ICMI CERTIFICATION SUMMARY REPORT

Goldcorp Inc., Porcupine Gold Mines, Timmins, Ontario, Canada

Submitted to:
Goldcorp Inc.
Porcupine Gold Mines
Timmins
Ontario
Canada
P0N 1H0

Report Number: 09514150105.450/D.1
Distribution:
Goldcorp Inc. - 2 copies
Golder Associates (UK) Ltd - 1 copy
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1.0 SUMMARY AUDIT REPORT FOR GOLD MINING OPERATIONS

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Name of Mine Operator: Porcupine Gold Mines Limited
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2.0 LOCATION DETAIL AND DESCRIPTION OF OPERATION

2.1 Mine Location

The Porcupine gold mine is located within the city limits of Timmins, Ontario, Canada. The Porcupine Gold Mine property area is approximately 38,000 hectares of mining claims.

Access to the property is via paved road and all the principal properties straddle Highway 101 as it enters the City of Timmins from the east. The Dome mine and mill are located to the southwest of the town of South Porcupine, and the Hoyle Pond property is situated some 20 kilometres east of Timmins and is accessed by driving north through the Hallnor property on a new all weather road. The Pampour Open Pit is located 24 kilometres east of the city. Rail freight service is available from a transfer point near the Hallnor Mine situated between Pampour and Dome. The city of Timmins is 60 kilometres from the Trans Canada Highway.

Porcupine is located within the Boreal Climatic Region which is characterized by contrasting seasons with warm, moderately humid summers and cold, dry winters. Temperatures range from -45 to +30 degrees Celsius. Mean rainfall is 600 millimetres and mean snowfall is 300 centimetres.

2.2 Background

The Site comprises two distinct mines:

The Dome Underground Mine

The Dome underground mine resumed operations in early 2006 after being put on Care and Maintenance in May 2004. Prior to 2004, the Dome Underground had been one of the Porcupine districts most prolific gold producers, spanning over 95 years of continuous operations since its discovery in 1909 and its production start up in 1910. The mine contains hundreds of miles of drifts and hundreds of stopes on 33 levels, with a shaft that extends to a depth of 1,665 meters.
Hoyle Pond Underground Mine

Ore sources included development and production stoping. A total of 4,912 meters of ore development and 7,420 meters of waste development were completed.

2.3 The Mill

After the formation of the Porcupine Gold Mines Joint Venture in 2002, ore has been fed to the Dome mill from the following main sources: Pamour Open Pit, Pamour Stockpile, the Dome Underground Mine and Hoyle Pond Underground Mine. Ore is crushed in three stages to produce a product size of 80% passing ½". Primary and secondary crushing is achieved in a 400 HP 42"x 65" gyratory and 400 HP 7" standard cone crushe, respectively. The latter feeds a 10' x 24' double deck screen in a closed circuit with a HP700 cone crushe. The screen undersize reports to two 4,000 tonne fine ore bins and the oversize is conveyed to a 75 tonne tertiary surge bin feeding the HP700 cone crushe. Due to the limited fine ore bin capacity, an external fine ore stockpile and reclaim conveyor system provide for supplemental mill feed during extended shutdowns of the crushing plants.

Minus 1/2" material is fed to a grinding circuit that consists of two parallel grinding lines. Circuit A consists of a 10.5' diameter x 14' 700 HP rod mill and 13.5' x 20' 2200 HP ball mill while Circuit B consists of a 15' diameter x 20' 2200 HP rod mill and a 16' x 28.5' 4500 HP ball mill. Gravity gold is recovered by the use of five Knelson CD-30 Concentrators fed from the cyclone underflow. In December 2002, a Consep CS8000 Acacia Reactor was commissioned to intensively leach the Knelson concentrate. The Acacia loaded solution has a dedicated electrowinning circuit. Gravity recovery accounts for up to 45% of the recovered gold, depending on ore type.

The cyclone overflows reports to a 155' thickener where the slurry density is increased to 55-60% solids. The thickener underflow feeds six leach tanks in series, which provide about 32 hours residence time. The leach circuit was expanded during the Pamour Pit Expansion to include three new additional tanks to increase the leach residence time which was a requirement of the Pamour ore.

Lime is added to the mill discharge pump boxes, thickener feed well, as well as staged addition points in the leach circuit to maintain a pH of 11.5 during cyanide leaching. Cyanide is added to the second tank of the leach circuit following preoxidation in the first tank. Staged oxygen addition maintains oxygen levels for optimum leach kinetics. After leaching, the slurry passes over a vibrating screen to remove any grit before being pumped to the CIP circuit where solution gold is absorbed by activated carbon contained in the CIP tanks. Loaded carbon is removed from the tanks and stripped. A fine carbon collection system is in place to collect any fine carbon generated during the transferring and sizing stages and is periodically shipped to a smelter for refining. The strip circuit including acid wash and strip vessels as well as the kiln was upgraded during the Pamour Pit Expansion to eliminate a prior bottleneck. The elution process transfers the gold from carbon into solution. The solution is passed through electrowinning cells where gold attaches itself to a cathode in the form of high-grade sludge. The cells are cleaned by power washing the sludge off the stainless mesh, and the sludge is filtered, dried and then refined in an induction furnace.

CIP tails pass over a vibrating screen to collect any carbon which may have leaked past the inter-stage screens. This carbon is collected and shipped to a smelter for refining. The final tails are sampled using an automated full stream sampler before being pumped to the tailing impoundment.

2.4 Tailings and Dam Construction

The current No. 6 Tailing Management Area is located approximately 3 km to the south of the mill site and consists of a naturally occurring basin enclosed by topographic highs to the east and west of the facility and by construction of a series of dams within the topographic lows around the perimeter.

Tailing slurry is pumped from the mill to the No. 6 Tailing Management Area via a 22 inch pipeline that branches into two 18 inch pipelines at the north dam to allow for the tailing material to be distributed around
the perimeter of the facility to maintain beaches and a pond at the north end of the basin where the emergency spillway is located along with a mill water reclaim system.

Water reclaimed from the tailings impoundment represents approximately 60% of the total mill water used in the process. The balance comes from a freshwater source and some nominal volume from underground. Excess water in the impoundment is treated prior to being discharged to the environment. The Effluent Treatment Plant (ETP) operates each year between May and October, and uses sulphur dioxide and air to destroy any residual cyanide and ferric sulphate and lime are used to precipitate heavy metals. A 105' diameter x 16'-9" reactor clarifier separates the precipitated sludge which is pumped back into the tailing impoundment where it is co-deposited with the tailing. The clear overflow is further treated with EDTA and carbon dioxide to control to regulatory limits.
SUMMARY AUDIT REPORT
Auditors Findings
This operation is:

- in full compliance with
- in substantial compliance with
- not in compliance with

with the International Cyanide Management Code.

Audit Company: Golder Associates
Audit Team Leader: Alistair Cadden, Lead Auditor and Mine Technical Specialist
Email: acadden@golder.com

Name and Signatures of Other Auditors

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Romain Girard</td>
<td>Mining Technical Specialist</td>
</tr>
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</table>

Dates of Audit
The Certification Gold Mining Operation Audit was undertaken within three days (six person-days) between 7 and 9 July 2010.

I attest that I meet the criteria for knowledge, experience and conflict of interest for Code Verification Audit Team Leader, established by the International Cyanide Management Institute and that all members of the audit team meet the applicable criteria established by the International Cyanide Management Institute for Code Verification Auditors.

I attest that this Summary Audit Report accurately describes the findings of the verification audit.  I further attest that the verification audit was conducted in a professional manner in accordance with the International Cyanide Management Code Verification Protocol for Cyanide Transportation Operations and using standard and accepted practices for health, safety and environmental audits.

Porcupine Gold Mines

Signature of Lead Auditor

7th October 2010
PRINCIPLE 1 – PRODUCTION
Encourage Responsible Cyanide Manufacturing by Purchasing from Manufacturers that Operate in a Safe and Environmentally Protective Manner

Production Practice 1.1: Purchase cyanide from manufacturers employing appropriate practices and procedures to limit exposure of their workforce to cyanide, and to prevent releases of cyanide to the environment

☑ in full compliance with

☑ in substantial compliance with

☐ not in compliance with

Production Practice 1.1

Summarise the basis for this Finding/Deficiencies Identified:

Porcupine Gold Mines is in full compliance with Standard of Practice 1.1, requiring the operation purchase cyanide from manufacturers employing appropriate practices and procedures to limit exposure of their workforce to cyanide and to prevent releases of cyanide to the environment.

Porcupine Gold Mines purchases its sodium cyanide from E.I DuPont de Nemours under a contractual Agreement. El DuPont de Nemours, the cyanide producer, was certified as compliant under the Code on 01 December 2009.
PRINCIPLE 2 – TRANSPORTATION

Protect Communities and the Environment during Cyanide Transport

Transport Practice 2.1: Establish clear lines of responsibility for safety, security, release prevention, training and emergency response in written agreements with producers, distributors and transporters.

☒ in full compliance with

☐ in substantial compliance with

☐ not in compliance with

Transport Practice 2.1

Summarise the basis for this Finding/Deficiencies Identified:

Porcupine Gold Mines is in full compliance with Standard of Practice 2.1, requiring that the operation establish clear lines of responsibility for safety, security, release prevention, training and emergency response in written agreements with producers, distributors and transporters.

PGM has a written cyanide supply agreement with DuPont which clearly states the responsibilities for safety, security, release prevention, training and emergency response in written agreements with producers, distributors and transporters. DuPont has a contract with Miller Transporters Inc to deliver cyanide to the site. Miller Transporters Inc was certified as Code compliant on October 22 2007.

Transport Practice 2.2: Require that cyanide transporters implement appropriate emergency response plans and capabilities and employ adequate measures for cyanide management.

☒ in full compliance with

☐ in substantial compliance with

☐ not in compliance with

Transport Practice 2.2

Summarise the basis for this Finding/Deficiencies Identified:

Porcupine Gold Mines is in full compliance with Standard of Practice 2.2, requiring that cyanide transporters implement appropriate emergency response plans and capabilities and employ adequate measures for cyanide management.

Transportation of cyanide to the site is the responsibility of E.I DuPont de Nemours and Company under the cyanide supply contract. This contract requires that the cyanide is transported by code compliant haulers.

The company that transports cyanide to the site is Miller Transporters Inc. Miller was certified as full complaint with the Code 22 October 2007.
PRINCIPLE 3 – HANDLING AND STORAGE
Protect Workers and the Environment during Cyanide Handling and Storage

Handling and Storage Practice 3.1:  Design and construct unloading, storage and mixing facilities consistent with sound, accepted engineering practices, quality control/quality assurance procedures, spill prevention and spill containment measures.

☑ in full compliance with

The operation is
☐ in substantial compliance with Handling and Storage Practice 3.1
☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in full compliance with Handling and Storage Standard of Practice 3.1, requiring that cyanide handling and storage facilities are designed and constructed consistent with sound, accepted engineering practices, quality assurance/quality control (QA/QC) procedures, spill prevention and spill containment measures.

The facilities meet code requirements in terms of location, general layout and major design, construction, and operation principles.

The offload pads, connection system, pipes, valves, tanks design as well as construction and performance have been reviewed and certified by independent professional engineers.

Two alarm systems are in place for the storage and distribution tanks:
- a sonic sensor to prevent overfilling.
- a probe that would stop the pump if overfilled (level transmitter and level switch).

Monthly preventative maintenance is being undertaken on both systems which are maintained in good working order. Preventative maintenance records were reviewed during the audit.

Visual observation by the auditors confirmed that the storage and distribution tanks are built on concrete surfaces, which is considered to be a competent barrier to leakage and provide appropriate secondary containment.

There is no storage of cyanide on site as the cyanide is delivered by truck and discharged directly into the holding tank within the plant site. The holding and distribution tanks are located within the main plant building and are with adequate ventilation, under a roof, in secure area, and separately from incompatible material.

Handling and Storage Practice 3.2:  Operate unloading storage and mixing facilities using inspections, preventative maintenance and contingency plans to prevent or contain releases and control and respond to worker exposures.

☑ in full compliance with

The operation is
☐ in substantial compliance with Handling and Storage Practice 3.2
☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

Porcupine Gold Mines
Signature of Lead Auditor

7th October 2010
The operation is in full compliance with Handling and Storage Standard of Practice 3.2 requiring that cyanide handling and storage facilities are operated using inspections, preventive maintenance and contingency plans to prevent or contain releases and control and respond to worker exposures.

Bulk cyanide is being delivered in Excel trailers. Solid cyanide briquettes in the trailers are dissolved by circulating mix water through the Excel trailers and into the mixing tank. The offload pad and cyanide mixing and holding tanks have been designed with secondary containment that has been shown through topographic survey to exceed 110% the capacity of the largest tank contained. Standard operating procedures, operator training and practices have been developed and implemented to manage the cyanide unloading and clean-up activities effectively and safely. An operator is in attendance during unloading.

Standard operating procedures and operator training are effective in managing unloading practices.
PRINCIPLE 4 – OPERATIONS
Manage Cyanide Process Solutions and Waste Streams to Protect Human Health and the Environment

Operations Practice 4.1: Implement management and operating systems designed to protect human health and the environment utilizing contingency planning and inspection and preventative maintenance procedures.

☐ in full compliance with
☐ in substantial compliance with
☐ not in compliance with

Operations Practice 4.1

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in full compliance with Standard of Practice 4.1, requiring that the operation implement management and operating systems designed to protect human health and the environment including contingency planning and inspection and preventive maintenance procedures.

Porcupine Gold Mines has written management and operating plans and procedures for all cyanide facilities including comprehensive Leach / CIP Operation Manuals and Procedures. These manuals include three separate units: Unit I – The Process; Unit II – The Equipment; and Unit III – The Operation.

The assumptions and parameters on which the facility design was based are identified within the operating plans and procedures.

Porcupine Gold Mines has a system of inspections and schedule of preventative maintenance to ensure the safe operation of the facility, which is managed through the site’s Ultramain maintenance planning system.

A formalised change management system is in place to ensure that the impact of any process or procedural changes on the safe management of cyanide is addressed, such as report dated June 2 2010 for reduction of antidote kits from 6 to 2, following up on the cyanide code team meeting minutes dated April 28 2010 when the change was decided.

Porcupine Gold Mines has contingency plans to address upsets in the water balance, or other process upsets such as an emergency power generation system and facility shut down procedures.

There are a number of systems and procedures in place to ensure that the facility is operated in accordance with the Code. These include inspections by workers and management, computerized systems such as the water balance and planned maintenance, and contingency plans.

Inspections of all cyanide facilities are undertaken at suitable intervals to ensure that they are functioning as required. Record keeping of the inspections and systems ensures that their implementation can be readily tracked.

Operations Practice 4.2: Introduce management and operating systems to minimise cyanide use, thereby limiting concentrations of cyanide in mill tailings.

☐ in full compliance with
☐ in substantial compliance with
☐ not in compliance with

Operations Practice 4.2

Summarise the basis for this Finding/Deficiencies Identified:

Porcupine Gold Mines

[Signature]

Lead Auditor

7th October 2010
The operation is in full compliance with Standard of Practice 4.2, requiring that the operation limit the use of cyanide to that optimal for economic recovery of gold so that the waste tailings material has as low a cyanide concentration as practical.

The operation conducts a programme of test work to determine appropriate cyanide addition rates in the mill and evaluate and adjust addition rates as necessary when ore types or processing practices change cyanide requirements.

Control of cyanide addition is through an in-line cyanide titration system and manual titrations undertaken by the mill operators.

**Operations Practice 4.3:** Implement a comprehensive water management programme to protect against unintentional releases.

- [x] in full compliance with

**The operation is**

- [ ] in substantial compliance with
- [ ] not in compliance with

**Operations Practice 4.3**

**Summarise the basis for this Finding/Deficiencies Identified:**

The operation is in full compliance with Standard of Practice 4.3, requiring the operation to implement a comprehensive water management programme to protect against unintentional releases.

Porcupine Gold Mines has developed a comprehensive, probabilistic water balance.

The water balance addresses the rate of deposition of tailings (there are no heap leach facilities at Porcupine Gold Mines); design storms; the quality of the input data through statistical evaluation; the impact of run-off from the catchment; the impact of freezing and thawing; losses due to evaporation and seepage; the impact of power outages and the capacity of the ETP. It is actively used as a management tool to plan dam wall and spillway sill raises.

Regular inspection of the pond water level, pond area and depth and monitoring of piezometers and outflows is undertaken.

Precipitation is measured at Timmins airport and used to update the water balance annually.

**Operations Practice 4.4:** Implement measures to protect birds, other wildlife and livestock from adverse effects of cyanide process solutions.

- [x] in full compliance with

**The operation is**

- [ ] in substantial compliance with
- [ ] not in compliance with

**Operations Practice 4.4**

**Summarise the basis for this Finding/Deficiencies Identified:**

The operation is in full compliance with Standard of Practice 4.4, requiring the operation implement measures to protect birds, other wildlife and livestock from adverse effects of cyanide process solutions.

There are no open waters where WAD cyanide exceeds 50 mg/L at Porcupine Gold Mines.

The only open water at the site is the tailings pond. Monitoring of the water in the tailings pond shows that the WAD cyanide concentration is consistently less than 50 ppm.

Porcupine Gold Mines

[Signature of Lead Auditor]

7th October 2010
There have been no wildlife mortalities reported at the site.

There are no heap leach facilities or solution ponds at the site.

**Operations Practice 4.5:** Implement measures to protect fish and wildlife from direct or indirect discharges of cyanide process solutions to surface water.

- [x] in full compliance with
- [ ] in substantial compliance with
- [ ] not in compliance with

**Operations Practice 4.5**

**Summarise the basis for this Finding/Deficiencies Identified:**

The operation is in full compliance with Standard of Practice 4.5, requiring the operation implement measures to protect fish and wildlife from direct or indirect discharges of cyanide process solutions to surface water.

The site does not have a discharge to surface water with a WAD cyanide concentration exceeding 0.5 mg/L. All discharge is treated (SO2 in pipe mixing). The WAD cyanide concentration after discharge has not exceeded 0.5 mg/l WAD in the last 5 years and is consistently < 0.022 mg/L. One occurrence was observed on May 21 2008 with a WAD concentration of 0.271 mg/l and on the October 13 2009 with a WAD concentration of 0.026 mg/l.

There is no mixing zone permitted in the jurisdiction. WAD cyanide concentrations of the discharge from the effluent treatment plant are <0.022 mg/L.

There is no indirect discharge to surface water as shown by groundwater monitoring.

Every 3 years a report on surface water is written by the mine to comply with the Federal regulations MMER. The last report was completed in 2007 and the next report is due to be completed in the autumn of 2010. The 2007 fish habitat study indicates that the discharge from the Effluent Treatment Plant has not led to a deterioration of the fish habitat in the Porcupine River.

**Operations Practice 4.6:** Implement measures designed to manage seepage from cyanide facilities to protect the beneficial uses of groundwater.

- [x] in full compliance with
- [ ] in substantial compliance with
- [ ] not in compliance with

**Operations Practice 4.6**

**Summarise the basis for this Finding/Deficiencies Identified:**

The operation is in full compliance with Standard of Practice 4.6, requiring the operation implement measures designed to manage seepage from cyanide facilities to protect the beneficial uses of groundwater.

The hydrogeology of the tailings dam area has been studied to ensure its suitability to minimize impacts on groundwater. The dam walls include a low permeability geomembrane barrier.

A network of groundwater monitoring wells has been installed and is sampled regularly to ensure groundwater is not being impacted by the operation. Monitoring of WAD cyanide in groundwater has shown the concentration to be below detection levels (<0.005 mg/L).

The site does not use mill tailings for backfill.

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Porcupine Gold Mines

Signature of Lead Auditor

7th October 2010

September 2010
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Golder Associates
Cyanide levels in groundwater have not risen above levels protective of beneficial use therefore Porcupine Gold Mines is not undertaking any remediation of groundwater.
Operations Practice 4.7: Provide spill prevention or containment measures for process tanks and pipelines.

☑ In full compliance with

The operation is □ in substantial compliance with Operations Practice 4.7

☑ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in full compliance with Standard of Practice 4.7 requiring that the operation provide spill prevention or containment measures for process tanks and pipelines.

Spill prevention or containment measures are provided for the following:

- Cyanide mixing and holding tanks;
- Leach tanks; and
- CIP tanks.

Topographic survey and measurements reviewed by the auditors have shown that all process tanks and pipelines have secondary containment volumes exceeding 110% of the volume of the largest tank contained.

The site implements procedures, such as sump pumps, to ensure that cyanide solutions collected in secondary containments are not released to the environment.

Cyanide pipelines are designed as pipe in pipe, or within containment bunds to collect leaks, to prevent releases to the environment and to ensure protection of surface water.

Currently all tanks and pipelines are constructed with compatible materials such as carbon steel and HDPE.

Operations Practice 4.8: Implement quality control/quality assurance procedures to confirm that cyanide facilities are constructed according to accepted engineering standards and specifications.

☑ In full compliance with

The operation is □ in substantial compliance with Operations Practice 4.8

☑ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in full compliance with Standard of Practice 4.8 requiring that operations implement QA/QC procedures to confirm that cyanide facilities are constructed according to accepted engineering standards and specifications.

QA/QC programmes have been implemented for the construction of all cyanide facilities.

The QA/QC programmes address the suitability of the material used and their correct installation.

QA/QC records and engineers reports for all cyanide facilities are retained on site.

QA/QC inspections have been undertaken by appropriately qualified people, and signed off by Professional Engineers.

Porcupine Gold Mines

Signature of Lead Auditor

7th October 2010
Where no original QA/QC documentation exists from the original construction period, the cyanide facilities have been inspected by a Professional Engineer, remediated as required and signed off as suitable to protect against cyanide releases and exposures.

**Operations Practice 4.9:** Implement monitoring programs to evaluate the effects of cyanide use on wildlife, surface and groundwater quality.

☑ in full compliance with

☐ in substantial compliance with

☐ not in compliance with

**Operations Practice 4.9**

**Summarise the basis for this Finding/Deficiencies Identified:**

The operation is in full compliance with Standard of Practice 4.9 requiring that operations implement monitoring programs to evaluate the effects of cyanide use on wildlife, surface and groundwater quality.

Written standard procedures have been developed as part of the 'Environmental Management System Manual (EMSM) for all monitoring activities (inspections, sampling, testing, audits, field procedures). These procedures have been prepared by the previous environmental coordinator, and updated by László Gótz (Environmental Manager). László Gótz's qualifications are:

- Registered Professional Engineer in Ontario;
- More than 10 years experience in gold mining environmental issues;
- Degree in mining engineering.

The procedures contain information on how and where samples should be taken, sample preservation techniques, chain of custody procedures, shipping instructions, and cyanide species to be analysed.

Groundwater sampling conditions and procedures are documented in writing.

Porcupine Gold Mines inspects and documents any wildlife mortality that may be associated with contact with or ingestion of cyanide.

Monitoring is conducted at frequencies adequate to characterise the medium being monitored and to identify changes in a timely manner.

- Surface water monitoring is conducted at the following intervals:
  - Effluent treatment discharge: Three times a week (total CN, pH);
  - Effluent treatment discharge: Weekly (total, WAD CN, metals);
  - South Porcupine River close to discharge: Monthly;
  - Dams and rivers: Quarterly;
- Groundwater monitoring is conducted at the following intervals:
  - Annual (summer); and,
  - Semi-Annual (late fall and early spring).
PRINCIPLE 5 – DECOMMISSIONING

Protect Communities and the Environment from Cyanide through Development and Implementation of Decommissioning Plans for Cyanide Facilities.

Decommissioning
Practice 5.1: Plan and implement procedures for effective decommissioning of cyanide facilities to protect human health, wildlife and livestock.

☒ in full compliance with

☐ in substantial compliance with Decommissioning Practice 5.1
☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in full compliance with Standard of Practice 5.1 requiring that the site plan and implement procedures for effective decommissioning of cyanide facilities to protect human health, wildlife and livestock.

The operation has plans for decommissioning cyanide facilities.

The plan includes an implementation schedule for the decommissioning works.

The decommissioning plan is updated from time to time to reflect the changes implemented at the mine (such as opening the Hollinger project) and in accordance with the requirements of the Ontario Ministry of Northern Development, Mines and Forestry. It was most recently updated in June 2010.

Decommissioning
Practice 5.2: Establish an assurance mechanism capable of fully funding cyanide related decommissioning activities.

☒ in full compliance with

☐ in substantial compliance with Decommissioning Practice 5.2
☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in full compliance with the Standard of Practice 5.2 requiring that the site establish an assurance mechanism capable of fully funding cyanide related decommissioning activities.

The closure plan includes a cost estimate for 3rd party decommissioning of the site.

The cost estimate is regularly reviewed, the most recent update being June 2010.

An irrevocable letter of credit is issued to the Ontario Ministry of Northern Development, Mines and Forestry to cover the cost of 3rd party decommissioning of the mine.

Porcupine Gold Mines
Signature of Lead Auditor

7th October 2010
PRINCIPLE 6 – WORKER SAFETY
Protect Workers’ Health and Safety from Exposure to Cyanide

Worker Safety Practice 6.1: Identify potential cyanide exposure scenarios and take measures as necessary to eliminate, reduce and control them.

☒ in full compliance with
☐ in substantial compliance with
☐ not in compliance with

Worker Safety Practice 6.1

Summarise the basis for this Finding/Deficiencies Identified:

The site is in full compliance with Standard of Practice 6.1 requiring that the site identify potential cyanide exposure scenarios and take measures as necessary to eliminate, reduce and control them.

Porcupine Gold Mines has developed Safe Operating Procedures which identify potential exposure pathways for cyanide, and specifies the working procedures and PPE required to eliminate, reduce and control them during cyanide unloading, storage and mixing activities including:

- G-15 Bulk Cyanide Offloading;
- G-35 Monitoring HCN Gas at Completion of Offload.

Other specific procedures have been developed for operations including:

- Cyanide Titration for Barren Solution;
- Cyanide Titration and Control for Process Slurry Cyanide Titration and Control for Process Slurry;
- Transferring Loaded Carbon to the Elution Column;
- Stripping;
- Strip Tank Lid Removal Emergency Shutdown;
- Kiln Operation;
- Operating CIP Feed / Tails Screens;
- Start-Up / Shut-Down of Main Tailings Pumps and VFD for Maintenance;
- Tailings Booster Pump Operation;
- Tailings Line Communications Failure Alarms;
- Daily Scheduled Reclaim Water Line Inspections;
- Tailing Line Flow Differential Alarm (Line Failure with Contained Spillage and Line Failure with Spillage to the Environment);
- Tailing Line Flow Differential Alarm (False Alarm);
- Tailings Spill Response;
- Tailings Spill Cleanup and Monitoring;
- Reclaim Water Spill Response;
- Cyanide Line Clearance;
- Strip Heat Exchanger Preparation for Maintenance.

The procedures specify the requirements for PPE and pre-work inspections.

A change management procedure is in place to ensure the safety aspects of proposed process and procedural changes address worker safety.

Worker input is sought and implemented while developing or modifying safe work procedures, through the use of planned task observations and crew meetings.

Porcupine Gold Mines

Signature of Lead Auditor

7th October 2010
Worker Safety Practice 6.2: Operate and monitor cyanide facilities to protect worker health and safety and periodically evaluate the effectiveness of health and safety measures.

☑ in full compliance with

The operation is □ in substantial compliance with □ not in compliance with

Worker Safety Practice 6.2

Summarise the basis for this Finding/Deficiencies Identified:

Porcupine Gold Mines is in full compliance with Standard of Practice 6.2 requiring that the site operate and monitor cyanide facilities to protect worker health and safety and periodically evaluate the effectiveness of health and safety measures.

The site has determined appropriate pH (around 11.2) for operating the facility.

The site uses both fixed and portable hydrogen cyanide (HCN) monitors to ensure that worker exposure to HCN gas is limited. These alarm when the concentration of HCN reaches 2 ppm which triggers an investigation for the source of elevated HCN concentrations, and again when it reaches 4.7 ppm, which triggers an evacuation and emergency response.

Areas of exposure to >4.7 ppm of HCN have been identified and signed. Safe working procedures have been developed to minimise the risk to workers form HCN gas.

The fixed HCN monitors are full span calibrated every 3 months in accordance with the manufacturer's recommendations. The zero setting is checked every month. Portable HCN monitors are tested each time they are used. Records of calibration are kept on site for at least 1 year.

Warning signs have been placed in all areas where cyanide may be encountered, and on all cyanide facilities warning that the tanks and pipes may contain cyanide solutions. The flow direction is marked on cyanide pipes.

Emergency showers and eye wash stations are located at locations around the plant where there is a risk of cyanide exposure. These are checked regularly as planned maintenance. The auditors verified that the water pressure in the showers and eye wash stations was appropriate by activating them. Type ABC fire extinguishers (with nitrogen propellant) were located at numerous places around the plant. The inspection records were attached to the fire extinguishers.

Material Safety Datasheets are displayed in English (the language of the workforce) at various locations around the plant site.

Procedures are in place to investigate cyanide exposures, and to modify procedures in the light of any findings from the investigations.

Worker Safety Practice 6.3: Develop and implement emergency response plans and procedures to respond to worker exposure to cyanide.

☑ in full compliance with

The operation is □ in substantial compliance with □ not in compliance with

Worker Safety Practice 6.3

Porcupine Gold Mines

Signature of Lead Auditor

7th October 2010

Golder Associates
Summarise the basis for this Finding/Deficiencies Identified:

Porcupine Gold Mines is in full compliance with Standard of Practice 6.3 which requires that the site develop and implement emergency response plans and procedures to respond to worker exposure to cyanide.

Porcupine Gold Mines has cyanide antidote kits and supplied oxygen resuscitation equipment required for treating potential victims of cyanide exposures at suitable locations within the mill, such as the mill shift bosses’ office and the nursing station.

First aid equipment is regularly inspected to ensure it will function correctly and remains within its useful life.

Porcupine Gold Mines has specific written plans for dealing with cyanide exposures.

Porcupine Gold Mines has on-site facilities, including a site nurse and clinic to provide first aid to staff exposed to cyanide.

Porcupine Gold Mines has a procedure to transport cyanide exposure victims to the local hospital, Timmins District Hospital.

Porcupine Gold Mines has formalised written agreements with local emergency responders such as the ambulance service and Timmins District Hospital, who have confirmed they have adequate training and facilities to deal with victims of cyanide exposure.

Mock drills are performed to test the emergency response procedures developed at site, and to incorporate learning’s from these drills into revised procedures.

Porcupine Gold Mines

Signature of Lead Auditor

7th October 2010
PRINCIPLE 7 – EMERGENCY RESPONSE

Protect Communities and the Environment through the Development of Emergency Response Strategies and Capabilities

Emergency Response Practice 7.1: Prepare detailed emergency response plans for potential cyanide releases.

☐ in full compliance with

☐ in substantial compliance with

☐ not in compliance with

Emergency Response Practice 7.1

Summarise the basis for this Finding/Deficiencies Identified:

Porcupine Gold Mines is in full compliance with Standard of Practice 7.1 which requires that the site prepare detailed emergency response plans for potential cyanide releases.

Porcupine Gold Mines has a well thought through and comprehensive written emergency response plan to deal with potential cyanide releases.

The plan considers all reasonably foreseeable cyanide failure scenarios, including off site and on site transportation incidents.

The plan addresses the potential need for evacuations of both the site and potentially affected communities. It specifies procedures for the use of specialised first aid equipment, antidotes and measures to control cyanide releases.

PGM’s ERP and a procedure titled “HCN Gas Emergency Evacuation” describe the procedures for workers to follow in the event of a HCN gas alarm siren. PGM’s ERP discusses the response for on-site transportation accidents related to cyanide. The ERP is set out to address solid liquid and gaseous releases of cyanide and describes appropriate responses to such incidents. PGM has developed and implemented procedures for safely unloading and mixing cyanide. Unloading and mixing emergencies are covered in the ERP. PGM’s ERP includes emergency procedures for fire and explosion of cyanide. The ERP states to contain runoff and neutralize with sodium hydrochlorate followed by returning the material to the mill/tailings impoundment. PGM does not have on-site fire fighting equipment and will rely on off-site responders for fire fighting (South Porcupine Fire Department, Whitney Fire Department and City of Timmins Fire Department). Many of the volunteers at the fire department are employees at Porcupine. The call in procedure to the fire department to inform them in the event of a cyanide related fire and fire incompatibility is described in the ERP. PGM’s ERP includes emergency procedures for pipe, valve or tank ruptures. The ERP contains details of emergency actions for cyanide solution spills including identifying critical switches and valves in the process system. The ERP describes procedures for a tailings dam overtopping and failure and tailing/claim line break. The procedure also details how to notify outside responders, and the civil authorities in case an evacuation of people living downstream is required. There are no other ponds containing cyanide at the site. PGM has an emergency generator system to run critical equipment during power outages. The generator is a Caterpillar 100KW diesel unit. Porcupine has developed a list of critical equipment to operate for worker safety and prevent releases. The generator is maintained, started and inspected every two weeks. PGM has developed formal written contingency procedures for uncontrolled seepage from the tailings dam, including requirements for material and equipment necessary to control such seepage and a chain of command for notifying the civil authorities in case further actions are required. The ERP describes actions to be taken in event of an operational or structural failure of the effluent treatment plant. The ETP is fed by pumped feed from tailings dam. If environmental parameters are not met, the pump shuts down and overflow from clarifier stops. Water is then stored on the Tailings Management Facility until the process issue is sorted out.

Porcupine Gold Mines

Signature of Lead Auditor

7th October 2010

Golder Associates
Emergency Response
Practice 7.2: Involve site personnel and stakeholders in the planning process.
☑ in full compliance with

The operation is ☐ in substantial compliance with ☐ not in compliance with

Emergency Response Practice 7.2

Summarise the basis for this Finding/Deficiencies Identified:

Porcupine Gold Mines is in full compliance with Standard of Practice 7.2 which requires that the site involve site personnel and stakeholders in the planning process.

Porcupine Gold Mines has involved the workforce and stakeholder such as the town of South Porcupine, the Fire Chief, the Police Chief and the Hospital in emergency response planning. The auditors reviewed copies of PGM’s correspondence with the various civil defence authorities regarding the emergency response plan and their roles within it.

Porcupine Gold Mines has made potentially affected communities aware of the risks associated with cyanide release through a series of public events, and the Hollinger information centre.

Local emergency responders have been involved in the emergency planning process, as demonstrated by the correspondence between the mine and the emergency services.

Porcupine Gold Mines consults and communicates with stakeholders to ensure the emergency response plan is kept current.

7th October 2010
Signature of Lead Auditor

Porcupine Gold Mines

September 2010
Report No. 09514150105.450/D.1
Emergency Response Practice 7.3: Designate appropriate personnel and commit necessary equipment and resources for emergency response.

- in full compliance with

- The operation is
  - in substantial compliance with
  - not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

Porcupine Gold Mines is in full compliance with Standard of Practice 7.3 which requires that the site designate appropriate personnel and commit necessary equipment and resources for emergency response.

Porcupine Gold Mines has designated appropriate staff equipment and other resources for emergency response. The Emergency Response Plan describes the responsibilities and level of authority of emergency response coordinators for all site emergencies. The ERP has a list of the Emergency Response team members and management with contact numbers. The ERP states the qualifications required for an emergency responder and that annual refresher training is required. The ERP includes call out procedures and 24-hour contact information for the management and emergency control team. The list was last updated in June 2010. The ERP contains a list of emergency response equipment. The ERP describes the role of outside responders or communities. The ERP describes the responsibilities and level of authority of the emergency response coordinators and team members for an emergency. The ERP includes procedures to inspect emergency response equipment and assure its availability when required.

Porcupine Gold Mines has confirmed that outside responders understand their roles in an emergency situation and their willingness to be involved in mock drills, as demonstrated in the mine's correspondence with outside responders reviewed by the auditors.

Emergency Response Practice 7.4: Develop procedures for internal and external emergency notification and reporting.

- in full compliance with

- The operation is
  - in substantial compliance with
  - not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

Porcupine Gold Mines is in full compliance with Standard of Practice 7.4 which requires that the site develop procedures for internal and external emergency notification and reporting.

The Emergency Response Plan gives details on procedures for notifying management, outside responders and regulatory authorities.

The Emergency Response Plan gives details for contacting affected communities, which will be handled through the Fire Chief and the Ontario Provincial Police. The Mine General Manager is responsible for dealing with the media.
Emergency Response Practice 7.5: Incorporate in response plans and remediation measures monitoring elements that account for the additional hazards of using cyanide treatment chemicals.

☐ in full compliance with

☐ in substantial compliance with

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:
Porcupine Gold Mines is in full compliance with Standard of Practice 7.5 which requires that the site incorporate in response plans and remediation measures monitoring elements that account for the additional hazards of using cyanide treatment chemicals.

The emergency response plan specifies specific remediation measures required for a range of solid and liquid cyanide releases, including tailings. These measures included detailed work procedures, clean up limits and how to dispose of arisings. The PGM emergency response plan addresses the following:

a) How to deal with solid and liquid spills of cyanide.
b) Decontamination and remediation of soils and other potentially contaminated media, including the levels to which spoils etc need to be remediated.
c) All materials resulting from the remediation of a spill will be disposed of in the tailings dam. Any recovered solid NaCN will be returned to the mixing circuit.
d) It has been assessed that it is extremely unlikely that the local water supply will be impacted by a cyanide spill. However, PGM has a back up plan to supply bottled water should this be required.

The use of sodium hypochlorite, ferrous sulphate and hydrogen peroxide are specifically prohibited for the neutralisation of cyanide that may enter into surface water. These chemicals are not kept on site for cyanide emergency response.

Sampling and analytical methodologies are defined in the Government (Ontario) MISA guidelines for water sampling procedures. Written standard procedures have been developed as part of the 'Environmental Management System Manual (EMSM)', revision November 5 2007. These are specifically referenced in the Emergency Response Plan. The ERP gives details of the location and frequency required for environmental monitoring during an emergency response.

Emergency Response Practice 7.6: Periodically evaluate response procedures and capabilities and revise them as needed.

☐ in full compliance with

☐ in substantial compliance with

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:
Porcupine Gold Mines is in full compliance with Standard of Practice 7.6, which requires that the site periodically evaluate response procedures and capabilities and revise them as needed.

Porcupine Gold Mines update the Emergency Response Plan at least annually.

Mock cyanide emergency drills are performed regularly.

Porcupine Gold Mines

Signature of Lead Auditor

7th October 2010

September 2010
Report No. 09514150105.450/D.1
The mine has a system to review the results of emergency responses and mock emergency drills and updates procedures accordingly.
PRINCIPLE 8 – TRAINING
Train Workers and Emergency Response Personnel to Manage Cyanide in a Safe and Environmentally Protective Manner

Training Practice 8.1: Train workers to understand the hazards associated with cyanide use.

☑ in full compliance with

The operation is
☐ in substantial compliance with
☐ not in compliance with

Training Practice 8.1

Summarise the basis for this Finding/Deficiencies Identified:
Porcupine Gold Mines is in full compliance with Standard of Practice 8.1 which requires that the site train workers to understand the hazards associated with cyanide use.

Porcupine Gold Mines trains all personnel who may encounter cyanide in cyanide hazard recognition. Auditors also attended a Contractor’s induction relating to cyanide risks. PGM has a Mill Induction Training Course that is provided to all workers and contractors. This course provides training in recognizing how cyanide is used on site, where it is used, the health effects of cyanide, symptoms of cyanide exposure, location of antidote kits, alarm response and first aid procedures.

All operators and some maintenance workers receive a more advanced cyanide training course that is part of the overall training program called Common Core. This course is a well structured training program consisting of 8 elements of induction. This course is required by the Ministry of Ontario.

Interviews with several employees and contractors confirmed that they had undergone cyanide refresher training and were aware of where it was used, poisoning symptoms and the correct emergency responses. Training materials were reviewed of the Mill Induction and the Common Core (element 8). Training records are retained by the Training Department and were reviewed to verify this item. Records included trainer’s name and title, date of training, training duration and subject, and a list of participants.

Periodic cyanide hazard recognition refresher training is undertaken. The auditors attended cyanide refresher training provided by DuPont.

Training records are retained on the SAP database system.

Training Practice 8.2: Train appropriate personnel to operate the facility according to systems and procedures that protect human health, the community and the environment.

☑ in full compliance with

The operation is
☐ in substantial compliance with
☐ not in compliance with

Training Practice 8.2

Summarise the basis for this Finding/Deficiencies Identified:
Porcupine Gold Mines is in full compliance with Standard of Practice 8.2 which requires that the site train appropriate personnel to operate the facility according to systems and procedures that protect human health, the community and the environment.

The operation trains workers to undertake cyanide related tasks safely with respect to themselves, their colleagues, the community and the environment. All personnel in job positions that involve the use of cyanide and cyanide management receive training on how to perform their assigned tasks including non-
routine tasks with minimum risk to worker health and safety. The cyanide-related Standard Operating Procedures (SOPs) and the training materials for the Common Core necessary for each job are located in the training department. Employees are also signed-off in the field on their tasks.

The training materials identify the elements necessary for the safe performance of each job, based on the site’s safe working procedures.

Appropriately qualified personnel deliver the training, with external specialists engaged as required.

Employees are trained prior to working with cyanide, with assessment undertaken to ensure they understand the requirements. Verification of training was by interview with Ross Libby, the Mill Training Coordinator, and several workers who work around cyanide. Porcupine has a Mill Induction Training Course that is provided to all workers and contractors. Common Core training is provided to employees for task specific training. All personnel in job positions that involve the use of cyanide and cyanide management receive training on how to perform their assigned tasks with minimum risk to worker health and safety prior to working with cyanide.

Refresher training is undertaken regularly and as identified from planned task observations. The auditors attended cyanide awareness refresher training provided by DuPont.

The effectiveness of training is assessed through written tests on each training module, and through planned task and crew observations.

Detailed records of training are retained either as hard copy or on the SAP database.

Training Practice 8.3: Train appropriate workers and personnel to respond to worker exposures and environmental releases of cyanide.

☐ in full compliance with

☐ in substantial compliance with

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

Porcupine Gold Mines is in full compliance with Standard of Practice 8.3 which requires that the site train appropriate workers and personnel to respond to exposures and environmental releases of cyanide.

All mill workers and contractors are trained in the appropriate emergency response for worker exposure and environmental releases of cyanide. The auditors interviewed several mill operators and contractor’s staff to verify that emergency response training had been undertaken. Ross Libby provides refresher training for HCN emergency response (EP-17). This refresher training includes donning the SCBA gear and rehearsing the procedures (EP-17) to respond to a HCN emergency.

Emergency responders are trained in cyanide decontamination and first aid procedures and participate in mock emergency response drills. Emergency responders are trained in the procedures included in the emergency response plan concerning cyanide, and in the use of appropriate equipment. Off site emergency responders have been made aware of their responsibilities and have confirmed they are prepared to deal with cyanide related emergencies.

Emergency response mock drills are undertaken regularly. Emergency response mock drills are evaluated and lesson learnt captured and incorporated into the updated procedures. Mock drill debriefings from Nov 2009, May 2010, June 2010 were reviewed by the auditors.

Emergency response training records are retained either as paper copy or on the SAP database system.
PRINCIPLE 9 – DIALOGUE
Engage in Public Consultation and Disclosure

Dialogue Practice 9.1: Provide stakeholders the opportunity to communicate issues of concern.
☑ in full compliance with
☐ in substantial compliance with
☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:
Porcupine Gold Mines is in full compliance with Standard of Practice 9.1 which requires that the site provide stakeholders the opportunity to communicate issues of concern.

Porcupine Gold Mines has a number of community engagement initiatives including the Watchful Eye, the Schumacher Information Centre, engagement with Northwatch NGO and other community groups to enable them to voice concerns.

Dialogue Practice 9.2: Initiate dialogue describing cyanide management procedures and responsively address identified concerns.
☑ in full compliance with
☐ in substantial compliance with
☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:
Porcupine Gold Mines is in full compliance with Standard of Practice 9.2 which requires that the site initiate dialogue describing cyanide management procedures and actively address identified concerns.

Porcupine Gold Mines has a number of community engagement initiatives including the Watchful Eye, the Schumacher Information Centre, engagement with Northwatch NGO and other community groups to facilitate dialogue with respect to cyanide management procedures.

Dialogue Practice 9.3: Make appropriate operational and environmental information regarding cyanide available to stakeholders.
☑ in full compliance with
☐ in substantial compliance with
☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:
Porcupine Gold Mines is in full compliance with Standard of Practice 9.3 which requires that the site make appropriate operational and environmental information regarding cyanide available to stakeholders.

Porcupine Gold Mines makes operational and environmental information regarding cyanide available through various websites (www.goldcorp.com; www.procupinegoldmines.ca) and various publicly distributed newsletters, also available through the Schumacher information centre.
The majority of the local population is literate and so written information is considered adequate.

Information regarding cyanide releases is made available through a number of company and official outlets such as the websites (www.goldcorp.com; www.workplacesafetynorth.ca), sustainability report etc.
GOLDER ASSOCIATES (UK) LTD

Alistair Cadden
ICMI Lead Auditor

Sophie Wheeler
Reviewer

Date: 7 October 2010

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At Golder Associates we strive to be the most respected global group of companies specialising in ground engineering and environmental services. Employee owned since our formation in 1980, we have created a unique culture with pride in ownership, resulting in long-term organisational stability. Golder professionals take the time to build an understanding of client needs and of the specific environments in which they operate. We continue to expand our technical capabilities and have experienced steady growth with employees now operating from offices located throughout Africa, Asia, Australasia, Europe, North America and South America.

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