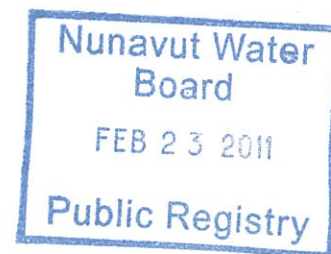




P.O. Box 119  
GJOA HAVEN, NU X0B 1J0  
TEL: (867) 360-6338  
FAX: (867) 360-6369

kNK5 wmoEp5 vtmq  
NUNAVUT WATER BOARD  
NUNAVUT IMALIRIYIN KATIMAYINGI  
OFFICE DES EAUX DU NUNAVUT

**EXPLORATION/ REMOTE  
CAMP SUPPLEMENTARY  
QUESTIONNAIRE**



**Applicant: Guyana Precious Metals Inc. Licence No:** \_\_\_\_\_  
(For NWB Use Only)

**ADMINISTRATIVE INFORMATION**

1. Environment Manager: Christine Robinson Phone 416 628 5936 Fax: 416 628 5935  
Cell: 416 659 0103 Email - crobenson@guygold.com
2. Project Manager: Alexander Y. Po, P.Geo. Phone 416 628 5936 Fax: 416 628 5935  
Cell: 647 202 5936 Email - apo@guygold.com
3. Does the applicant hold the necessary property rights? YES
4. Is the applicant an 'operator' for another company (i.e., the holder of the property rights)? If so, please provide letter of authorization. NO
5. Duration of the Project
  - One year or less Start and completion dates: \_\_\_\_\_
  - Multi Year:  
If Multi-Year indicate proposed schedule of on site activities Start: May 1, 2011 Completion: April 30, 2013

**CAMP CLASSIFICATION**

6. Type of Camp
  - Mobile (self-propelled)
  - **XXX** Temporary  
Seasonally Occupied: \_\_\_\_\_
  - Permanent
  - Other: \_\_\_\_\_
7. What is the design, maximum and expected average population of the camp?  
Maximum - 25 Persons Average 12 persons
8. Provide history of the site if it has been used in the past.

The general area has been explored for mineral deposits for many decades. The camp and airstrip are situated on crown land owner by the company. The most recent land use permits and water licenses in the area were held by Coronation Minerals, for a similar diamond drilling project. During this activity the camp at the Hope Lake Airstrip was permitted and operated by and by Matrix Aviation Solutions Inc.

Due to poor commodity price and financing in 2007-2008, the former operators, Coronation Minerals Inc (CMI) was not able to execute their 2008 proposed diamond drilling program. The CMI management was changed and the new Guyana Precious Metals Inc. management took over on March 3, 2009.

## **CAMP LOCATION**

9. Please describe proposed camp location in relation to biogeographical and geomorphological features, and water bodies.

The camp will be located on a flat area at coordinates 67° 25.774'N, 116° 24.779'W (NTS 86N/8) along the side of the Hope Lake airstrip. Both the airstrip and the camp are located on crown land. There is one small creek in the area that will be used for a water supply.

10. How was the location of the camp selected? Was the site previously used? Was assistance from the Regional Inuit Association Land Manager sought? Include maps and/or aerial photographs.

This camp site has been used by past mineral exploration activities in the area. It was selected because it was an already disturbed site and close to the airstrip. See Figure 2 and 3 in Project Description Report

11. Is the camp or any aspect of the project located on:

- Crown Lands Permit Number (s)/Expiry Date: Applied for expected in April 2011
- Commissioners Lands Permit Number (s)/Expiry Date: N/A
- Inuit Owned Lands Permit Number (s)/Expiry Date: Applied for Expected in April 2011

12. Closest Communities (direction and distance in km): Approximately 80 km to Kugluktuk

13. Has the proponent notified and consulted the nearby communities and potentially interested parties about the proposed work? Contact has been made with KIA and discussions are being planned

14. Will the project have impacts on traditional water use areas used by the nearby communities? Will the project have impacts on local fish and wildlife habitats? NO

## **PURPOSE OF THE CAMP**

15. XXX Mining (includes exploration drilling)

- Tourism (hunting, fishing, wildlife observation, adventure/expedition, etc.) (Omit questions # 16 to 21)
- Other \_\_\_\_\_

16. Activities (check all applicable)

- Preliminary site visit
- Prospecting
- XX Geological mapping
- Geophysical survey
- XX Diamond drilling
- Reverse circulation drilling
- Evaluation Drilling/Bulk Sampling (also complete separate questionnaire)
- Other: \_\_\_\_\_

17. Type of deposit (exploration focus):

- Lead Zinc
- Diamond
- Gold
- Uranium
- Other: copper, gold, nickel, PGM, and diamonds

#### **DRILLING INFORMATION**

18. Drilling Activities

- ☒ Land Based drilling
- ☐ Drilling on ice

19. Describe what will be done with drill cuttings?

Drill cuttings and water will be directed to a natural depression with no flow to the surrounding environment. The cuttings will settle and water will evaporate. These areas will then be restored during the open water season.

20. Describe what will be done with drill water?

Drill cuttings and water will be directed to a natural depression with no flow to the surrounding environment. The cuttings will settle and water will evaporate. These areas will then be restored during the open water season.

21. List the brand names and constituents of the drill additives to be used? Includes MSDS sheets and provide confirmation that the additives are non-toxic and biodegradable.

Additives will be Calcium chloride (MSDS Attached)

22. Will any core testing be done on site? Describe.

Core testing will be done at the camp site at the Hope Lake airstrip.

#### **SPILL CONTINGENCY PLANNING**

23. The proponent is required to have a site specific Spill Contingency Plan prepared and submitted with the application This Plan should be prepared in accordance with the *NWT Environmental Protection Act, Spill Contingency Planning and Reporting Regulations, July 22, 1998* and *A Guide to the Spill Contingency Planning and Reporting Regulations, June 2002*. Please include for review.

Contingency Plan is Attached

24. How many spill kits will be on site and where will they be located?

Three 45 gallon spill kits will be on site, one at each drill site and one at the fuel storage area at the

airstrip and camp.

25. Please describe the types, quantities, and method of storage of fuel and chemicals on site, and provide MSDS sheets.

Fuel will be flown to the Hope Lake airstrip in 205 l drums by fixed wing aircraft. The drums will be stored in a central storage area at the airstrip which has been equipped with an impermeable membrane. It is anticipated that no more than 48 barrels (10,000 liters) will be stored at the airstrip at any one time. The breakdown of the fuel types for the project is given in Table 3.

Fuel	Number of Containers and Capacity of Containers	Total Amount of Fuel (In Litres)	Total fuel per year (l)
Diesel	400	205 litre barrels	80,000
Gasoline	10	205 litre barrels	2,000
Aviation fuel	400	205 litre barrels	80,000
Propane	20 tanks	100 lb tanks	
Other			

The diesel for the drill rigs will be moved from the storage area to the drill sites as required. Each drill will have a minimum of two (2) days fuel on site (approximately 4 barrels). The barrels will be stored on an impermeable membrane at least 30 meters from any water body in the area.

Helicopters will only be refueled at the Hope Lake airstrip using electric pumps and pumping from 205 l barrels.

Calcium chloride will be brought to the project site on an as needed basis. When on site it will be stored in a weather tight and secured shelter until it is used. The primary storage area will be at the Hope Lake airstrip near the fuel storage area. The drill salt will be moved to the drill sites from the camp as needed. The maximum amount of drill salt stored will be 1000 kg. The drill salt is transported in 20 kg bags.

## **WATER SUPPLY AND TREATMENT**

26. Describe the location of water sources.

Camp Water - The estimated water usage for the camp is 1.5 cubic meters per day. The water will be pumped from an unnamed creek near the airstrip to a holding tank at the kitchen and dry tents. From this holding tank water will be distributed to facilities in the camp. Treatment of the domestic water will be by

Trojan UV Max system.

Drill Water - The maximum water use per diamond drill is estimated to be 3.78 m<sup>3</sup>/day. With two drills operating daily water use will be approximately 8 m<sup>3</sup>/day. The water use depends on the nature of the rock fracturing in the area of the drill. Highly fractured rock results in more water loss down hole and therefore less ability to recycle water. The water usage figures provided above are considered to be maximum usage.

Drill water will be obtained from lakes and creeks near the drill sites. All water intakes will comply with **Freshwater Intake End-of-Pipe Fish Screen Guideline, 1995**

27. Estimated water use (in cubic metres/day):

- Domestic Use: 1.5 cubic meters/day Water Source: Un-named creek near airstrip
- Drilling: 8 cubic meters / day Water Source: Un-named creeks near drill sites
- Other: Water Source: \_\_\_\_\_

28. Describe water intake for camp operations? Is the water intake equipped with a mesh screen to prevent entrapment of fish? (see *DFO 1995, Freshwater Intake End-of-Pipe Fish Screen Guideline*) Describe:

Camp and drill water will be obtained from lakes and creeks near the drill sites. All water intakes will comply with **Freshwater Intake End-of-Pipe Fish Screen Guideline, 1995**

29. Will drinking water quality be monitored? What parameters will be analyzed and at what frequency?

No

30. Will drinking water be treated? How?

Treatment of the domestic water will be by Trojan UV Max system.

31. Will water be stored on site?

The estimated water usage for the camp is 1.5 cubic meters per day. The water will be pumped from an unnamed creek near the airstrip to a holding tank (1500 liters) at the kitchen and dry tents.

## WASTE TREATMENT AND DISPOSAL

32. Describe the characteristics, quantities, treatment and disposal methods for:

Type of waste	Projected amount generated	Method of Disposal
Sewage (human waste)	<.5 cubic meters /day	Latrine pits
Greywater	<1 cubic meters /day	Discharged to sump
Combustible wastes	<10 kg/day	Incinerated on site
Non-Combustible wastes	<5 kg/day	Removed to approved land fill

Overburden (organic soil, waste material, tailings)	N/A	
Hazardous waste	<5 kg/day	Removed to approved land fill
Other: Drill recirculating water	<8 cubic meters/day	Depressions near drill sites

Type of Waste	Composition	Quantity Generated	Treatment Method	Disposal Method
Sewage (human waste)		<.5 cubic meters /day	Age and backfill	Latrine pits
Greywater		<1 cubic meters /day	Evaporation and backfill	Discharge to sump
Combustible wastes		<10 kg/day	Incinerated	Incineration on site
Non-Combustible wastes		<5 kg/day	Removed to approved land fill	Removal to approved land fill
Overburden (organic soil, waste material, tailings)		N/A		
Hazardous waste		<5 kg/day	Removed to approved land fill	Removal to approved land fill
Other: Drill recirculating water		<8 cubic meters/day	Evaporation	Depression near site

33. Please describe incineration system if used on site. What types of wastes will be incinerated?

Garbage and waste materials from the camp will be collected daily. Garbage and waste materials (oil, containers, etc.) generated at the drill sites will be collected daily and returned to the camp. The garbage and waste materials will be sorted into combustible and non-combustible material.

Combustible material will be disposed at in the camp A400(A) Inciner8 two stage incinerator. The information sheet on the incinerator is found in Appendix A. Non-combustible material and oils will be flown to an approved disposal site on a weekly basis. Any residue from the incinerator will be returned be flown to an approved landfill for disposal.

#### Waste Management

34. Where and how will non-combustible waste be disposed of? If in a municipality in Nunavut, has authorization been granted?

Non-combustible waste will be taken to an approved landfill most likely in NWT.

35. Describe location (relative to water bodies and camp facilities) dimensions and volume, and freeboard for all sumps (if applicable).

The greywater sump will be designed to accommodate approximately 10 cubic meters with a freeboard of 0.25 meters. It will be located a minimum of 50 meters from the camp.

36. Will leachate monitoring be done? What parameters will be sampled and analyzed, and at what frequency?

NO

#### **OPERATION AND MAINTENANCE**

37. Have the water supply and waste treatment and disposal methods been used and proven in cold climate? What known O&M problems may occur? What contingency plans are in place?

The proposed systems have been used in Nunavut and NWT by Matrix Aviation Solutions Inc, who will supply the camp, since approximately 200. They function well in cold weather and have no operational problems.

#### **ABANDONMENT AND RESTORATION**

38. Provide a detailed description of progressive and final abandonment and restoration activities at the site.

A full A&R plan is attached.

#### **BASELINE DATA**

39. Has or will any baseline information be collected as part of this project? Provide bibliography. NO

- Physical Environment (Landscape and Terrain, Air, Water, etc.)
- Biological Environment (Vegetation, Wildlife, Birds, Fish and Other Aquatic Organisms, etc.)
- Socio-Economic Environment (Archaeology, Land and Resources Use,
- Demographics, Social and Culture Patterns, etc.)
- Other: \_\_\_\_\_

#### **REGULATORY INFORMATION**

40. At a minimum, you should ensure you have a copy of and consult the documents below for compliance with existing regulatory requirements:

- ARTICLE 13 – NCLA -Nunavut Land Claims Agreement 1993 NWNSRTA – The Nunavut Waters and Nunavut Surface Rights Tribunal Act, 2002 1993 Northwest Territories Waters Regulations, 1993
- NWB - Water Licensing in Nunavut - Interim Procedures and Information Guide for Applicants NWB - Interim Rules of Practice and Procedure for Public Hearings

- RWED Environmental Protection Act, R-068-93-Spill Contingency Planning and Reporting Regulations, 1993
- RWED A Guide to the Spill Contingency Planning and Reporting Regulations, 2002
- NWTWB - Guidelines for Contingency Planning
- Canadian Environmental Protection Act, 1999 (CEPA)
- Fisheries Act, RS 1985 - s.34, 35, 36 and 37
- DFO - Freshwater Intake End of Pipe Fish Screen Guideline
- NWTWB - Guidelines for the Discharge of Treated Municipal Wastewater in the NWT Canadian Council for Ministers of the Environment (CCME); Canadian Drinking Water Quality Guidelines, 1987
- Public Health Act - Camp Sanitation Regulations
- Public Health Act - Water Supply Regulations
- Territorial Lands Act and Territorial Land Use Regulations; Updated 2000





BOX 698, DAVIDSON, SASK., CANADA S0G 1A0  
PHONE: (306)567-2814 FAX: (306)567-2888

## PRODUCT DATA

**PRODUCT:** Calcium Chloride High Test Fines

ITEM	%	METHOD
Calcium Chloride, min.	94.0	ASTM E449-84
Alkali Chlorides, max.	4.9	ASTM E449-84
Total magnesium, as MgCl, max.	0.4	ASTM E449-84
Heavy Metal as Pb, max.	0.005	13964
Calcium Hydroxide, max.	0.20	ASTM E449-84
Sulphate (calculated as SO <sub>4</sub> ), max.	0.20	13964
Calcium Carbonate	0.20	13964
Iron, max	0.005	LDG-AM-82-73
Other Impurities, not including H <sub>2</sub> O, max.	0.98	

## SIEVE ANALYSIS

Based on STD TYLER MESH

ITEM	%
Passing #10 sieve	99
Passing #20 sieve	45
Passing #35 sieve	20
Bulk density	75 lbs/ft <sup>3</sup>

**MSDS****CALCIUM CHLORIDE-94%****PRODUCT INFORMATION****CHEMICAL NAME:** Calcium Chloride**SYNONYM(S):** High Test Fines, High Test Powder, High Test Beads,**CHEMICAL FAMILY:** Inorganic salt**Product use:** Calcium chloride is used to dehydrate natural gas with high sulfur content, gas from remote or offshore wells, or from wells with low flow rates.**MOLECULAR FORMULA:** CaCl<sub>2</sub>**SHIPPING NAME:** Calcium Chloride**PIN - UN NUMBER:** Not controlled**WHMIS:** D2B**MANUFACTURER:** The Dow Chemical Company Ltd.

P.O box 1012

Sarnia, Ontario

N7T 7K7

DOW Emergency Number: 780-998-8282 (Ft Saskatchewan, Alberta)

519-339-3711 (Sarnia, Ontario)

450-652-1000 (Varenes, Quebec)

**SUPPLIER:** Panther Industries Inc.

Box 628

Davidson, Sask. S0G 1A0

**EMERGENCY TELEPHONE NUMBER:** (306) 567-2814**HAZARDOUS INGREDIENTS**

INGREDIENTS:	WEIGHT %	C.A.S. REGISTRY NUMBER:
Calcium Chloride	94-97%	10043-52-4

**OTHER INGREDIENTS**

INGREDIENTS:	WEIGHT%	C.A.S. REGISTRY NUMBER:
Strontium Chloride	0-1%	10476-85-4
Sodium Chloride	1-2%	07647-14-5
Potassium Chloride	2-3%	07447-40-7
Water		07732-18-5

**PHYSICAL DATA****PHYSICAL STATE:** Solid.**PH:** data to indicate the product is basic**ODOUR AND APPEARANCE:** Odourless white to off white pellets.**ODOUR THRESHOLD:** Not applicable**VAPOUR PRESSURE:** <0.005 mmHg, at 20 °C.**VAPOUR DENSITY:** Not applicable**BOILING POINT:** 1670°C**SOLUBILITY IN WATER:** Very soluble**MELTING POINT:** Approx. 772°C, 1424°F**SPECIFIC GRAVITY:** 2.2**FIRE AND EXPLOSION DATA****CONDITIONS OF FLAMMABILITY:** Not applicable.**MEANS OF EXTINGUISHING:** This material does not burn. If exposed to fire from another

## MSDS

## CALCIUM CHLORIDE-94%

source, use suitable extinguishing agent for that fire.

**FLASH POINT:** Not applicable.

**UPPER FLAMMABLE LIMIT:** Not applicable.

**LOWER FLAMMABLE LIMIT:** Not applicable.

**SPECIAL FIRE FIGHTING PROCEDURES:** Keep people away. Isolate fire area and deny unnecessary entry. Firefighters should wear positive-pressure self-contained breathing apparatus (SCBA) and full protective fire fighting clothing (included fire fighting helmet, coat, pants, boots, and gloves.)

**EXPLOSION HAZARDS:** Hydrogen chloride is a hazardous combustion product at temperatures in excess of 1600 degrees Celsius.

### REACTIVITY DATA

**STABILITY:** Stable. Hygroscopic.

**HAZARDOUS POLYMERIZATION:** Will not occur

**HAZARDOUS DECOMPOSITION PRODUCTS:** Does not decompose.

**CONDITIONS TO AVOID:** None known.

**INCOMPATIBILITY:** Corrosive to some metals. Corrosive when wet. Flammable hydrogen may be generated from contact with metals such as zinc or sodium. Avoid contact with sulfuric acid. Heat is generated when mixed with water. Spattering or boiling can occur.

### HEALTH HAZARD DATA

**INHALATION:** Vapors are unlikely due to physical properties. Dust may cause irritation to upper respiratory tract. Calcium Chloride has an LD<sub>50</sub> of 1940 mg/kg oral mouse

**SKIN CONTACT:** Short single exposure not likely to cause significant skin irritation.

Prolonged or repeated exposure may cause skin irritation, even a burn. May cause more severe response if skin is damp or if material is confined to skin. May cause more severe response if skin is abraded (scratched or cut). When dissolving, the heat produced may cause more intense effects as well as thermal burns. Not classified as corrosive according to DOT. A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts.

**EYE CONTACT:** Dusts may cause severe irritation with corneal injury, pellets may cause slight eye irritation. Effects may be slow to heal. When dissolving, the heat produced may cause more intense effects as well as thermal burns.

**INGESTION:** Single dose oral toxicity is considered to be low. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury. Ingestion may cause gastrointestinal irritation or ulceration.

**Toxicological data:** Effects of chronic exposure: These effects are; Repeated exposure may cause irritation or even a burn to the skin, eyes and nasal cavity.

**IRRITANCY:** Slight.

**MUTAGENICITY:** Negative

**SENSITIZATION TO PRODUCT:** Not available.

**REPRODUCTIVE TOXICITY:** Not available.

### ANIMAL TOXICITY DATA:

LD50 - 967-1668 mg/kg oral, rat.

>5000 mg/kg skin, rabbits

### FIRST AID PROCEDURES

**INHALATION:** Remove to fresh air if effects occur. Consult a physician.

**EYE CONTACT:** Irrigate with flowing water immediately and continuously for 15 minutes. Consult medical personnel.

**SKIN CONTACT:** Wash off in flowing water or shower.

**INGESTION:** If swallowed, seek medical attention. Give 2-4 glasses of water or milk and don't induce vomiting unless directed to do so by medical personnel.

## MSDS

## CALCIUM CHLORIDE-94%

**NOTE TO PHYSICIAN:** If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

### PREVENTATIVE MEASURES

**RESPIRATORY PROTECTION:** In dusty atmospheres, use an approved dust respirator.

Atmospheric levels should be maintained below the exposure guideline.

**EXPOSURE GUIDELINES:**

Calcium chloride:	Dow IHG is 10 mg/m <sup>3</sup>
Sodium chloride:	Dow IHG is 10 mg/m <sup>3</sup>
Potassium chloride:	Dow IHG is 10 mg/m <sup>3</sup>

**EYE AND FACE PROTECTION:** Use safety glasses. For dusty operations or when handling solutions of the material, wear chemical goggles.

**SKIN PROTECTION:** When prolonged or frequently repeated contact could occur, use protective clothing impervious to this material. Selection of specific items such as faceshield, gloves, boots, apron or full-body suit will depend on operation. Remove contaminated clothing immediately, wash skin area with soap and water and launder clothing before reuse. If hands are cut or scratched, use gloves impervious to this material even for brief exposures.

**STORAGE REQUIREMENTS:** Keep containers tightly closed when not in use. Store in a dry place. Protect from atmospheric moisture.

**ENGINEERING CONTROLS:** Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

**HANDLING:** Heat developed during diluting or dissolving is very high. Use cool water when diluting or dissolving (temperature less than 80F, 27C)

### ENVIRONMENTAL PROTECTION DATA

**PROCEDURES TO BE FOLLOWED IN CASE OF A LEAK OR SPILL:** Contain spill.

Shovel and sweep up spill and place in a suitable and properly labelled container. Flush residue with large amounts of water. Keep contaminated water from entering sewers and water courses.

**WASTE DISPOSAL:** All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations.

**AQUATIC TOXICITY:** Material is practically non-toxic to aquatic organisms on an acute bases (LC50/EC50 > 100 mg/L in most sensitive species).

### PREPARATION INFORMATION

**MSDS PREPARED BY:** Technical Department  
Panther Industries Inc.  
Davidson, Sask.  
Ph. (306) 567-2814

**DATE PREPARED/REVISED:** Feb 17 2004

**DATE PRINTED:** Feb 17 2004

**REFERENCES:** 1. Patty's Industrial Hygiene and Toxicology 3rd Ed.1981 by Clayton & Clayton John Wiley & Sons, New York.  
2. Manufacturer's MSDS.