it took approximately 3 days to complete construction of the berm. This work will continue in 2006 due to insufficient cover material for the liner.

A list of unauthorized discharges and a summary of follow-up actions taken.Spill No.: 05-198 (as reported to the Spill Hot-line)Date of Spill: April 17 2005Date of Notification to an Inspector: April 25 2005

Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

Please see attached report - Windy Lake Exploration Camp grey water final spill report # 05-198 for details. Based on the outcome of the investigations and mitigative measures proposed, it is recommended that this Spill Report Number 05-198 should be closed.

Spill No.: 05-364 (as reported to the Spill Hot-line)Date of Spill: July 23 2005Date of Notification to an Inspector: July 24, 2005

Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

What Happen: This incident happened during transportation of a pallet of P50 fuel dumps from fuel farm area to a temporary laydown area to make way for the construction of the a lined secondary containment berm.

Volume Spilled in Litres (L): Approxiamtely 175 L of P50 fuel spilled from a 45-gallon drum.

Root Cause (s): At the time of carrying out such a task, (i) lack of adequate supervision (only one operator was present at the work location); and (ii) ground condition was not suitable at the time of transportation (slippery condition due to continuous rain).

Mitigation Measures: Changes were made to the fuel transporting procedures to ensure two attendants are available all the time during transportation. Only in an emergency purposes, transporting of bulk fuel in camps should be avoided.

Management of Contaminated Site: Contaminated topsoil was dugout and placed on the LTA for treatment. Peat moss was spread over the dugout contaminated area to absorbed the remaining fuel products trapped in soil thereby eliminating strong fuel fume, which could lead to unexpected fire hazard. Soil samples will be taken from the area in 2006.

Spill No.: NA (as reported to the Spill Hot-line)Date of Spill: April 15 2005Date of Notification to an Inspector: NA

Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

On April 15 2005, grey water leaving a trail of colored snow was found moving southward and downhill towards the transfer pump box. Details of the incident are given in report:(i) Windy Lake Exploration Camp Grey Water Discharge Report, April 20 2005 and (ii) Windy Lake Exploration Camp Grey Water Discharge Follow-up Report, June 29 2005.

Spill No.: (as reported to the Spill Hot-line)Date of Spill: Date of Notification to an Inspector:

Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

At Windy Lake Camp, fuel was found leaking from the elbow of the transfer pump of a contractor tanker. The released portion was limited to the back of the skid. The release portion was less than 25 litres. Peat moss was spread over the area. A tray full of peat moss was placed under the elbow to catch further release until the elbow joint was replaced.

Spill No.: (as reported to the Spill Hot-line)Date of Spill: Date of Notification to an Inspector:

Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

At Windy Lake Camp, spray of gas seen coming out of a 45-gallon drum at the gas refueling station. The pinch hole was quickly repaired to prevent further release. Once this was done, the gas was transferred into a tidy tank.

Spill No.: (as reported to the Spill Hot-line)Date of Spill: Date of Notification to an Inspector:

Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

At Naartok, during a drill site inspection, it was observed that a small oil leak occurred on an outcrop at a drill site. The volume was approximately less than 1 litre. The area was reclaimed by spreading peat moss over the impacted outcrop and removing residual product not picked by absorbent pads. Peat moss was effective.

Spill No.: (as reported to the Spill Hot-line)Date of Spill: Date of Notification to an Inspector:

Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

At Roberts Bay, it was noted that approximately 10 bags of drilling salt (CaCl) were damaged during transportation spilling its contents. Damaged bags were re-packed and stored on pallets. Spilled CaCl were shoveled and placed plastic bags for reuse.

Spill No.: (as reported to the Spill Hot-line)Date of Spill: Date of Notification to an Inspector:

Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

At Patch Lake, twelve bags of drilling salt (CaCl) were damaged spilling its contents. The damaged bags were re-packed into new bags and stacked on pallets. Spilled products were reclaimed, bagged and place on the pallets for reuse.

Spill No.: (as reported to the Spill Hot-line)

Date of Spill:

Date of Notification to an Inspector:

Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

At Windy Lake Camp, twenty-six bags of drilling salt (CaCl) were damaged spilling its contents. The damaged bags were re-packed into new bags and stacked on pallets. Spilled products were reclaimed, bagged and place on the pallets for reuse.

Revisions to the Spill Contingency Plan

SCP addendum attached for Board consideration



Additional Details:

This EER&CP has been revised taking into consideration inputs from regulatory authorities, changes to exploration strategies, new infrastures and personnel changes within MHL.

Revisions to the Abandonment and Restoration Plan

AR addendum attached for Board consideration



Additional Details:

This A&R plan has been developed with an objective to carryout progressive reclamation at all stages of the program. The document will be finalized after receiving comments from NWB.

Progressive Reclamation Work Undertaken

Additional Details (i.e., work completed and future works proposed)

Restoration Activities: Native Grass Cover - Because of the June spill and building of the LTA in 2004; moving AST tanks and building of a lined secondary in July 2005 disturbed many areas. Therefore activities in the summer of 2005 concentrated on use of native grass species to help with slope stabilization and erosion control. This work was carried in high sediment areas to slow down the rate of run offs into Windy Lake. To prevent further disturbances, barricades were set up to prevent vehicles from entering onto the reclaimed disturbed areas. **Seed Mix:** MHBL is in consultation with KIA is trying to reduce erosion and speed revegetation of the contaminated spill site at Windy Lake using mix seeds. KIA has been on the record not wanting to introduce foreign species into Nunavut at other mining projects and KIA called Arctic farmer to determine origin the of the seed source purchased by MHBL. There are no seed sources originating in Nunavut for revegetation of sites such as at Windy Lake. The mix seeds purchased from came from Alaska, where there have been plant propagation programs to develop seed sources for revegetation/farming in southern Alaska. Based on the mix seed origins, MHBL decided against using the seeds and continued revegetation using borrowed native grass mats. Most of these grass mat were removed from the area surveyed to be used for the fuel farm.

Erosion Control: Recycle Cement: Solidified cement were used as intermittent levees to slow down surface erosion caused by water. As cement is inert, it will provide stability to the slopes and therefore slow down surface erosion. The solidified cement bags will be removed once eroded surface is considered stable. Borrowing of local materials was discharged as it prevents another area from being disturbed. **Silt Curtains** - Silt curtains will be purchased in 2006 for use in these runoff areas.

Results of the Monitoring Program including:

The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude) of each location where sources of water are utilized;

Details described below



Additional Details:

Camp portable water is taken from Windy Lake. GPS co-ordinates will be taken in 2006

The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude) of each location where wastes associated with the licence are deposited;

Details described below



Additional Details:

Grey water is release over the hill northeast of Windy Lake Camp onto the tundra. GPS co-ordinates will be taken in 2006. GPS co-ordinates will also be taken for the Land Treatment Area and and solid wastes lay down area in 2006.

Results of any additional sampling and/or analysis that was requested by an Inspector

No additional sampling requested by an Inspector or the Board



Additional Details: (date of request, analysis of results, data attached, etc)

No additional sampling requested in 2005

Any other details on water use or waste disposal requested by the Board by November 1 of the year being reported.

Additional sampling requested by an Inspector or the Board (See below)



Additional Details: (Attached or provided below)

See attached report (MHBL addressing DIAND Field Reports, 2005)for details.

Any responses or follow-up actions on inspection/compliance reports

Inspection and Compliance Report received by the Licensee (Date):



Additional Details: (Dates of Report, Follow-up by the Licensee)

See attached Environmental Protection Plan

Any additional comments or information for the Board to consider

As part of MHBL environmental strategy, a new Environmental Protection Plan was developed (see attached copy for details). This document as part of the Environmental Management System (EMS), which includes specific procedures for exploration activities anticipated in the Hope Bay Belt such as clearing, diamond drilling, stripping and grubbing of overburden/rock, trenching, handling of fuel and hazardous materials, solid waste disposals, erosion prevention, wildlife, cultural site sightings etc. The revision of the EPP will be triggered by changes to the specific aspects of the activities as the Exploration program moves to new heights, trends in environmental monitoring data, stakeholder concerns and changes in regulatory requirements than will required changes to current management practices. The current EPP is structured to allow for such updates and revisions. Protections plans have been developed to protect (i) environmentally sensitive areas; (ii) Camp activities;(iii) environmental concerns due to unexpected spill or release of hazardous materials, contamination of camp water supply etc; (iv) sensitive areas and periods such as ice melts.

The EPP reflects future objectives such as placing a high priority on prevention and waste reduction through substitution with "innovative" technologies or products throughout the operation of the Project, especially with respect to overburden and waste rock placement, tailings management, domestic and industrial solid wastes, liquid effluent, drill cuttings and hazardous wastes. To meet the needs of each phase of the Project, additional environmental protections procedures will be developed as appropriate.

Date Submitted:

March 31 2006

Submitted/Prepared by:

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