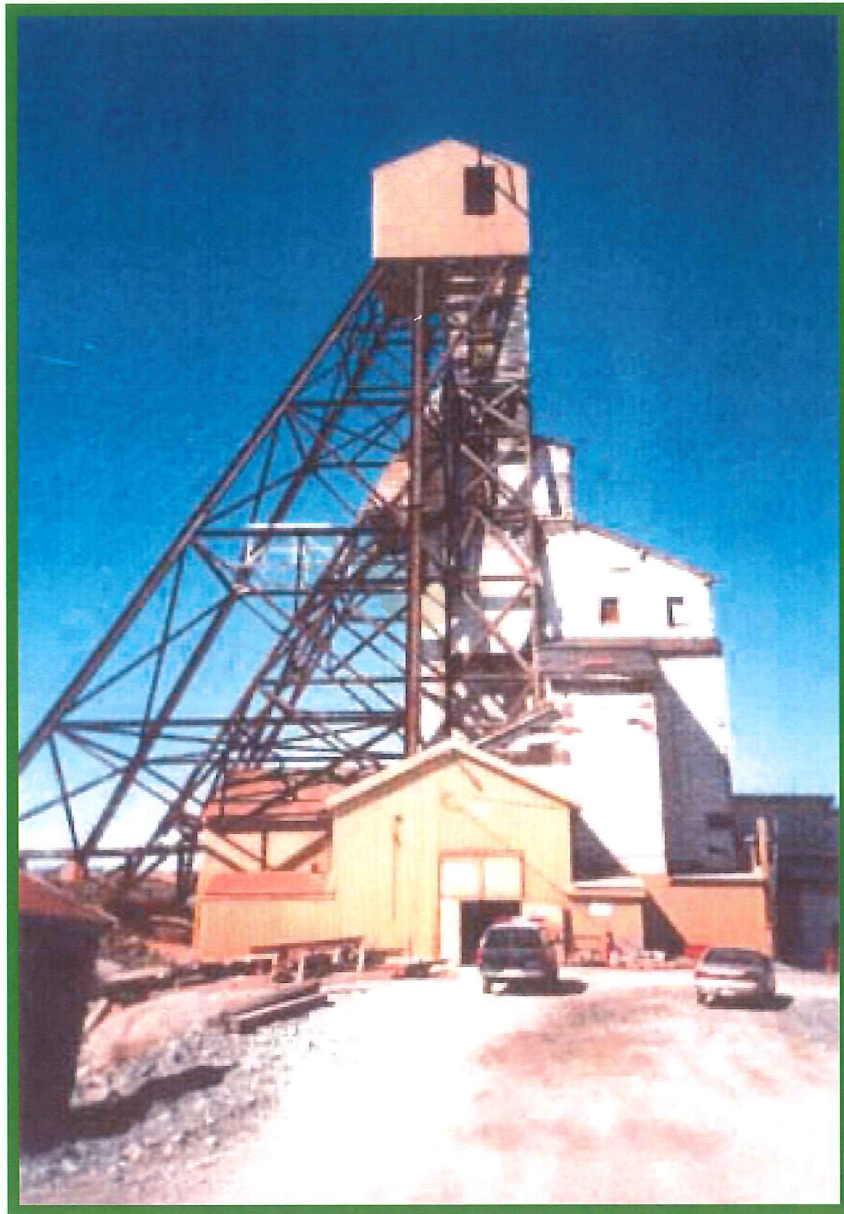

Final Abandonment and Restoration Plan Miramar Giant Mine Ltd.



Submitted to:

Miramar Giant Mine Ltd.
Yellowknife, NT

VOLUME III OF III

September 26, 2001





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**REPORT ON**

**FINAL ABANDONMENT AND
RESTORATION PLAN
PREPARED FOR
INDIAN & NORTHERN AFFAIRS CANADA
BY
MIRAMAR GIANT MINE LTD.
YELLOWKNIFE, NT**

VOLUME III OF III

Submitted to:

Miramar Giant Mine Ltd.
Yellowknife, NT

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APPENDIX A-9
ANNUAL DAM INSPECTION 2001

REPORT ON

**2001 GEOTECHNICAL INSPECTION OF
GIANT MINE TAILINGS DAMS
YELLOWKNIFE, NT**

Submitted to:

Miramar Giant Mine Ltd.
Yellowknife, NT

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August 13, 2001
012-1477/2000

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1.0 INTRODUCTION

1.1 General

This report presents the results of Golder Associates Ltd. examination of the water and/or tailing retaining structures on the Miramar Giant Mine property. The purpose of the examination is to partially fulfil the requirements of Miramar's Giant Mine Water Licence (NIL2-0043).

Authorization to proceed with the work was given in the form of a Purchase Order Number 9707063, issued by Miramar Giant Mine Ltd. on June 5, 2001.

1.2 Objectives

The objectives of the examination are to visually assess the performance of the tailing dams and other water and/or tailing retaining structures within the Giant property. All deficiencies and points of concern will then be addressed to Miramar Giant Mine Ltd.

1.3 Water Licence

Conditions of the Water Licence that apply to the annual inspection are as follows:

- A minimum freeboard limit of 0.5 m should be maintained on water retaining structures at all times;
- Erosion of the facilities should be rectified immediately;
- The inspection should be carried out before July 1 with the report to follow to the Water Board within 60 days of the inspection date.

The project scope was identified and discussed in Golder Associates letter dated June 4th, 2001. The scope of work is summarized as follows:

- Review previous year's inspection report;
- Inspect the dams in the Giant Tailing Containment Area or tailing management system; and
- Complete inspection reports summarizing the results of the inspections and provide recommendations for any work that may be required.

2.0 BACKGROUND INFORMATION

Mine tailing has historically been deposited at the Giant site since production began in 1948. Historical aerial photographs indicate that tailing was initially deposited east of the mill site in a small valley that leads to Back Bay. This practice was stopped in 1951, at which time tailing from the operation was deposited into a small lake north of the mine. The liquid portion of the tailing drained both into Baker Creek, which discharges into Back Bay, and northeast towards the mouth of the Yellowknife River. This continued until 1968, when the latter flow was stopped [D. Sutherland, 1989].

Mine tailing was mainly deposited northeast of the mill in an area that is known today as the North/Central Pond. The natural topography directed surface runoff and mine tailing towards Baker Creek.

Rock fill dams were constructed to direct and hold back tailing solids at the present day sites of Dams 1, 2, 3, and 4. These dams were apparently constructed in stages and composed of mine waste rock fill over bedrock, silty clay, or mine tailing. By 1974, the original rock fill dams had reached their operating capacity and additional storage was required. Subsequently, Dams 1, 2, 3, 4A, and 4B were lined with an upstream clay layer and raised to provide additional storage and create a two phase clarification system.

Dams 5, 6, and 7 were then constructed [Geocon, 1975]. Dam 8 was constructed by 1979 and further construction was completed for Dams 2, 3, 4A, 4B, 4C, 5, 6, and 8 [Geocon, 1980]. Dams 9, 10, and 11 were constructed in 1983 to create additional storage and create what is now called the South Pond. Dam 11 was further raised in 1984.

Additional tailing storage requirements prompted the design and construction of the Northwest Tailing Containment Area. Subsequently, Dams 21 A, B, C, and D; and Dams 22 A, and B were designed and constructed in 1988. No major construction has taken place since construction of the Northwest Tailing Containment Area.

Miramar Mining Corporation acquired the Giant Mine assets under its indirectly wholly owned subsidiary, Miramar Giant Mine Ltd. from the Department of Indian Affairs and Northern Development (DIAND) on December 14, 1999. The property had been previously owned and operated by Royal Oak Mines Inc. until the company went into receivership in April 1999.

The tailing retention structures were inspected in the past by Geocon Inc. from the mid 1970's through 1992; by Golder Associates Ltd. from 1993 through 1999, and by EBA Consulting in 2000. The structure of this report follows the layout of previous reports for continuity.

3.0 SYSTEM OPERATION

Since the late 1980's, when ore was being processed on the Giant property, mine tailing was mainly deposited into the Northwest Tailing Containment Area, with a small amount deposited into the South Pond. Accumulated water was returned to the Effluent Treatment Plant for initial treatment and discharged to the Settling Pond. The water would then seep to the Polishing Pond before release to Baker Creek. The water was decanted into carbon columns to remove any remaining gold before being released.

Once milling ceased, only minewater has been placed into the tailing disposal areas, where the same treatment process continues. Maximum water level in the Northwest Tailings Containment Area is typically reached each spring, prior to treatment and release into the environment after spring break-up.

A summary of the typical water levels for the various ponds are provided in the following table:

Month-end/Year	Date	Northwest Pond Water Elevation (ft)	South Pond Water Elevations (ft)	North Pond Water Elevation (ft)	Polishing Pond Water Elevation (ft)
Jun - 00	14-June	6095.0	6083.7	6035.9	6034.7
Jul - 00	26-July	6092.8	6082.7	6034.2	6033.7
Aug - 00	30-August	6085.6	6083.1	6036.9	6034.4
Sep - 00	25-Sept	6082.9	6078.7	6037.6	6033.6
Oct - 00	18-Oct	6087.5	NA	6036.6	NA
Nov - 00	NA	NA	NA	NA	NA
Dec - 00	05-Dec	6090.6	NA	NA	NA
Jan - 01	10-Jan	6092.5	NA	NA	NA
Feb - 01	16-Feb	6093.7	NA	NA	NA
Mar - 01	14-Mar	6094.2	NA	NA	NA
Apr - 01	26-Apr	6094.9	NA	NA	NA
May - 01	22-May	6095.8	6080.3	6039.2	6033.2
Jun - 01	14-Jun	6095.1	6084.1	6040.2	6035.8

Note: all elevations are referenced to mine datum.

4.0 INSPECTION REPORTS

Inspection reports for the dams are presented in the attached appendices. Photographs of the dams are provided to assist in the presentation of the reports. Locations of all dams are shown on Figure 1.

Inspection of the dams indicated that Dam #1, Dam #11 and Dam #22B require work during the 2001 construction season. The recommendations are as discussed on June 22, 2001 and as presented on each of the Inspection Reports. The most significant of these maintenance items is the subsided area on the crest of Dam #1 immediately above the I-38 portal. This area has subsided approximately 0.5 m over the past two years. In addition to being a potential safety hazard in the event of a failure, it is understood that this has resulted in reduced efficiency of the polishing pond by substantially reducing the volume of water that can be retained in the settling pond/polishing pond structure. It is recommended that the clay core and associated waste rock in this area be raised by at least 0.5 meter during the post discharge season (September/October) of the 2001 operating year.

5.0 CLOSURE

We trust that this report satisfies your present requirements. Golder Associates would be pleased to provide any further information that may be needed and to advise on the geotechnical aspects of the recommendations. Please contact our Yellowknife office if you require any additional information.

GOLDER ASSOCIATES LTD.

John A. Hull, P.Eng.
Associate

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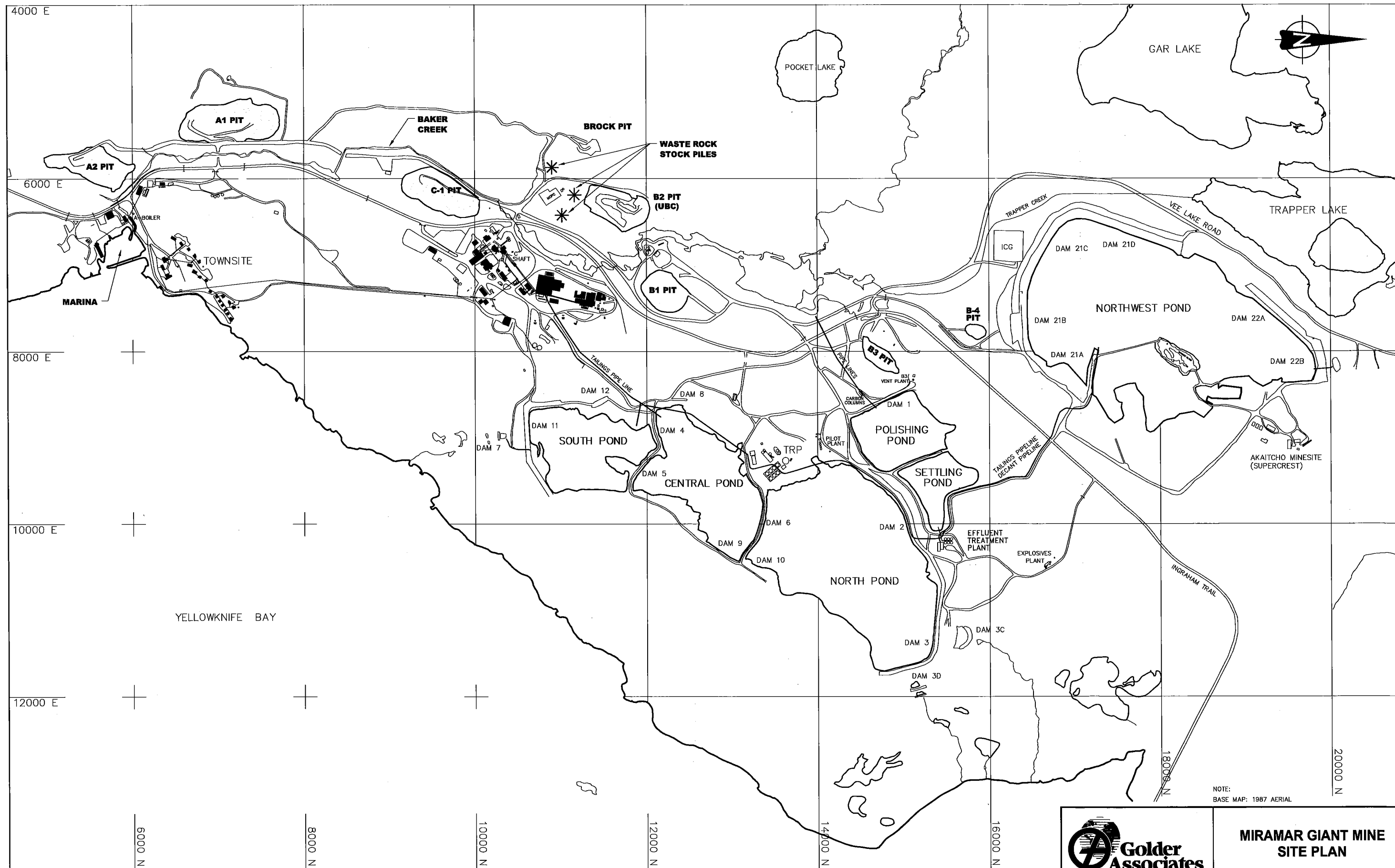
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Drawing: N:\Work\1400\012-1477 2001 Giant Dams\DRAWINGS\FIGURE 1.dwg Plotted: Nov 15, 2001 - 2:09pm By: RRoque



		MIRAMAR GIANT MINE SITE PLAN	
Drawn: JK	App'd:	Date: Nov 15, 01	Figure: 1
Project No: 012-1477		Revision No:	

APPENDIX A

INSPECTION REPORTS
ORIGINAL TAILING DISPOSAL AREA
NORTH, CENTRAL AND SOUTH PONDS

DAM 1 (ORIGINAL TAILING AREA)

<u>LOCATION:</u>	West end of Polishing Pond, (refer to Figure 1).
<u>FUNCTION:</u>	Retains western portion of Polishing Pond.
<u>DISCHARGE FACILITIES:</u>	Abandoned decant structure; discharge pipeline to carbon columns through a pipe box near the south end of the dam.
<u>LENGTH:</u>	+/- 275 m.
<u>MAX HEIGHT:</u>	+/- 9 m est.
<u>CREST WIDTH:</u>	Greater than 15 metres due to placement of seepage control materials on upstream face.

BACKGROUND

Dam 1 is part of the original tailing containment structure for the mine. Early dam construction consisted of placing mine waste rock fill in about 3 metre lifts. The dam was originally considered to be primarily a solids retaining structure, and a water retention structure in a limited role. The dam has been periodically raised over time and an upstream clay seal has been placed to reduce seepage.

The dam has a history of seepage passing through the downstream toe. Broken instrumentation on the downstream toe indicates that the dam has experienced some movement. A heaved area was identified at the downstream toe in 1981.

Seepage reportedly increases through the north end of the downstream toe when the water level in the Polishing Pond approaches the intake elevation on the abandoned decant structure.

WATER LEVEL

At the time of inspection, the water level in the Polishing Pond was approximately 0.71 m below the crest of the clay core and about 440 mm below the intake at the decant structure.

CREST CONDITION

The travelled portion of the crest appeared to be generally in good condition.

The upstream face of the dam was in good shape.

Vegetation was well established on the upstream side.

DOWNSTREAM SLOPE AND TOE

Seepage was observed through the overburden material near the central part of the downstream toe. The seepage observed was clear. This seepage was also observed along the north side of the access road adjacent to the B3 Pit from the Ingraham Trail.

Two seepage collection sumps are located along the north toe of the dam. The upstream sump had approximately 0.3 m of water while the downstream sump was dry. There was no visible sign (i.e. flowing water) that seepage was occurring in this immediate area at the time of this inspection. A pipe was observed in the upstream sump that leads to the crest of the dam. There was no pump currently in place to transfer water from the sump back to the pond.

Two pipes lead through a pipe box at the south end of the dam, down the downstream slope to the carbon columns. Two pipes lead from the carbon columns to the discharge point near the Ingraham Trail. Water collects in an area adjacent to the access road south of the B3 Pit, immediately downstream of the carbon columns.

COMMENTS AND RECOMMENDATIONS

The most important maintenance item for the dam structure, is the subsided area on the crest of the dam. This area has settled or subsided approximately 0.5 meter over the past two years. It is understood that this has reduced the efficiency of the polishing pond by reducing the volume of water that can be retained behind Dam 1. It is recommended that the clay core and associated waste rock in this area be raised by at least 0.5 meter during the post discharge season (September/October) of the 2001 operating year.

Dam 1 is an important component of the minewater treatment system and retains a substantial volume of water. Long term stability of this dam is important. There is also an active opening to underground immediately downstream via the B3 Pit. Documented history of this dam indicates that some seepage and movement has occurred over time. The seepage appears to continue, as observed by the water collecting in the north sump and moving through the overburden material. Since, this dam will continue to be active for some time, we recommend continued monitoring be carried out. An instrumentation

program in the form of slope indicators and piezometers is required, if the dam is to continue to operate for the long term management of minewater.

The decant structure through the south end of the dam is abandoned. The system should be grouted or removed in the initial stages of the final abandonment and restoration of the mine.

The area immediately downstream of the carbon columns collects water. The grade through this area should be examined and adjusted to direct the ponded water through the downstream culverts. Alternatively, the downstream culverts could be examined and adjusted to pass the collected water.



PHOTOGRAPH 1

Downstream toe area of Dam 1.
Area is wet from seepage through dam foundation



PHOTOGRAPH 2

Decant structure at Dam 1.



PHOTOGRAPH 3

Crest of Dam 1 looking east.

DAM 2 (ORIGINAL TAILING AREA)

- LOCATION:** Northwest boundary of North Pond. (refer to Figure 1).
- FUNCTION:** Dam 2 currently retains less than 1.5 m of water differentially between the North Pond and the Settling Pond. The crest and downstream toe serves as access to the effluent treatment plant. Tailing and water lines lay on and across the crest of the dam.
- DISCHARGE FACILITIES:** Historically there were two decant structures; one near the east abutment and one near the west abutment. Both are abandoned under the dam's present function.
- A pump and water line run along the upstream face towards the Effluent Treatment Plant.
- LENGTH:** +/- 365 m.
- MAX HEIGHT:** +/- 12 m est.
- CREST WIDTH:** Varies
- WATER LEVEL:** Approximately 1.0 m to 1.5 m above Settling Pond elevation.

BACKGROUND

Dam 2 is part of the original tailing containment structure for the mine. Early dam construction consisted of placing mine waste rock fill in about 3 metre lifts. The dam was originally considered to be primarily a solids retention structure, and a water retention structure in a limited role. The dam has been raised over time and an upstream clay seal has been placed to reduce seepage.

Historically the dam retained water and mine tailing. The dam was partially dismantled in 1991 to supply materials for other construction.

CREST CONDITION

The crest generally comprises of remnants of the old clay core.

The crest is in good condition for the current function of the dam.

UPSTREAM SLOPE

The upstream slope varies across the entire width. Generally, the slope was relatively flat towards the water. Varying degrees of gully erosion is evident across the face.

An access road constructed of mine waste rock leads down to a pump on the upstream face.

DOWNSTREAM SLOPE AND TOE

The downstream toe and slope has been partially dismantled. Some mine waste rock has been stockpiled along the downstream toe. There was no evidence of seepage through the toe.

INSTRUMENTATION

There have been references to thermistor and piezometer readings in previous reports. This data was not available at the time of preparing this report. These instruments have been destroyed or lost over time.

COMMENTS AND RECOMMENDATIONS

The dam currently plays only a minor role and appears to stable under its current function. The gully erosion upstream should be graded.

Minewater should not be discharged on to the upstream face to minimize further erosion.



PHOTOGRAPH 4

Upstream face of dam at pump station.



PHOTOGRAPH 5

Downstream slope of Dam 2 with settling pond in background.

DAM 3 (ORIGINAL TAILING AREA)

LOCATION: Northeast side of North Pond. (refer to Figure 1).

FUNCTION: Retains tailing solids.

**DISCHARGE
FACILITIES:** None.

LENGTH: +/- 460 m.

MAX HEIGHT: +/- 15 m est.

CREST WIDTH: Approximately 11 m.

WATER LEVEL: Unknown; exposed tailing is dry on the surface.

BACKGROUND

Dam 3 is part of the original tailing containment structures for the mine. The dam is divided into two segments by bedrock outcrops located at the west and southwest abutments and near the centre of the structure. Early dam construction consisted of placing mine waste rock fill in about 3 metre lifts. The dam was originally considered to be primarily a solids retention structure, and a water retention structure in a limited role. Borehole information through the west portion of the dam indicates that the dam is underlain by tailing covering native overburden that consists of peat, organic silty clay, silty clay and glacial till. The dam has been raised periodically over time and an upstream clay seal has been placed to reduce seepage.

The dam has a history of seepage through the downstream toe near the abutments. It is understood that tailing deposited in this area during the winter months froze into a complex succession of layers of tailing and ice to a thickness of up to 3.3 m. Prior to the addition of an upstream clay seal, Dam 3 experienced a small slide on the upstream side and longitudinal cracking, sloughing and excessive subsidence of the rockfill.

The area has a recent history of wind blown tailing overtopping the crest. "Soil Sement" has been applied to control fugitive dust in this area during the past three summers.

CREST AND UPSTREAM FACE

The crest and upstream face appeared to be in good condition. Some vegetation growth was observed on the upstream face and crest. A portion of the dam near the west abutment had been historically removed.

DOWNSTREAM SLOPE AND TOE

There was evidence to suggest that some seepage or movement had historically occurred through the downstream face of the east end.

Water collects at the downstream toe of the west end. However, there was no evidence of seepage through the dam at the time of this inspection.

COMMENTS AND RECOMMENDATIONS

The dam was in good condition and appears to be stable with regards to its current function. No maintenance is currently required for this structure.



PHOTOGRAPH 6

Crest of Dam 3 looking east, old pond area on right.



PHOTOGRAPH 7

Downstream area of west end of Dam 3.
Pond at Dam 3C at right of photo.

DAM 3C (ORIGINAL TAILING AREA)

<u>LOCATION:</u>	North of west leg of Dam; (refer to Figure 1)
<u>FUNCTION:</u>	Barrier for seepage collection sump at downstream toe of west leg of Dam 3.
<u>LENGTH:</u>	+/- 45 m.
<u>MAX HEIGHT:</u>	+/- 1.5 m (est.).
<u>CREST WIDTH:</u>	Approximately 3 m.
<u>DISCHARGE FACILITIES:</u>	None

BACKGROUND

Dam 3C was constructed in the mid 1970's to act as a seepage collection barrier downstream of Dam 3. There have been no reported problems with this dam.

WATER LEVEL

The water level was approximately 1.2 m below the crest of the dam.

CREST CONDITION

The crest appeared to be in good condition and was covered with long grasses and small shrubs.

DOWNSTREAM SLOPE AND TOE

The downstream slope appeared to be in good condition and was covered with long grasses and small shrubs. There was no visible evidence of seepage. However, the downstream area appeared to be wet in several areas with lush vegetation growth.

COMMENTS AND RECOMMENDATIONS

The dam appeared to be functioning well for its present function. No maintenance is required for this dam.

DAM 3D (ORIGINAL TAILING AREA)

<u>LOCATION:</u>	East of east leg of Dam 3; (refer to Figure 1).
<u>FUNCTION:</u>	Barrier for seepage collection sump at downstream toe of east leg of Dam 3.
<u>LENGTH:</u>	+/- 30 m.
<u>MAX HEIGHT:</u>	+/- 4 m (est.)
<u>CREST WIDTH:</u>	Approximately 3 m.
<u>DISCHARGE FACILITIES:</u>	None

BACKGROUND

An earth dam constructed in the mid 1970's to act as a seepage collection barrier downstream of the east leg of Dam 3. A concrete dam was constructed in the late 1970's to act as a backup to Dam 3D. It should be noted that some reports have previously identified the concrete dam as Dam 3D.

WATER LEVEL

There was no water present adjacent to Dam 3D on June 20 2001. Water was ponded in front of the concrete dam at the time of this examination.

CREST CONDITION

The crest is generally in good condition with some minor tension cracks on the surface.

DOWNSTREAM SLOPE AND TOE

The downstream slope of Dam 3D was in good condition at the time of this examination. The seepage collection area downstream of Dam 3D was dry.

The concrete wall is a near vertical structure with no signs of seepage. A seepage collection pipe was in place on the downstream side of the concrete structure.

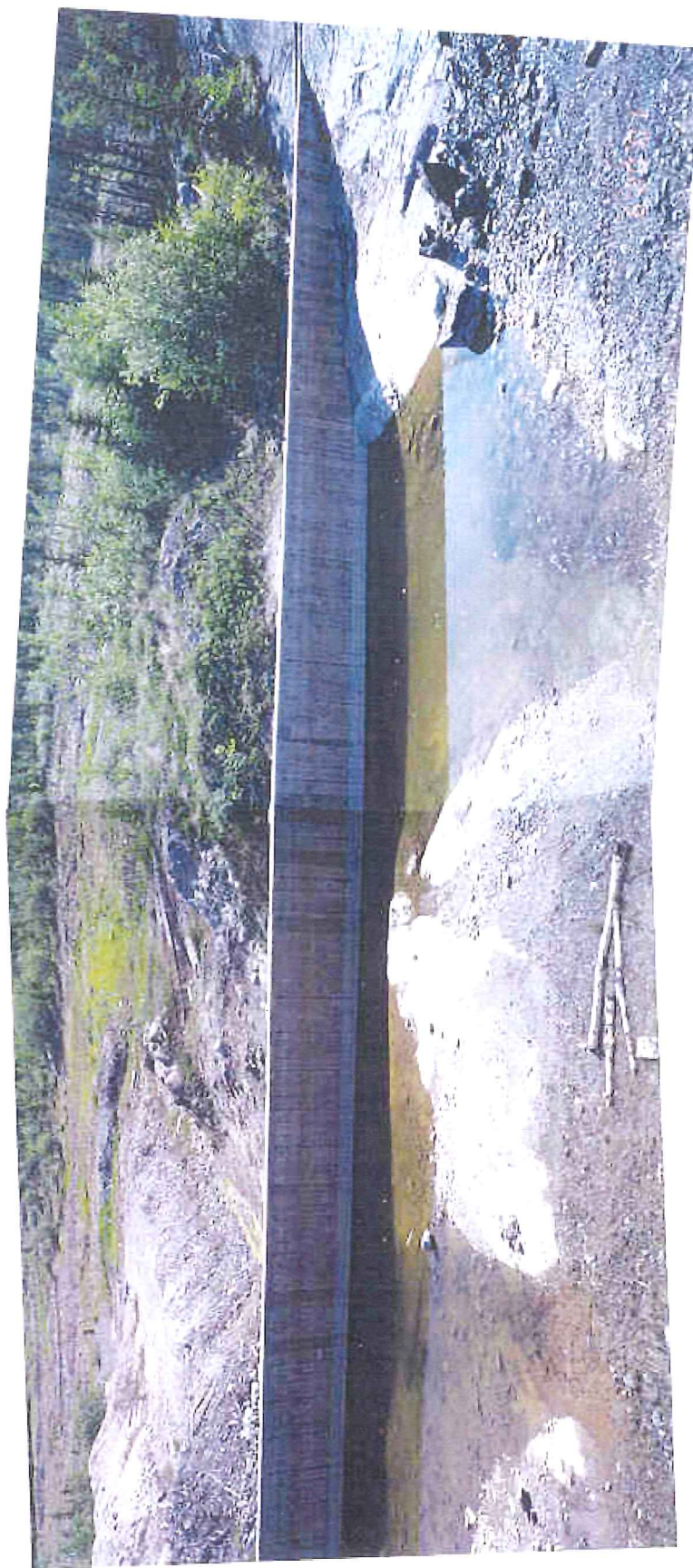
COMMENTS AND RECOMMENDATIONS

The earth and concrete dams appeared to be in good condition. No maintenance is required for these dams under their present function.



PHOTOGRAPH 8

Dam 3D looking east, Dam 3 on right.



PHOTOGRAPH 9

Concrete dam downstream of Dam 3D.

Golder Associates

DYKE 4 (ORIGINAL TAILING AREA)

<u>LOCATION:</u>	East part of North boundary of South Pond; (refer to Figure 1).
<u>FUNCTION:</u>	The structure provides access to the east side of the Central Pond.
<u>DISCHARGE FACILITIES:</u>	Abandoned pipes.
<u>LENGTH:</u>	+/- 75 m.
<u>MAX HEIGHT:</u>	+/- 1.8 m above tailing
<u>CREST WIDTH:</u>	Approximately 6 m.

BACKGROUND

Dyke 4 (originally constructed as Dams 4A, 4B, and 4C) was part of the original tailing containment structures for the mine. Early dam construction consisted of placing mine waste rock fill in about 3 metre lifts. The dam was originally considered to be primarily a solids retention structure, and a water retention structure in a limited role. Clay material was placed upstream in 1979 to reduce seepage. The dam formed the barrier for the original southern limit of the tailing containment area.

WATER LEVEL

No water was found adjacent to this dam. Dry tailing was found approximately 1.0 m below the crest.

CREST CONDITION

The crest was generally found to be in good condition. Tire tracks have been worn into the clay core surface.

DOWNSTREAM SLOPE AND TOE

The downstream toe was well vegetated with rye grass and other various plant species. Exposed tailing immediately downstream have good vegetation growth.

COMMENTS AND RECOMMENDATIONS

Dyke 4 appears to function well under its present function. No maintenance is required for this structure at this time.



PHOTOGRAPH 10

Dyke 4 looking east. South pond on right.

DYKE 5 (ORIGINAL TAILING AREA)

<u>LOCATION:</u>	West part of North boundary of South Pond; (refer to Figure 1)
<u>FUNCTION:</u>	Retains some mine water and forms the division between South Pond and Central Pond.
<u>DISCHARGE FACILITIES:</u>	A decant water line from the South Pond to the North Pond passes through the dyke.
<u>LENGTH:</u>	+/- 135 m.
<u>MAX HEIGHT:</u>	+/- 2.0 m (est.) above upstream water.
<u>CREST WIDTH:</u>	+/- 3 to 5 m.
<u>WATER LEVEL:</u>	+/- 2.0 m below crest (Photo 15).

BACKGROUND

Dyke 5 (originally constructed as Dam 5) was constructed in the late 1970's as part of two-phase clarification system. Seepage through the dam was reduced in 1981 by creating an upstream clay barrier and a downstream clay cut-off at the toe. The dam became the North barrier of the South Pond upon construction of Dam 11 in the early to mid 1980's. The storage volume for South Pond was virtually depleted in the early 1990's and the impoundment was almost completely filled with tailing.

The South Pond was intermittently used to store tailing and minewater up until cessation milling at Giant Mine. Recently, the east side of the south pond has been used to store seepage water from downstream of Dam 11. A decant pipe was placed through the dyke in 1999 to convey accumulated water in the South Pond directly to the North Pond. At the time of the inspection this decant pipe was operating.

CREST CONDITION

The crest was generally in good condition with the exception of tire tracks worn into the travelled surface. Some minor cracking was observed near the east abutment.

DOWNSTREAM SLOPE AND TOE

The downstream slope was generally in good condition with only minor rill surface erosion. Some natural vegetation was observed on the slope. A small pond of water was observed at the downstream toe in the South Pond.

COMMENTS AND RECOMMENDATIONS

Based upon previous inspection reports, this dyke has only recently been used to retain water once again.

Dyke 5 appears to function well under its present function.

No maintenance is required for this structure at this time.



PHOTOGRAPH 11

Dyke 5 with water from south pond on right.

DYKE 6 (ORIGINAL TAILING AREA)

<u>LOCATION:</u>	North boundary of Central Pond; (refer to Figure 1)
<u>FUNCTION:</u>	Originally Dam 6 between Central Pond and North Pond.
<u>DISCHARGE FACILITIES:</u>	Decant outlet from South and Central Ponds.
<u>LENGTH:</u>	+/- 245 m.
<u>MAX HEIGHT:</u>	+/- 9 m est.
<u>CREST WIDTH:</u>	Unknown; covered with tailing.
<u>WATER LEVEL:</u>	None

BACKGROUND

Dam 6 was originally to be constructed as part of a three pond clarification system. This idea was abandoned when the conditions for construction were considered to be unfavourable. The dam was constructed as a divider dyke on top of existing tailing (named Causeway Dam No. 6) in 1979. The dyke was created to retain solids while allowing water to pass through two culverts incorporated into the structure. The dam was raised approximately 1.5 m in 1981 to stack tailing during the winter months. The dam partially collapsed as a result of the tailing reclamation project conducted in the North Pond in the early 1990's.

The dam was partially reconstructed in 1998 with a mixture of mine waste and tailing. A decant was added to convey water from the Central Pond to the North Pond. An outlet from a second decant was added in 1999 to convey water from the South Pond to the North Pond.

CREST CONDITION

The crest is covered with mine tailing.

DOWNSTREAM SLOPE AND TOE

Gully erosion was observed in the tailing on the downstream slope near the west abutment at the discharge pipe location.

COMMENTS AND RECOMMENDATIONS

The dyke has undergone some sloughing and erosion on its downstream face and crest. Since the majority of the tailing in the Central Pond are probably in a dry or frozen state, failure of this structure will only result of sloughing of tailing into the North Pond.

To reduce the potential for additional sloughing, the tailing area around the discharge pipe should be flattened or more rock should be added. In addition, the freeboard on the inlet end of the decant should be improved. Ultimately, a proper spillway could be constructed to direct runoff over the crest and downstream face or the north face of the Central Pond should be graded to allow for sheet flow to the North Pond from the Central Pond.

The dyke was not designed to retain water and should not be used for this purpose.



PHOTOGRAPH 12

Decant discharge line from the central pond. Slope should be monitored and if needed, more rock added at toe of slope.

DAM 7 (ORIGINAL TAILING AREA)

<u>LOCATION:</u>	South of South Pond, downstream of Dam 11; (refer to Figure 1).
<u>FUNCTION:</u>	Retains seepage from Dam 11 whereby it is returned to the South Pond by pumping.
<u>DISCHARGE FACILITIES:</u>	None
<u>LENGTH:</u>	+/- 15 m.
<u>MAX HEIGHT:</u>	+/- 2.4 m est.
<u>CREST WIDTH:</u>	Approximately 3 m.
<u>WATER LEVEL:</u>	Controlled by float and pumping back to South Pond.

BACKGROUND

Dam 7 was designed and constructed in the late 1970's as a backup to collect seepage from the main dams.

CREST CONDITION

The crest is generally in good condition. The surface is capped with approximately 0.5 m of waste rock.

DOWNSTREAM SLOPE AND TOE

The slope appeared to be in good condition and well vegetated. There was no sign of seepage.

COMMENTS AND RECOMMENDATIONS

Dam 7 appeared to be performing satisfactory. No maintenance is required for this structure.



PHOTOGRAPH 13

Downstream face of dam.



PHOTOGRAPH 14

Upstream face of dam.

DAM 8 (ORIGINAL TAILING-AREA)

LOCATION: West side of Central Pond; (refer to Figure 1)

FUNCTION: Retains dry tailing.

**DISCHARGE
FACILITIES:** None.

LENGTH: +/- 75 m.

MAX HEIGHT: +/- 3 m (est.)

CREST WIDTH: Unknown; dry tailing flush with surface.

WATER LEVEL: No water, only dry tailing.

BACKGROUND

Dam 8 was constructed in the late 1970's as the tailing level rose in Tailing Pond 1 (now Central and North Pond). Some modifications in the form of slope flattening and expansion of the upstream clay lining were made to the structure in 1980 to reduce sloughing and minor seepage. Some minor erosion had occurred in 1994 as a result of discharging from a pumper truck. The downstream slope was steepened as a result of a ramp cut into the back slope in 1995. This resulted in some cracking on the downstream crest.

Experimentation with manure and peat placed on tailings in 1998 has resulted in good vegetation growth immediately upstream of the dam.

CREST CONDITION

The crest is level with the upstream tailing. Some tension cracks observed on the downstream crest.

DOWNSTREAM SLOPE AND TOE

The downstream slope was uneven and near vertical in some places. Previous inspection reports recommended placing additional fill on the backslope ramp. This recommendation does not appear to have been implemented.

COMMENTS AND RECOMMENDATIONS

Dam 8 appears to be performing adequately under its current function. However, the downstream slope should be graded to prevent sloughing and erosion, as recommended in previous inspection reports.



PHOTOGRAPH 15

Downstream slope should be flattened.

DAM 9 (ORIGINAL TAILING AREA).

LOCATION: South extension from east abutment of Dyke 6; (refer to Figure 1)

FUNCTION: Retains dry tailing from Central Pond.

**DISCHARGE
FACILITIES:** None

LENGTH: +/- 75 m.

MAX HEIGHT: +/- 11 m (est).

CREST WIDTH: Approximately 3 to 5 m.

WATER LEVEL: None; only dry tailing.

BACKGROUND

There does not appear to be a record of any problems with this Dam. It is understood that this dam was constructed in the late 1970's with rising tailing levels.

CREST CONDITION

The crest appeared to be in good condition. The upstream slope was well vegetated.

DOWNSTREAM SLOPE AND TOE

The downstream slope appeared to be stable and in good condition. There was no sign of seepage along the downstream toe.

COMMENTS AND RECOMMENDATIONS:

Dam 9 appears to be performing well under its current function. No maintenance is required.

DAM 10 (ORIGINAL TAILING AREA)

LOCATION: Northeast extension from east abutment of Dyke 6; (refer to Figure 1).

FUNCTION: Originally to retain tailing in the North Pond. The dam currently serves no purpose.

**DISCHARGE
FACILITIES:** None.

LENGTH: +/- 60 m.

MAX HEIGHT: +/- 4.5 m (est).

CREST WIDTH: Approximately 3 to 5 m.

WATER LEVEL: There is no water near the dam.

BACKGROUND

There does not appear to be a record of any problems with this Dam. It is assumed that this dam was constructed in the late 1970's to deal with rising tailing levels.

CREST CONDITION

The crest appeared to be in good condition.

DOWNSTREAM SLOPE AND TOE

The downstream slope appeared to be stable and in good condition. There was no sign of seepage at the toe.

COMMENTS AND RECOMMENDATIONS

The dam is in good condition. No maintenance is required.

DAM 11 (ORIGINAL TAILING AREA)

<u>LOCATION:</u>	South boundary of South Pond; (refer to Figure 1).
<u>FUNCTION:</u>	Retains tailing and mine water.
<u>DISCHARGE</u>	None
<u>FACILITIES:</u>	There is a return line from the seepage collection sump.
<u>LENGTH:</u>	+/- 425 m.
<u>MAX HEIGHT:</u>	+/- 15 m (est.)
<u>CREST WIDTH:</u>	About 10 m.
<u>WATER LEVEL:</u>	Dry tailing was approximately 1.2 m below the crest at the west end of the dam. Water was observed to be approximately 1.8 m below the crest near the east abutment.

BACKGROUND

Dam 11 was constructed in 1984 (also referred to as South Dam) to increase tailing storage and create the South Pond. Instrumentation in the form of piezometers and thermistors was incorporated into the dam construction. Seepage collects downstream in a sump created by Dam 7. This seepage is pumped back into the South Pond. Records of seepage rates were not incorporated into this report.

Seepage was previously reported at the north end of the north extension. This seepage has not been observed since the 1995 inspection.

CREST CONDITION

Tailing have been deposited up to the elevation of the crest of the dam along most of the length of Dam 11. At present, the water stored in the pond is maintained well away from the dam crest. This practice should be continued or the dam crest increased by 0.5 m. Good vegetation growth was present on the clay core on the eastern leg of the dam.

DOWNSTREAM SLOPE AND TOE

The downstream slope is bermed at two levels. Some dry tailing was observed at the downstream toe on the first bench level near the east abutment.

Seepage collects in a downstream sump that is pumped back to the South Pond on a regular basis. The water is discharged into Pond 11 at a point some 30 m from the crest of the dam. At present the system to support the discharge pipe is in disrepair and the pipe support system should be repaired or re-built.

COMMENTS AND RECOMMENDATIONS:

Dam 11 appears to be performing well with its present function.

The discharge pipe from the seepage pond should be rebuilt before this winter.

If, Dam 11 is to be used in the future as part of the long term water management system for the mine, the piezometers in the dam should be repaired or replaced, as data collected would be needed for future operation of the dam.



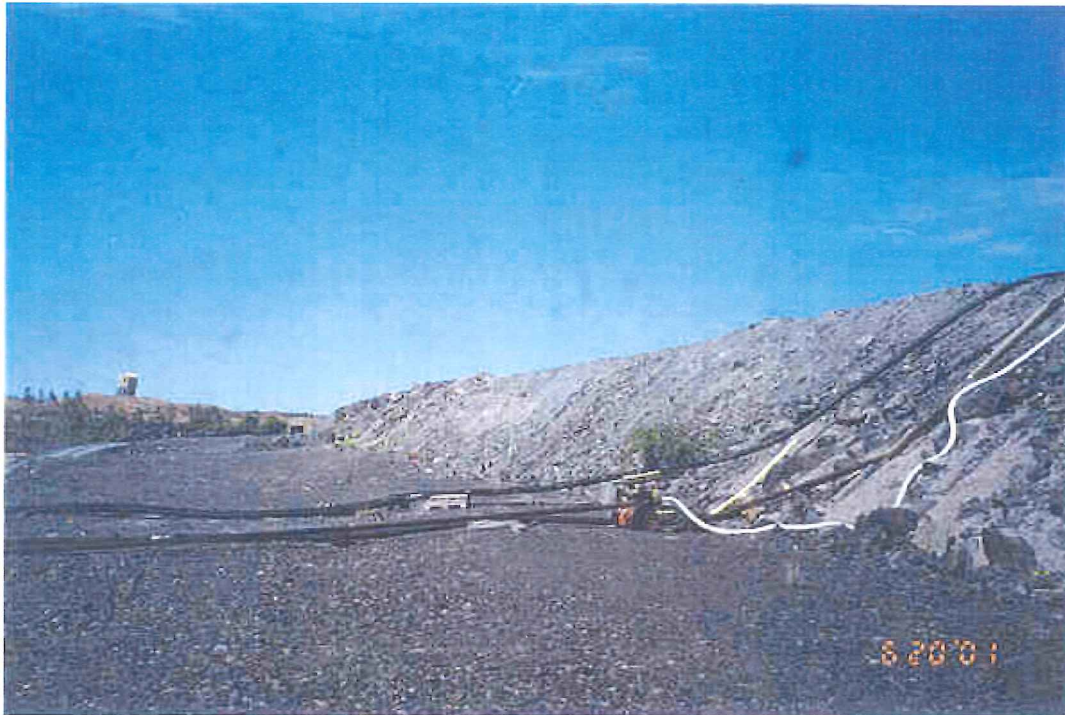
PHOTOGRAPH 16

West end of dam with water ponded at toe of dam.



PHOTOGRAPH 17

Crest of Dam 11 looking east.



PHOTOGRAPH 18

Lower bench on dam, looking west.
Pipes for seepage water return from Dam 7



PHOTOGRAPH 19

Crest of Dam 11, with seepage water return pie from Dam 7. Supports for
pipe should be rebuilt.



PHOTOGRAPH 20

East end of dam with water from Dam 7 to the left.

DAM 12 (ORIGINAL TAILING AREA)

LOCATION: Westside of South Pond; (refer to Figure 1).

FUNCTION: Discharge point for tailing line; retains tailing beach.

DISCHARGE FACILITIES: None.

LENGTH: +/- 60 m.

MAX HEIGHT: +/- 3 m (est).

CREST WIDTH: Approximately 3 m.

WATER LEVEL: Beached tailing on upstream face.

BACKGROUND

No information is available.

CREST CONDITION

The crest appeared to be in good condition. Erosion in the tailing immediately upstream of the dam was observed as a result of mine water from the discharge line.

DOWNSTREAM SLOPE AND TOE

The downstream slope appeared to be in good condition and stable with respect to its current function. There was no sign of seepage along the downstream toe. However, the area immediately downstream of the toe and along side of the access road has been reported to be damp or wet at times.

COMMENTS AND RECOMMENDATIONS:

Dam 12 appears to be functioning well with respect to its current function. The discharge line has been moved further into the tailing area away from the crest. Future discharge of minewater should be kept away from the face of the dam.

No other maintenance is required at this time.

SOLIDS RETENTION DYKE (SETTLING POND, ORIGINAL TAILING AREA)

LOCATION: West side of Settling Pond; (refer to Figure 1).

FUNCTION: Partitions the Settling Pond from the Polishing Pond.

DISCHARGE FACILITIES: None.

LENGTH: +/- 200 m.

MAX HEIGHT: +/- 1 m (est.) above pond elevation.

CREST WIDTH: Approximately 4 m.

WATER LEVEL: 1.0 m. below crest elevation

BACKGROUND

Some differential settlement and tension cracks have been reported in previous reports. Water was reported to have overtopped the dyke in 1996. Additional material has been placed on the dyke.

CREST CONDITION

New material has been placed on the dyke this year. Crest in fair condition.

DOWNSTREAM SLOPE AND TOE

Generally appeared to be in good condition with respect to its current function.

COMMENTS AND RECOMMENDATIONS:

The dyke appeared to performing adequately with respect to its current function.



PHOTOGRAPH 21

Dam 12 with access road at toe of dam

APPENDIX B

INSPECTION REPORTS

NORTHWEST TAILING CONTAINMENT AREA

DAM 21A (NORTHWEST TAILING AREA)

- LOCATION:** Northeast end of Dam 21; (refer to Figure 1).
- FUNCTION:** Water recovery pipeline causeway; retains beached tailing.
- DISCHARGE FACILITIES:** Former discharge point for minewater and tailing.
- LENGTH:** +/- 90 m.
- MAX HEIGHT:** +/- 11 m (est.)
- CREST WIDTH:** Approximately 15 m.
- WATER LEVEL:** Beached tailing approx. 1 m below crest.

BACKGROUND

The dam was constructed as part of a major tailing containment expansion in 1983.

Seepage and/or local runoff has historically collected in a depressed area at the downstream toe. A tailing spill occurred around the east abutment prior to the 1995 inspection. Several funnel like depressions were reported in the upstream tailing beach during the 1996 inspection. These depressions were thought to be related to the flow of water through the upstream shell of the dam. It has also been suggested that these funnel like depressions are the result of water passing through diamond drill holes that are known to be present in the area.

CREST CONDITION

The crest appeared to be in relatively good condition. A sinkhole observed in the beached tailing near the upstream east abutment last year was not present this year.

DOWNSTREAM SLOPE AND TOE

The downstream slope of the dam appeared to be in good condition.

The vegetation at the downstream toe was in fair condition.

COMMENTS AND RECOMMENDATIONS

The area of the sinkhole noted in the 2000 Annual Inspection should continue to be monitored. Minewater should be discharged well away from the beached tailing area.

Tailing was reported to have passed through the downstream toe on two occasions in the past. The toe area should be inspected on a regular basis.

All redundant tailing lines should be removed from this area.



PHOTOGRAPH 22

Beach in front of Dam 21A. Water should not be discharged in this area.

DAM 21B (NORTHWEST TAILING AREA)

LOCATION: Forms the south boundary of the tailing area; (refer to Figure 1).

FUNCTION: Retains tailing and associated water.

**DISCHARGE
FACILITIES:** None.

LENGTH: +/- 245 m.

MAX HEIGHT: +/- 15 m (est.)

CREST WIDTH: Approximately 15 m.

WATER LEVEL: None. Beached tailing approximately 0.5 m below the crest.

BACKGROUND

The dam was constructed as part of a major tailing containment expansion in 1983.

Seepage has historically been reported to east of the propane tank farm gate and immediately east of the tank farm access road.

CREST CONDITION

Wind blown tailing was present across the crest of the dam. Operators were in the process of placing Soil Sement to control fugitive dust emissions from this source.

DOWNSTREAM SLOPE AND TOE

The downstream slope consists of two benches. The slope appeared to be stable and in good condition.

Some water has collected along the downstream toe at the previously reported seepage points. However, seepage flow was not observed at the time of this examination. Vegetation growth was good in these areas.

COMMENTS AND RECOMMENDATIONS

The pipes on the dam no longer serve a purpose in this area and should be removed.

The seepage areas should be inspected periodically and samples taken to determine water quality.



PHOTOGRAPH 23

Dam 21B, lower bench with wind blown tailing on bench.

DAM 21C (NORTHWEST TAILING AREA)

LOCATION: Forms southwest boundary of the tailing area; (refer to Figure 1).

FUNCTION: Retains tailing and associated minewater.

**DISCHARGE
FACILITIES:** None.

LENGTH: +/- 275 m.

MAX HEIGHT: +/- 15 m (est.)

CREST WIDTH: Approximately 15 m.

WATER LEVEL: None. Beached tailing immediately upstream.

BACKGROUND

The dam was constructed as part of a major tailing containment expansion in 1983.

Minor seepage has been observed in the past along the downstream toe at two locations; near the bend in the dam and in the vicinity of the tank farm. Some crest level restoration work was done 1994 and 1995 due to settlement of the clay core. Tailing was beached upstream to reduce seepage flow through the toe.

CREST CONDITION

The clay core has settled over time relative to the upstream and downstream shell.

The crest was generally in good condition.

DOWNSTREAM SLOPE AND TOE

The slope appeared to be stable and in good condition.

COMMENTS AND RECOMMENDATIONS

The dam appears to be in good condition.

The seepage areas should be regularly monitored for signs of increased flow. Water samples should be taken at these seepage collection points.

The dam area should be surveyed to determine if the settlement affects relative freeboard levels.



PHOTOGRAPH 24

Beach in front of Dam 21C.

DAM 21D (NORTHWEST TAILING AREA)

<u>LOCATION:</u>	Forms west boundary of the tailing area, (refer to Figure 1).
<u>FUNCTION:</u>	Retains tailing and associated mine water.
<u>DISCHARGE FACILITIES:</u>	None.
<u>LENGTH:</u>	+/- 365 m.
<u>MAX HEIGHT:</u>	+/- 12 m (est.)
<u>CREST WIDTH:</u>	Approximately 15 m wide.
<u>WATER LEVEL:</u>	Approximately 1.2 m below the crest surface at the time of the inspection.

BACKGROUND

The dam was constructed as part of a major tailing containment expansion in 1983.

Seepage has historically occurred along the downstream toe. Beach construction has been recommended in the annual inspection reports along the upstream face since 1993. A flow measuring weir has been recommended in previous reports to determine the seepage rates, however there is no single point source of seepage, so this is difficult to accomplish.

The clay core has shown signs of settlement and has been monitored with survey hubs and thermistor data. Sinkholes have been reported and filled in along the crest.

CREST CONDITION

The crest was generally in good condition.

DOWNSTREAM SLOPE AND TOE

There is a 5 to 6 m wide rock toe berm along this section of the dam. Minor tension cracks were observed at the crest of the toe berm.

There are several small ponds of water at the downstream toe. These ponds appear to be associated with Trapper Creek. The vegetation growth around the pond areas was good. It was difficult to determine if seepage was present through the downstream toe.

COMMENTS AND RECOMMENDATIONS

The dam appeared to be in good condition.

The seepage areas should be regularly monitored for signs of increased flow.



PHOTOGRAPH 25

Downstream tow area of Dam 21D.
Trapper Creek in background adjacent to Vee Lake Road.



PHOTOGRAPH 26

Bench in area of minor cracks on front edge of slope.
Overall bench is stable

DAM 22A (NORTHWEST TAILING AREA)

LOCATION: Forms western portion of the northwest closure; (refer to Figure 1).

FUNCTION: Retains tailing and associated water mine.

**DISCHARGE
FACILITIES:** None.

LENGTH: +/- 245 m.

MAX HEIGHT: +/- 12 m (est.)

CREST WIDTH: Approximately 15 m wide.

WATER LEVEL: Approximately 1.2 m below the crest elevation.

BACKGROUND

The dam was constructed as part of a major tailing containment expansion in 1983.

Seepage has historically been reported along the downstream toe and water samples have reportedly been taken to determine the water quality. Some beach building has taken place along the northern portion of the dam.

CREST CONDITION

The crest appeared to be in good condition at the time of the inspection.

DOWNSTREAM SLOPE AND TOE

The slope appeared to be stable and in good condition.

COMMENTS AND RECOMMENDATIONS

The dam appeared to be in good condition.

DAM 22B (NORTHWEST TAILING AREA)

LOCATION: Forms the eastern portion of the northwest closure (refer to Figure 1).

FUNCTION: Retains tailing and associated mine water.

DISCHARGE

FACILITIES: Return line from downstream seepage collection sumps.

LENGTH: +/- 185 m.

MAX HEIGHT: +/- 12 m (est.)

CREST WIDTH: Approximately 15 m wide.

WATER LEVEL Approximately 1.2 m (elev. 1857.8) below the crest.

BACKGROUND

The dam was constructed as part of a major tailing containment expansion in 1983.

Seepage has historically occurred from two areas near the west end of the berm and at the west abutment and flows through a ditch to a seepage collection pond from which pumping returns it to the tailing area. The amount of seepage pumped back to the Northwest Pond is routinely measured and recorded daily. Seepage rates were noted to be as high as 1.5 litres per second in the 1994 inspection report, but reportedly decreased as beach building was completed on the upstream face.

CREST CONDITION

The crest was generally in good condition at the time of the examination.

DOWNSTREAM SLOPE AND TOE

The downstream face of the dam appeared to be in good condition.

Seepage was observed along the toe of the berm near the west abutment. A seepage rate of approximately 1 to 3 litres per second was estimated by timing the pumpback rate of water into a bucket of a known volume. Seepage had reportedly slowed considerably once the water level in the pond dropped.

COMMENTS AND RECOMMENDATIONS

The seepage rate of 1 to 3 litres per second recorded at the time of the inspection appears to be consistent with previous seepage flows. Therefore, the creation of a tailing beach and the berm in front of the dam appear to have effectively stabilized the seepage through the dam.

To reduce seepage through this dam, it is recommended that the tailing pond area upstream of the dam be further isolated from the rest of the Northwest Pond.

The pipe from the pump to the Northwest pond should be rebuilt on a more stable base or wood trestle support.



PHOTOGRAPH 27

Seepage area at toe of Dam 22B west abutment.



PHOTOGRAPH 28

Berm in front of Dam 22B to help reduce seepage at toe of dam.

APPENDIX C
INSPECTION REPORTS
OTHER DAMS

B-2 DAM

LOCATION: Located adjacent to the north side of the B-2 Pit; (refer to Figure 1).

FUNCTION: Prevents Baker Creek from flooding the pit.

DISCHARGE

FACILITIES: Return line from seepage collection in pit.

BACKGROUND

The dam has performed well during the past. Longitudinal cracking with associated sinkholes was observed in the 1999 inspection report on the downstream side of the crest near the south abutment. Recommendations were made to grade the crest to prevent the infiltration of any surface water into the cracks and sinkholes.

CREST CONDITION

The crest was generally in good condition at the time of the examination. Some grading was done on the crest area during the spring freshet of 2001.

DOWNSTREAM SLOPE AND TOE

The downstream face of the dam appeared to be in good condition. Minor seepage was observed at the rock/toe interface inside the pit wall. A small pool of water was observed at the base of the pit wall at the surface opening to the B-2 Pit

COMMENTS AND RECOMMENDATIONS

The dam appeared to be functioning well. No maintenance is required at this time.

Previous reports have cautioned of any plans to steepen the pit wall immediately behind the dam. This should not be permitted to occur pending a review of data to afford a better appreciation of the integrity of the dam and its response to blasting accelerations.

APPENDIX A-10
COST ESTIMATE MINE CLOSURE

A cost estimate has been prepared for the Restoration and Abandonment Plan that is discussed in this document for the Giant Mine complex. The estimate was developed from information collected in 2000 and in 2001. The estimate is set up in 2 parts with Part 1 consisting of cost tables developed for the tailing areas and the general site clean up and Part 2 consisting of a detailed summary of all the buildings on the property and an estimate to demolish the structure.

The cost estimate is based on a key assumption that the buildings and all construction debris and all arsenic impacted soils can be disposed of on site. The landfills to receive the material would be developed in the Northwest Pond and the existing mine permits and the Water Licence allow this proposed plan. It is anticipated that the Water Licence would not need to be modified, but that the Mackenzie Valley Land and Water Board will confirm this approach with the approval of the Final Abandonment and Restoration Plan. All hazardous wastes, chemical, etc. will be disposed of off site in permitted facilities.

Giant Abandonment and Restoration Costs

Summary

1	North Tailing Pond	\$	874,700.00
2	Central Tailing Pond	\$	321,600.00
3	South Tailing Pond	\$	627,400.00
4	Northwest Tailing Pond	\$	1,594,600.00
5	Historic Tailing	\$	176,000.00
6	Arsenic Impacted Soils	\$	2,972,000.00
7	Waste Dumps General	\$	80,000.00
	Asbestos	\$	80,000.00
8	Open Pits	\$	347,500.00
9	Mine Waste Dumps	\$	75,000.00
10	Underground	\$	580,000.00
11	Polishing Pond	\$	420,700.00
12	Effluent Treatment Plant	\$	230,500.00
13	Baker Creek	\$	60,000.00
14	Buildings	\$	3,836,000.00
15	Mob for contractor	\$	175,000.00
	Sub Total	\$	12,801,750.00
	Contingency +/- 25%	\$	3,200,750.00
	Total	\$	16,002,500.00
	Project Management	\$	2,400,000.00
	Engineering	\$	1,600,000.00
	Testing – Chemistry	\$	800,000.00
	Contingency	\$	1,600,000.00
	Grand Total	\$	22,402,500.00

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Tailing

North Pond

Item	Unit Cost	Quantity	Estimated Cost
1 Access			
Signs	\$ 100 per sign	2 signs	\$ 200
Ditches	\$ 10 / meter	500 meter	\$ 5,000
Block roads	\$ 500 per road	3 roads	\$ 1,500
2 Embankments			
Buttress Berm	\$ 6 / m ³	0 m ³	\$ -
Flatten slope	\$ 6 / m ³	0 m ³	\$ -
Toe Drain/Filter	\$ 36 / m ³	0 m ³	\$ -
Raise Crest	\$ 8 / m ³	0 m ³	\$ -
3 Cover			
Contour / Re-grade	\$ 1 / m ³	50,000 m ³	\$ 50,000
Cover layer	\$ 5 / m ³	125,000 m ³	\$ 625,000
Mine Waste Rock	\$ 10 / tonne	5000 tonne	\$ 50,000
Vegetation	\$ 3,500 / ha	28 ha	\$ 98,000
Straw etc.	\$ 10,000 LS	1	\$ 10,000
4 Spillway			
	\$ 10 / m ³	2500 m ³	\$ 25,000
5 Remove Pipes			
	\$ 10,000 LS	1	\$ 10,000
			\$ 874,700.00

Tailing

Central Pond

Item		Unit Cost	Quantity	Estimated Cost
1 Access				
Signs	\$	100 per sign	1 signs	\$ 100
Ditches	\$	10 / meter	0 meter	\$ -
Block roads	\$	500 per road	2 roads	\$ 1,000
2 Embankments				
Bulldress Berm	\$	6 / m ³	0 m ³	\$ -
Flatten slope	\$	6 / m ³	0 m ³	\$ -
Toe Drain/Filler	\$	36 / m ³	0 m ³	\$ -
Raise Crest	\$	6 / m ³	0 m ³	\$ -
3 Cover				
Contour	\$	1 / m ³	10,000 m ³	\$ 10,000
Cover layer	\$	5 / m ³	50,000 m ³	\$ 250,000
Mine Waste Rock	\$	10 / tonne	0 tonne	\$ -
Vegetation	\$	3,500 / ha	13 ha	\$ 45,500
Straw etc	\$	10,000 LS	1	\$ 10,000
4 Spillway				
	\$	10 / m ³	0 m ³	\$ -
5 Remove Pipes				
	\$	5,000 LS	1	\$ 5,000
				\$ 321,500

Tailing

South Pond

Item	Unit Cost	Quantity	Estimated Cost
1 Access			
Signs	\$ 100 per sign	2 signs	\$ 200
Ditches	\$ 10 / meter	200 meter	\$ 2,000
Block roads	\$ 500 per road	2 roads	\$ 1,000
2 Embankments			
Buttress Berm	\$ 6 / m ³	0 m ³	\$ -
Flatten slope	\$ 6 / m ³	0 m ³	\$ -
Too Drain/Filter	\$ 36 / m ³	0 m ³	\$ -
Raise Crest	\$ 8 / m ³	2,400 m ³	\$ 19,200
(Crest on Dam 11 and 12 increased by 750mm average)			
3 Cover			
Contour	\$ 1 / m ³	50,000 m ³	\$ 50,000
Cover layer	\$ 5 / m ³	100,000 m ³	\$ 500,000
Mine Waste Rock	\$ 10 / tonne	0 tonne	\$ -
Vegetation	\$ 3,500 / ha	10 ha	\$ 35,000
Straw etc.	\$ 10,000 LS	1	\$ 10,000
4 Spillway	\$ 10 / m ³	0 m ³	\$ -
5 Remove Pipes	\$ 10,000 LS	1	\$ 10,000
			\$ 627,400

Tailing

Northwest Pond

Item	Unit Cost	Quantity	Estimated Cost
1 Access			
Signs	\$ 100 per sign	5 signs	\$ 500
Ditches	\$ 10 / meter	10 meter	\$ 100
Block roads	\$ 500 per road	3 roads	\$ 1,500
2 Embankments			
Buttress Berm	\$ 6 / m ³	0 m ³	\$ -
Flatten slope	\$ 6 / m ³	0 m ³	\$ -
Toe Drain/Filter	\$ 36 / m ³	0 m ³	\$ -
Raise Crest	\$ 8 / m ³	0 m ³	\$ -
3 Cover			
Contour	\$ 1 / m ³	100,000 m ³	\$ 100,000
(Includes divide dyke in west portion of pond)			
Cover layer	\$ 8 / m ³	150,000 m ³	\$ 1,200,000
(Arsenic impacted soil and construction debris)			
Mine Waste Rock	\$ 10 / tonne	5000 tonne	\$ 50,000
Vegetation	\$ 3,500 / ha	25 ha	\$ 87,500
Straw etc.	\$ 10,000 LS	1	\$ 10,000
4 Spillway			
	\$ 25 / m ³	5000 m ³	\$ 125,000
5 Remove Pipes			
	\$ 20,000 LS	1	\$ 20,000
			\$ 1,594,600

General

Items

	Unit Cost	Quantity	Estimated Cost
1 Historic Tailings			
Re-grade	\$ 1 / m ³	1,000 m ³	\$ 1,000
Straw	\$ 5,000 LS	1 unit	\$ 5,000
Vegetation	\$ 3,500 ha	5 ha	\$ 17,500
Beach Rip rap	\$ 30 / m ³	1,750 m ³	\$ 52,500
Filter	\$ 40 / m ³	1,000 m ³	\$ 40,000
Submerged Tailings	\$ 12 / m ³	5,000 m ³	\$ 60,000
			\$ 176,000
2 Arsenic Impacted Soil			
Excavation	\$ 5 / m ³	175,000 m ³	\$ 875,000
Re-grade excavation	\$ 1 / m ³	10,000 m ³	\$ 10,000
Transport	\$ 2 / m ³	200,000 m ³	\$ 400,000
Disposal	\$ 3 / m ³	200,000 m ³	\$ 600,000
Cover Intermediate	\$ 4 / m ³	20,000 m ³	\$ 80,000
Final	\$ 10 / m ³	100,000 m ³	\$ 1,000,000
Vegetation	\$ 3,500 ha	2 ha	\$ 7,000
			\$ 2,972,000
3 Hydrocarbon Impacted Soil			
Waste Classification	\$ 200 /sample	20 sample	\$ 4,000
Excavation	\$ 5 / m ³	15,000 m ³	\$ 75,000
Re-grade excavation	\$ 6 / m ³	15,000 m ³	\$ 90,000
Transport / Disposal	\$ 10 / m ³	15,000 m ³	\$ 150,000
Cover Intermediate	\$ 5 / m ³	1,000 m ³	\$ 5,000
Final	\$ 10 / m ³	2,500 m ³	\$ 25,000
Vegetation	\$ 3,500 ha	0.5 ha	\$ 1,750
			\$ 350,750
4 Waste Dumps			
General Solid Waste			
Cover	\$ 8 / m ³	10,000 m ³	\$ 80,000
Asbestos			
Cover	\$ 8 / m ³	10,000 m ³	\$ 80,000
5 Open Pits			
Perimeter Berm	\$ 100 / meter	3000 meter	\$ 300,000
Fences	\$ 25 / meter	300 meter	\$ 7,500
Quarries / Brock Pit	\$ 8 / m ³	5000 / m ³	\$ 40,000
			\$ 347,500

TOTAL \$ 4,006,250

General

Items

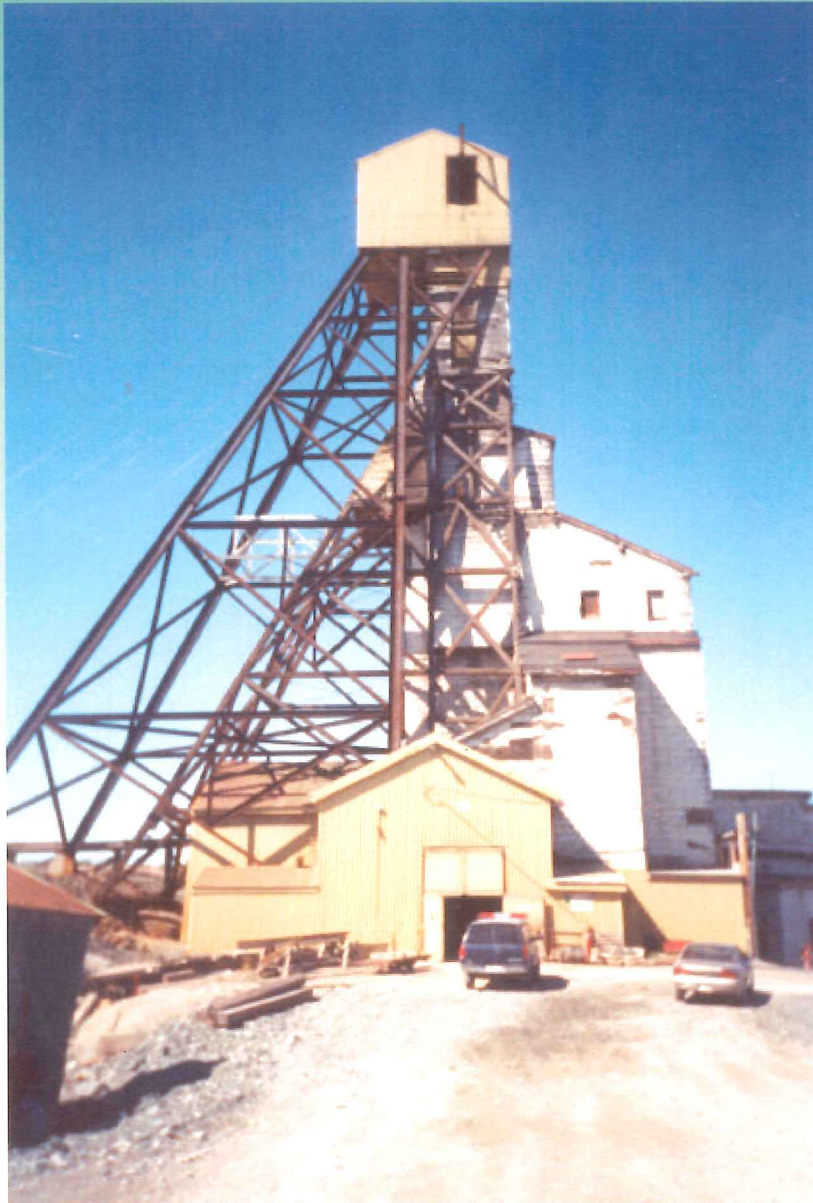
	Unit Cost	Quantity	Estimated Cost
6 Waste Dumps - Mine Waste Rock			
Perimeter Berm	\$ 50 / meter	1000 meter	\$ 50,000
Fences	\$ 25 / meter	1000 meter	\$ 25,000
			\$ 75,000
7 Underground Opening			
Raises	\$ 22,500 LS	16 each	\$ 360,000
Shafts	\$ 45,000 LS	4 each	\$ 180,000
Ramps	\$ 8,000 LS	5 each	\$ 40,000
			\$ 580,000
8 Water Management - Ponds at Effluent Treatment Plant			
Cover Polishing Pond	\$ 8 / m ³	40,000 m ³	\$ 320,000
Dam 1	\$ 10,000 LS	1 unit	\$ 10,000
Vegetation	\$ 3,500 ha	4 ha	\$ 14,000
Spillway Excavate	\$ 5 / m ³	1,500 m ³	\$ 7,500
Riprap	\$ 24 / m ³	800 m ³	\$ 19,200
Remove pipes	\$ 10 / m	5,000 m	\$ 50,000
			\$ 420,700
9 Water Management - Effluent Treatment Plant			
<i>Assume new plant in 2010 at different location and present plant is removed.</i>			
Excavation	\$ 3 / m ³	2,000 m ³	\$ 6,000
Remove	\$ 221,000 LS	1 unit	\$ 221,000
Vegetation	\$ 3,500 ha	1 ha	\$ 3,500
			\$ 230,500
10 Baker Creek			
Downstream of Ingraham Trail			
Excavate	\$ 8 / m ³	· m ³	\$ -
Rip rap	\$ 24 / m ³	2,500 m ³	\$ 60,000
			\$ 60,000
TOTAL			\$ 1,366,200
GRAND TOTAL			\$ 5,372,450

Prioritization of Demolition Sequence
for Site Rehabilitation of
Miramar Giant Mine
Yellowknife N.T.

011-9804

Volume 1

May 2001



Miramar Giant Mine
Yellowknife N.T.

REPORT ON

**PRIORITIZATION OF DEMOLITION SEQUENCE
FOR SITE REHABILITATION OF
MIRAMAR GIANT MINE
YELLOWKNIFE, N.W.T.**

VOLUME 1

Submitted by:

Golder Associates Ltd.
500 – 4260 Still Creek Drive
Burnaby, British Columbia
V5C 6C6

Submitted to:

Miramar Giant Mine Ltd.
Yellowknife, N.W.T.
X1A 2M1

DISTRIBUTION:

- 6 Copies - Miramar Giant Mine
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(G.A.I.A.) Inc., Sudbury, ON

March 2001
011-9804

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1.0 SCOPE OF WORK

1.1 Task 1000

This report has been produced to provide a review of demolition estimates and a schedule of progressive demolition based on the closure activities at the Giant Mine Site.

The report identifies some of the known hazards associated with the various structures and some recommended guidelines to be followed in order to cope with these hazards throughout the demolition process. Detailed inspections will be needed for each structure before it is demolished. Building locations are shown on Figure 17 in Volume 2, Appendix G8 – Mine Site Plans.

This cost estimate is broken down into seven main areas. A separate estimated cost for each area has been provided and are listed in alphabetical order as follows:

- “A” Shaft
- Akaitcho Mine Site
- “B” Pit Area
- “C” Pit Area
- “C” Shaft
- Miscellaneous
- T.R.P. Area

For the purposes of scheduling demolition, the following sequence has been used.

- Phase 1 Removal at Present Time
- Phase 2 Removal after Minor Works such as Utility Relocates or Relocation of Services Provided
- Phase 3 After Miramar Ceases Mining Operations
- Phase 4 After INAC has resolved the Underground Arsenic Situation
- Phase 5 Closure of Effluent Treatment Plant

Scheduling and estimates have been derived from information and direction received from Miramar Giant Mine. The following conditions apply to this report:

1. All demolition materials will be disposed of within designated areas on the mine property.
2. No allowances were included in estimates to cover freight cost of moving material, equipment or machinery off property limits.
3. No cost was allowed for the off-site disposal of identified hazardous substances.

4. These costs do not allow for the removal of any stored materials or items within structures (oils, chemicals, spare parts, paper files, small tools, etc.).
5. Although GAIA Contractors and Golder Associates believe that there are some recoverable costs through the sale of assets, these savings have not been taken into consideration in the attached estimates.
6. No credits on estimated costs have been allowed for the selling of scrap material (copper, steel, etc.).
7. No allowances were made for revegetation of any of the demolition sites in the estimated costs.
8. The limitations of the work scope does not provide for any soil investigation or remediation work that might be required in future by such investigations. A study on hydrocarbon-impacted soils has identified other sites which will require work. The costs to manage those soils are not included in these costs as this program deals only with the structures on site.

2.0 SUMMARY

The progressive demolition procedures are as follows:

- Phase 1 Removal at Present Time
- Phase 2 Removal after Minor Works such as Utility Relocates or Relocation of Services Provided
- Phase 3 After Miramar Ceases Mining Operations
- Phase 4 After INAC has resolved the Underground Arsenic Situation
- Phase 5 Closure of Effluent Treatment Plant

Details of these procedures are described in Appendix E.

3.0 CLOSURE

We trust that with this report, we have fulfilled the current requirements of Golder Associates with respect to the closure planning for this project. Should you require any further information, please feel free to contact the undersigned.

GOLDER ASSOCIATES LTD.

Bruce Fox
Senior Project Manager

John A. Hull, P.Eng.
Associate

BF/JAH/vee
011-9804

N:\WORK\1400\012-1431 MIRIMAR MINE BACK BAY TAILINGS GIANT MINE\RPT0727 - SITE REHAB VOL
I.DOC

APPENDIX A
MATERIAL ANALYSIS REPORT

MATERIAL ANALYSIS REPORT

Survey and Analysis of Arsenic Contaminated Materials and Residual Gold Values

GAIA personnel examined a number of materials within the Giant Mine buildings to determine if these materials had been contaminated with mobile, water soluble forms of arsenic and to determine if any materials held any residual gold values. The materials examined consisted of concrete surfaces, wood beams and surface residues.

Chip samples from concrete surfaces, shavings from wooden beams and floor residues were collected and shipped to Enviro-Test Laboratories in Edmonton for analysis of arsenic 3+, arsenic 5+ (analyses for total arsenic was not requested since the purpose of sampling was only to identify possible areas of mobile arsenic contaminants) and gold. Table 1.1 lists the results of these analyses.

Table 1.1

Sample Description	As 3+ mg/kg	As 5+ mg/kg	Au mg/kg	Material Tested	Location
P110-CC-02-07/00-AS,AU	26.4	53.2	6	Concrete	Floor north end of Roaster Building
P110-CS-03-07/00-AS,AU	406	360	15	Wood	Beam near thickener tanks – north side of Roaster Building
P142-CC-05-07/00-AS,AU	4.0	16.4	4	Concrete	North-west pillar in Roaster Building
P142-CS-07-07/00-AS,AU	6.2	<0.1	24	Wood	Beam on north side of Roaster Building
P134-CC-09-07/00-AS,AU	4.3	10.8	34	Concrete	North end of Cottrell Building
P106-CS-11-07/00-AS,AU	57.5	105	195	Wood	Beam near thickener – north end
P106-CC-12-07/00-AS,AU	0.1	8.5	4	Concrete	Pier near thickener – north end
P106-SD-13-07/00-AS,AU	6.0	600	47	Residue	Floor near thickener – north-east of Mill Building
P106-CS-14-07/00-AS,AU	2.5	0.3	<1	Wood	Beam near ball Mill – south-east of Mill
P101-CS-15-07/00-AS,AU	1.2	3.3	<1	Wood	Floor walkway in Crusher House
P101-CC-16-07/00-AS,AU	<0.1	0.1	18	Concrete	Crusher

It would appear from the above analysis that some of the materials within the Giant Mine ore processing facilities are contaminated with arsenic residue and may require special handling during demolition and disposal (Ontario Cleanup Guidelines for Contaminated Sites – material in excess of 50 mg/kg – total arsenic for industrial sites). It would also appear that some of the materials have residual gold values that may be recoverable, depending on the overall quantities.

Since the sampling conducted during the inspection was not exhaustive and only represents an indication of the extent of the contamination and residual gold values, it is suggested that an additional sampling and analysis program be carried out. Any further sampling and analysis should be representative and should concentrate on the areas identified in the initial sampling.

Survey and Analysis of Asbestos Material

During the site inspection of the Giant Mine, GAIA personnel examined all buildings and other structures for the presence of asbestos containing material. By far, the most common asbestos containing material noted was asbestos-cement siding and insulation board. However, a significant amount of compact and loose asbestos insulation and pipe coatings were noted.

Representative samples of a variety of suspected asbestos containing materials were collected and shipped to the Enviro-Test Laboratories in Edmonton for asbestos characterization. Four of the five samples (see Table 1.0) analyzed were reported to contain 75-100% Chrysotile (serpentine*) asbestos fibres and the remaining sample (insulation from the north wall of the Roaster building) contained 75-100% Amosite (amphibole*) asbestos fibres.

Table 1.0

Sample Description	Percent Asbestos	Asbestos Type	Material Tested	Location
P110-CS-01-07/00-AB	75-100	Chrysotile	Siding	Transite siding inside electrical room
P110-CS-04-07/00-AB	75-100	Chrysotile	Insulation	Calcine kiln
P142-CS-06-07/00-AB	75-100	Amosite	Insulation	North wall of Roaster Building
P134-CS-08-07/00-AB	75-100	Chrysotile	Insulation	Cottrell vents
P134-CS-10-07/00-AB	25-50	Chrysotile	Siding	Exterior of Cottrell Building

* Note: Chrysotile (serpentine) fibres are flexible and curvy, while amosite fibres are straight and needle like. Amosite fibres tend to become airborne easier and therefore require more care during handling and exposure.

APPENDIX B
ENVIRONMENTAL, HEALTH & SAFETY IMPLICATIONS

ENVIRONMENT, HEALTH AND SAFETY IMPLICATIONS

Sampling conducted by GAIA personnel at the Giant Mine has indicated that buildings contain asbestos materials and that other materials are contaminated by arsenic. This information will have implications with respect to the demolition and disposal of materials from the site.

In addition to the asbestos and arsenic hazards identified in the survey, a number of other potential hazardous materials and workplace hazards may be present in the work areas. The following materials and conditions should be considered potential workplace hazards on this site:

- PCBs and PCB Contaminated Material
- Arsenic and Arsenic Dust
- Mercury and Mercury Vapours
- Lime
- Lead-Based Paints
- Cyanide and Cyanide Compounds
- Miscellaneous Laboratory Chemicals
- Hydrocarbons and Hydrocarbon Contaminated Materials
- Asbestos Types I, II, and III
- Biological Hazards from Sewage
- Methane Gas
- Compressed Gases (Oxygen, Propane, Acetylene, etc.)
- Confined Spaces
- Potential Falls
- Open Holes, Shafts
- Energized Power Circuits
- Demolition Activities, Heavy Equipment Traffic

The above list is not exhaustive and it is recommended that each workplace be examined carefully by the contractor prior to the start of work to identify site specific hazards.

The potential workplace hazards and the required minimum Personal Protective Equipment (PPE) have been identified for each work site. The PPE listed is the minimum required and it is recommended that the owner and the contractor produce and enforce a detailed Site Specific Health and Safety Plan for the site prior to the commencement of work.

The handling of asbestos and materials contaminated by arsenic and other hazardous substances will require workers to wear specific PPE and depending on the type and level of contact, this could range from simple protective clothing, dust respirators, safety glasses and gloves to full positive pressure suits with supplied air. It may also require the workers to report to decontamination areas prior to leaving the work area. Working with arsenic, lead, mercury and

PCB contaminated materials may also require workers to undergo medical surveillance that may include monitoring of blood, urine and hair samples.

The transportation and disposal of asbestos, arsenic and other contaminated material may also require special consideration, especially if disposal is off site. The materials may be subject to the Transportation of Dangerous Goods Act and may require disposal in a specially licensed facility.

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APPENDIX C

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COST BREAKDOWN

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COST BREAKDOWN

Definition of Terminology

Hazardous Substance Investigation

Contractor must do his due diligence to identify and be aware of any and all hazardous substances associated with the demolition of each structure in regards to the health and safety of his employees and the proper handling of those substances.

Demolition of Building

Refers to the act of completely breaking down and disposing of all remaining contents and portions of the structure after hazardous substances have been removed.

Heavy Machinery Removal

Refers to equipment or machinery that requires removal by large crane.

Light Machinery Removal

Refers to equipment or machinery that a light crane or boom truck can remove.

Concrete Demolition

Breaking up and disposal to designated waste dump of all concrete materials, as directed.

Dismantle Steel Siding

The removal of siding in an orderly fashion using manual means in order to salvage material.

Site Preparation

The required backfilling and grading of building site to original contours after demolition material has been totally removed.

Other Terms

All other terms are believed to be self-explanatory.

**"A" Shaft
Building #081
Curling Rink**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Removal of Asbestos Type 1	\$ 11,000.00
Demolition of Building	\$ 7,000.00
Site Preparation	\$ 1,500.00
Sub total	\$ 20,000.00

**"A" Shaft
Building #006
Sewage Lift Station**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Demolition of Building	\$ 5,000.00
Site Preparation	\$ 500.00
Sub total	\$ 6,000.00

**"A" Shaft
Buildings #058 & #002
Diesel House & Hoist Room**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Removal of Asbestos Type 1	\$ 2,500.00
Removal of Asbestos type 2	\$ 2,000.00
Demolition of Building	\$ 5,000.00
Heavy Machinery Removal	\$ 7,000.00
Light Machinery Removal	\$ 3,500.00
Concrete Demolition	\$ 3,000.00
Site Preparation	\$ 1,600.00
Sub total	\$25,600.00

**"A" Shaft
Building #004
Sub Station**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Removal of Asbestos Type 1	\$ 1,500.00
Structural steel & Transformers	\$ 4,000.00
Demolition of Building	\$ 2,000.00
Concrete Demolition	\$ 700.00
Site Preparation	\$ 500.00
Sub total	\$ 9,200.00

**"A" Shaft
Building #003
Exploration Shop**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Dismantle Steel Siding	\$ 10,500.00
Demolition of Building	\$ 6,800.00
Site Preparation	\$ 1,200.00
Sub total	\$ 19,000.00

**“A” Shaft
Building #024
Head Frame**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Demolition Of Structure	\$ 3,500.00
Shaft Cap Installations	\$ 20,000.00
Sub Total	\$ 24,500.00

**“A” Shaft
Ex Powder Magazine #025**

ITEM	COSTS
Dismantling and demolition of Building	\$ 7,000.00
Dismantling of Perimeter Fence	\$ 2,000.00
Sub Total	\$ 9,000.00

**“A” Shaft
Building #021
Storage Shed**

ITEM	COSTS
Hazardous substances Investigation	\$ 500.00
Demolition of Structure	\$ 2,200.00
Site Preparation	\$ 500.00
Sub Total	\$ 3,200.00

**"A" Shaft
Building #075
Pump House at Lake**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Removal of Asbestos Type 1	\$ 6,000.00
Removal of Asbestos Type 2	\$ 2,000.00
Demolition of Building	\$ 5,000.00
Concrete Demolition	\$ 1,500.00
Site Preparation	\$ 400.00
Sub total	\$ 15,400.00

**"A" Shaft
Building #037
Old Boiler House**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Removal of Asbestos Type 1	\$ 7,000.00
Removal of Asbestos Type 2	\$ 3,500.00
Steel siding Removal	\$ 7,000.00
Demolition of Building	\$ 7,000.00
Structural Steel Removal	\$ 3,500.00
Heavy Machinery Removal	\$ 4,000.00
Light Machinery Removal	\$ 2,000.00
Concrete Demolition	\$ 2,000.00
Site Preparation	\$ 500.00
Sub total	\$ 37,000.00

**“A” Shaft
Building #076
Townsite Pump House**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Removal of Asbestos Type 1	\$ 1,500.00
Demolition of Building	\$ 3,000.00
Concrete Demolition	\$ 700.00
Site Preparation	\$ 300.00
Sub total	\$ 6,000.00

**“A” Shaft
Building #008
Recreation Hall**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Dismantling Chain Link fence	\$ 500.00
Demolition of Building	\$ 7,500.00
Concrete Demolition	\$ 2,000.00
Site Preparation	\$ 1,000.00
Sub total	\$ 11,500.00

**"A" Shaft
Vent House**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Removal of Asbestos Type 1	\$ 10,500.00
Demolition of Building	\$ 7,000.00
Concrete Demolition	\$ 1,000.00
Site Preparation	\$ 1,000.00
Sub total	\$ 20,000.00

**"A" Shaft
Diesel Generator Building**

ITEM	COSTS
Hazardous Substances Investigation	\$ 200.00
Removal of Equipment	\$ 600.00
Dismantling or Demolition of Building	\$ 1,800.00
Concrete Demolition	\$ 300.00
Site Preparation	\$ 200.00
Sub total	\$ 3,100.00

**Akaitcho Mine Site
Air Compressor Building**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Light Machinery Removal	\$ 1,500.00
Dismantling or Demolition of Building	\$ 5,500.00
Concrete Demolition	\$ 500.00
Site Preparation	\$ 500.00
Sub Total	\$ 8,000.00

**Akaitcho Mine Site
3 Bunk Houses**

ITEM	COSTS
Demolition of Building	\$ 10,000.00
Site Preparation	\$ 2,000.00
Sub Total	\$ 12,000.00

**Akaitcho Mine Site
Steel Head Frame**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Demolition of Head Frame	\$ 9,500.00
Shaft Cap Construction	\$ 20,000.00
Concrete Demolition	\$ 800.00
Site Preparation	\$ 1,200.00
Sub total	\$ 32,000.00

**Akaitcho Mine Site
Warehouse & Hoist Room**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Removal of Asbestos Type 1	\$ 2,000.00
Removal of Steel Paneling Plus Asbestos Type 2	\$ 22,000.00
Demolition of Building	\$ 7,000.00
Heavy Machinery Removal	\$ 4,000.00
Light Machinery Removal	\$ 2,000.00
Sub Station Removal	\$ 6,000.00
Concrete Demolition	\$ 1,500.00
Site Preparation	\$ 2,500.00
Sub total	\$ 48,000.00

**Akaitcho Mine Site
Cookhouse & Cafeteria**

ITEM	COSTS
Demolition of Building	\$ 6,000.00
Site Preparation	\$ 800.00
Sub Total	\$ 6,800.00

**Akaitcho Mine Site
Exploration Building**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Removal of Asbestos Type 1	\$ 9,000.00
Removal of Aluminum Paneling Plus Asbestos Type 2	\$ 17,000.00
Structural Steel Plus Asbestos Type 2 Removal	\$ 6,500.00
Demolition of Building Remnants	\$ 3,500.00
Concrete Demolition	\$ 1,200.00
Site Preparation	\$ 1,200.00
Sub total	\$ 39,400.00

**B-1 Pit
Building #147
Vent Shaft**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Removal of Asbestos Type 1	\$ 6,000.00
Removal of Steel Siding	\$ 20,000.00
Heavy Machinery removal	\$ 5,000.00
Light Machinery removal	\$ 4,000.00
Dismantling Structural Steel	\$ 4,000.00
Demolition of Building	\$ 11,000.00
Sub Station Removal	\$ 6,000.00
Concrete Demolition	\$ 2,500.00
Shaft Cap Construction	\$ 40,000.00
Dismantling Perimeter Fencing	\$ 1,500.00
Site Preparation	\$ 2,500.00
Sub total	\$103,500.00

**B-3 Pit
Vent Plant**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Removal of Asbestos Type 1	\$ 2,000.00
Removal of Steel Siding and Insulation	\$ 20,000.00
Heavy Machinery Removal	\$ 9,000.00
Dismantling Structural Steel	\$ 6,000.00
Demolition of Building	\$ 5,000.00
Sub Station Removal	\$ 8,000.00
Concrete Demolition	\$ 2,000.00
Shaft Cap Construction	\$ 40,000.00
Site Preparation	\$ 4,000.00
Sub total	\$ 97,000.00

**"C" Pit
C-1 Pit House #210**

ITEM	COSTS
Demolition or Removal of Building	\$ 4,000.00
Sub total	\$ 4,000.00

**"C" Pit
Building #017
Service Building**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Demolition of Building	\$ 7,000.00
Site Preparation and Clean up of Debris	\$ 2,000.00
Sub Total	\$ 9,500.00

**C-1 Pit Area
Sub Station**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Removal of Asbestos Type 1	\$ 6,500.00
Equipment Removal Including Transformers	\$ 6,000.00
Dismantling Structural Steel Plus Electrical Apparatus	\$ 7,000.00
Demolition of Building	\$ 3,000.00
Concrete Demolition	\$ 1,500.00
Dismantling Perimeter Fencing	\$ 2,000.00
Site Preparation	\$ 2,000.00
Sub total	\$ 29,000.00

**"C" Shaft
Building #131
Assay Office**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Asbestos Type 1 Removal	\$10,000.00
Dismantling Steel Roof ,Siding & Insulation	\$ 9,000.00
Dismantling of Steel Structural	\$ 4,000.00
Demolition of Remnants of Building	\$ 4,000.00
Concrete Demolition	\$ 1,500.00
Site Preparation	\$ 1000.00
Sub total	\$30,000.00

**"C" Shaft
Out Buildings @ Machine Shop**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Asbestos Type 1 Removal	\$ 2,000.00
Dismantling of Steel Structural	\$ 2,000.00
Demolition of Remnants of Building	\$ 4,000.00
Site Preparation	\$ 1,000.00
Sub total	\$ 9,500.00

**"C" Shaft
Building #167
Bag House**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Arsenic Dust Collecting	\$ 30,000.00
Equipment or Machinery Removal	\$ 10,000.00
Dismantling Steel Roof, Siding & Insulation	\$ 27,000.00
Dismantling of Steel Structural	\$ 10,000.00
Demolition of Remnants of Building	\$ 6,000.00
Concrete Demolition	\$ 1,500.00
Site Preparation	\$ 1,000.00
Sub total	\$ 86,500.00

**"C" Shaft
Building #169
Laboratory**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Equipment or Machinery removal	\$ 2,000.00
Dismantling Steel Roof, Siding & Insulation	\$ 12,000.00
Dismantling of Steel Structural	\$ 2,500.00
Demolition of Remnants of Building	\$ 3,000.00
Site Preparation	\$ 1,500.00
Sub total	\$ 22,000.00

**"C" Shaft
Building #142
Carpenter's Shop**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Asbestos Type 1 Removal	\$ 11,000.00
Removal of Steel Roof	\$ 5,500.00
Demolition of Building	\$ 6,000.00
Site Preparation	\$ 1,500.00
Sub Total	\$ 24,500.00

**"C" Shaft
Building #147
Powder Magazine**

ITEM	COSTS
Demolition of Building	\$ 2,000.00
Site Preparation + Perimeter Fence Removal	\$ 1,000.00
Sub Total	\$ 3,000.00

**"C" Shaft
Building #143
Dorrco Plant**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Asbestos Type 1 Removal	\$ 68,000.00
Asbestos Type 2 Removal	\$ 10,000.00
Removal and Disposal of Arsenic Dust and Residue	\$ 20,000.00
Equipment or Machinery Removal	\$ 15,000.00
Dismantling of Steel Structural	\$ 25,000.00
Demolition of Remnants of Building	\$ 48,000.00
Concrete Demolition	\$ 5,000.00
Site Preparation	\$ 3,000.00
Sub total	\$ 195,000.00

**"C" Shaft
Building #134
Cottrell Plant**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Collection of Arsenic Dust	\$ 27,000.00
Asbestos Type 1 Removal	\$ 100,000.00
Asbestos Type 2 Removal	\$ 7,000.00
Equipment or Machinery Removal	\$ 12,000.00
Dismantling of Steel Structural	\$ 11,000.00
Demolition of Remnants of Building	\$ 35,000.00
Concrete Demolition	\$ 5,000.00
Site Preparation	\$ 2,000.00
Sub total	\$ 200,000.00

**"C" Shaft
Electrical Building
Behind Office Building**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Removal of Steel Roof, Siding & Insulation	\$ 2,500.00
Removal of Structural Steel	\$ 1,000.00
Removal of electrical Equipment	\$ 500.00
Concrete Demolition	\$ 250.00
Site Preparation	\$ 250.00
Sub Total	\$ 5,000.00

**"C" Shaft
Building #112
Pump House No.3**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Demolish and Disposal of Building	\$ 2,500.00
Concrete Demolition	\$ 250.00
Site Preparation	\$ 250.00
Sub Total	\$ 3,500.00

**"C" Shaft
Building #150
Electrical Shop**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Asbestos Type 1 Removal	\$ 6,500.00
Equipment or Machinery and Tank Removal	\$ 3,500.00
Dismantling of Steel Structural	\$ 5,000.00
Demolition of Remnants of Building	\$ 5,000.00
Concrete Demolition	\$ 1,000.00
Site Preparation + Sub Station + Perimeter Fence	\$ 5,000.00
Sub total	\$ 26,500.00

**"C" Shaft
Building #126
No. 5 Sub Station**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Asbestos Type 1 Removal	\$ 4,000.00
Dismantling of Steel Structural Plus Electrical Apparatus	\$ 4,000.00
Demolition of Remnants of Building	\$ 3,000.00
Concrete Demolition	\$ 1,000.00
Site Preparation + Sub Station + Perimeter Fence	\$ 2,000.00
Sub total	\$ 14,500.00

**"C" Shaft
Building # 087
EX Powder Magazine
Ex PCBs Storage**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Aluminum Siding & Roof Removal	\$ 10,000.00
Dismantling of Steel Structural	\$ 5,000.00
Demolition of Building	\$ 5,500.00
Site Preparation and Perimeter Fence Removal	\$ 1,500.00
Sub total	\$ 22,500.00

**"C" Shaft
Building #160
Arsenic Loading Scale
c/w with Arsenic Storage Silo**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Dismantle or Demolish Scale Building	\$ 5,000.00
Remove Scale and Machinery	\$ 5,000.00
Remove Asbestos Type 1	\$ 2,000.00
Removal and Disposal of Arsenic Dust and Residue	\$ 20,000.00
Dismantle Arsenic Silo	\$ 10,000.00
Concrete Demolition	\$ 700.00
Site Preparation	\$ 1,000.00
	\$ 1,500.00
Sub total	\$ 45,700.00

**"C" Shaft
Building #148
Fan House & Structural Steel**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Removal of Equipment Including Fuel Tank	\$ 1,500.00
Removal of Asbestos Type 1 Siding & Roofing	\$ 6,000.00
Dismantling structural Steel & Piping	\$ 7,000.00
Demolition of Remnants of Building	\$ 2,000.00
Concrete Demolition	\$ 500.00
Site Preparation	\$ 1,000.00
Sub total	\$ 18,500.00

**"C" Shaft
Building # 152
Grease Storage Shed**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Demolition of Building	\$ 2,000.00
Site Preparation	\$ 500.00
Sub Total	\$ 3,000.00

**"C" Shaft
Building #144
Planer Shop**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Asbestos Type 1 Removal	\$ 14,500.00
Equipment or Machinery Removal	\$ 3,000.00
Demolition of Building	\$ 10,000.00
Site Preparation	\$ 1,000.00
Sub total	\$ 29,000.00

**"C" Shaft
Building #129, #123, #116
Head Frame**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Steel siding Removal	\$ 8,000.00
Equipment or Machinery Removal	\$ 16,500.00
Dismantling of Steel Structural	\$ 8,000.00
Demolition of Building	\$ 30,000.00
Concrete Demolition	\$ 4,000.00
Concrete Shaft Cap	\$ 25,000.00
Site Preparation	\$ 2,000.00
Sub total	\$ 94,000.00

**"C" Shaft
Building #101
Crusher House**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Asbestos type 1 Removal	\$ 6,000.00
Equipment or Machinery Removal	\$ 30,000.00
Dismantling of Steel Structural	\$ 7,000.00
Demolition of Building	\$ 20,000.00
Concrete Demolition including Track Removal	\$ 8,000.00
Site Preparation	\$ 4,000.00
Sub total	\$ 75,500.00

**"C" Shaft
Building #127
Hoist House Compressor Building**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Asbestos Type 1 Removal	\$ 6,000.00
Equipment or Machinery Removal	\$ 10,000.00
Dismantling Steel Roof & Siding	\$ 10,500.00
Dismantling of Steel Structural	\$ 4,000.00
Demolition of Remnants of Building	\$ 4,000.00
Concrete Demolition	\$ 2,500.00
Site Preparation + Sub Station + Perimeter Fence	\$ 2,000.00
Sub total	\$ 40,000.00

**"C" Shaft
Building # 117
New Refractory Building**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Equipment or Machinery Removal	\$ 6,000.00
Dismantling Steel Roof , Siding & Insulation	\$ 19,000.00
Dismantling of Steel Structural	\$ 5,000.00
Demolition of Remnants of Building	\$ 5,000.00
Concrete Demolition	\$ 1,000.00
Site Preparation + Perimeter Fence	\$ 1,500.00
Sub total	\$ 38,500.00

**"C" Shaft
Buildings #122 & #084
Machine Shop & Pipe Shop**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Removal of Equipment	\$ 10,000.00
Removal of Interior Steel Siding	\$ 6,000.00
Demolition of Remnants of Building	\$ 10,000.00
Concrete Demolition	\$ 5,000.00
Site Preparation	\$ 2,000.00
Sub total	\$ 34,000.00

**"C" Shaft
Warehouse # 085**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Demolition of Remnants of Building	\$ 4,000.00
Site Preparation	\$ 500.00
Sub total	\$ 5,000.00

**"C" Shaft
Building #016
ATCO Mine Rescue Trailer**

ITEM	COSTS
Removal of Trailer	\$1,000.00
Sub Total	\$1,000.00

**"C" Shaft
Building # 172
Boiler Building**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Equipment or Machinery Removal	\$ 10,000.00
Dismantling Steel Roof & Siding	\$ 18,000.00
Dismantling of Steel Structural	\$ 8,000.00
Demolition of Remnants of Building	\$ 4,000.00
Concrete Demolition	\$ 2,500.00
Site Preparation	\$ 1,500.00
Sub total	\$ 45,000.00

**"C" Shaft
Building #007
Mobile Repair Shop**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Removal of Equipment or Machinery	\$ 12,000.00
Dismantling Steel Roof, Siding & Insulation	\$ 20,000.00
Dismantling of Steel Structural	\$ 15,000.00
Concrete Demolition	\$ 3,000.00
Site Preparation	\$ 2,000.00
Sub total	\$ 52,500.00

**"C" Shaft
House Above Mobile Repair Shop**

ITEM	COSTS
Demolition of Structure	\$ 1,500.00
Site Preparation	\$ 500.00
Sub total	\$ 2,000.00

**"C" Shaft
Building #155
Office Building**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Removal of Asbestos Type 1	\$ 5,000.00
Removal of Asbestos Type 2	\$ 3,000.00
Demolition of Building	\$ 19,000.00
Concrete Demolition	\$ 8,000.00
Site Preparation	\$ 2,500.00
Sub total	\$ 38,500.00

**"C" Shaft
Building #166
C Dry**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Dismantling of Steel Roof & Siding	\$ 20,000.00
Dismantling Structural Steel	\$ 12,000.00
Demolition of Remnants of Building	\$ 15,000.00
Concrete Demolition	\$ 4,000.00
Site Preparation	\$ 4,000.00
Sub total	\$ 55,500.00

**"C" Shaft
Building #110
Old Roaster**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Asbestos Type 1 Removal	\$ 15,000.00
Removal of Arsenic Dust and Residue	\$ 20,000.00
Equipment or Machinery Removal	\$ 20,000.00
Dismantling of Steel Structural	\$ 10,000.00
Demolition of Remnants of Building	\$ 67,000.00
Concrete Demolition	\$ 7,000.00
Site Preparation + Sub Station + Perimeter Fence	\$ 10,000.00
Sub total	\$ 150,000.00

**"C" Shaft
Warehouse #3
Building #133**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Asbestos Type 1 removal	\$ 17,000.00
Demolition of Remnants of Building	\$ 6,000.00
Concrete Demolition	\$ 1,500.00
Site Preparation + Sub Station + Perimeter Fence	\$ 3,000.00
Sub total	\$ 28,500.00

**"C" Shaft
Building #100 #115
Ore Load Out**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Removal of Equipment	\$ 5,000.00
Removal of Steel Roof, Siding & Insulation	\$ 7,000.00
Dismantling Structural Steel	\$ 4,500.00
Demolition of Remnants of Building	\$ 3,000.00
Concrete Demolition	\$ 2,000.00
Site Preparation	\$ 1,000.00
Sub total	\$ 23,000.00

**"C" Shaft
Conveyor From
Ore Load Out to Crusher House**

ITEM	COSTS
Removal of Equipment	\$ 4,000.00
Dismantling Structural Steel	\$ 6,000.00
Concrete Demolition	\$ 500.00
Site Preparation	\$ 500.00
Sub total	\$ 11,000.00

**"C" Shaft
Building #154
Pipe Storage
2 x Structures**

ITEM	COSTS
Demolition of Buildings	\$ 13,000.00
Site Preparation	\$ 1,000.00
Sub Total	\$ 14,000.00

**"C" Shaft
Building # 162
Calcining Plant**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Asbestos Type 1 Removal	\$ 93,000.00
Asbestos Types 2 & 3 Removal & Cleanup	\$ 10,000.00
Removal and Disposal of Arsenic Dust and Residue	\$ 20,000.00
Equipment or Machinery Removal	\$ 15,000.00
Dismantling of Steel Structural	\$ 20,000.00
Demolition of Building	\$ 40,000.00
Concrete Demolition including Track Removal	\$ 8,000.00
Site Preparation	\$ 3,000.00
Sub total	\$ 210,000.00

**"C" Shaft
Pump Shack**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Removal of Equipment	\$ 1,000.00
Demolition of Remnants of Building	\$ 2,000.00
Concrete Demolition	\$ 500.00
Site Preparation	\$ 1,000.00
Sub total	\$ 5,000.00

**"C" Shaft
Building #109
Reagent Warehouse**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Demolition of Remnants of Building	\$ 6,500.00
Site Preparation	\$ 1,000.00
Sub total	\$ 8,000.00

**"C" Shaft
Out Buildings @ Machine Shop**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Dismantle Steel Roof, Siding, & Insulation	\$ 4,500.00
Dismantling of Steel Structural	\$ 2,000.00
Removal of Equipment	\$ 1,000.00
Concrete Demolition	\$ 1,500.00
Sub total	\$ 9,500.00

**"C" Shaft
Service Corridor
Old Mill and Roaster**

ITEM	COSTS
Demolition of Structure	\$ 9,500.00
Site Preparation	\$ 500.00
Sub total	\$ 10,000.00

**"C" Shaft
Building #171
Butler Building**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Asbestos Type 2 Removal	\$ 6,000.00
Demolition of Remnants of Building	\$ 3,000.00
Concrete Demolition	\$ 700.00
Site Preparation	\$ 2,000.00
Sub total	\$ 12,200.00

**"C" Shaft
Building #146
Warehouse #4**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Dismantling Steel Roof & Siding	\$ 9,000.00
Dismantling of Steel Structural	\$ 5,000.00
Demolition of Remnants of Building	\$ 2,500.00
Site Preparation	\$ 2,000.00
Sub total	\$ 18,500.00

**"C" Shaft
Building #059
Standby Generators**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Removal of Equipment Including Fuel Tank	\$ 4,000.00
Removal of Steel Siding, Roofing & Insulation	\$ 12,000.00
Dismantling Structural Steel	\$ 3,000.00
Demolition of Remnants of Building	\$ 4,000.00
Concrete Demolition	\$ 500.00
Site Preparation	\$ 1,000.00
Sub total	\$ 25,500.00

**"C" Shaft
Chimney**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Removal and Disposal of Arsenic Dust and Residue	\$ 20,000.00
Demolition of Chimney	\$ 18,000.00
Disposal of all Materials	\$ 13,000.00
Concrete Demolition	\$ 500.00
Site Preparation	\$ 500.00
Sub total	\$ 52,500.00

"C" Shaft
Buildings #101 ,#102, #106,#108 and #120
Screen House & Conveyors Connecting

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Equipment or Machinery Removal	\$ 8,000.00
Demolition of Remnants of Building	\$ 14,000.00
Concrete Demolition	\$ 4,000.00
Site Preparation + Sub Station + Perimeter Fence	\$ 500.00
Sub total	\$ 27,000.00

"C" Shaft
Building #106 #108 #120
Mill Building

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Asbestos Type 1 Removal	\$ 7,000.00
Equipment or Machinery Removal	\$ 61,000.00
Dismantling of Steel Structural	\$ 25,000.00
Demolition of Remnants of Building	\$ 140,000.00
Concrete Demolition	\$ 20,000.00
Site Preparation + Sub Station + Perimeter Fence	\$ 6,000.00
Sub total	\$ 260,000.00

**Effluent Water
Treatment Plant**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,500.00
Removal of Equipment and Machinery	\$ 28,000.00
Dismantling of Steel Roofing, Siding and Insulation	\$ 41,000.00
Demolition of Buildings Remnants	\$ 15,000.00
Chemical Tank Neutralizing and Disposal	\$ 16,000.00
Lime Tank Disposal	\$ 22,000.00
Tank Farm Demolition	\$ 70,000.00
Sub Station Demolition	\$ 8,000.00
Concrete Demolition	\$ 6,000.00
Site Preparation, Clean up + Reclamation	\$ 13,500.00
Sub Total	\$ 221,000.00

Explosives Limited Site

ITEM	COSTS
By others	

**General Site Clean Up
All Properties**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Dismantling all Fixtures and Disposing of same, Collecting all H.D.P.E. Pipe & Fittings, Removal & Disposal of all Scrap Metals, Clean up and Disposal of all Debris Reclamation of all Parking Lots, Roads, & Accesses as Directed Construct Poured In Place Bulk Heads for Portals	\$ 199,00.00
Sub Total	\$ 200,000.00

**Town Site Houses
22 Structures**

ITEM	COSTS
Hazardous Substances Investigation	\$ 5,000.00
Demolition & Disposal of all 22 Units	\$ 132,000.00
Site Preparation + Clean Up	\$ 22,000.00
Sub Total	\$ 159,000.00

**Oil Tanks
"A" Shaft
Tank Farm**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Sterilize Tanks, collect & Dispose of Hydrocarbons	\$ 38,000.00
Residue, Dismantle and Scrap out Tanks	
Site Preparation	\$ 1,000.00
Sub Total	\$ 40,000.00

**Oil Tanks
"C" Shaft
Tank Farm**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Sterilize Tanks, collect & Dispose of Hydrocarbons	\$ 33,000.00
Residue, Dismantle and Scrap out Tanks	
Site Preparation	\$ 1,000.00
Sub Total	\$ 35,000.00

**Oil Tanks
Mobile Repair Tank Farm
Tank Farm**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Sterilize Tanks, collect & Dispose of Hydrocarbons	\$ 24,000.00
Residue, Dismantle and Scrap out Tanks	
Site Preparation	\$ 1,000.00
Sub Total	\$ 26,000.00

**Oil Tanks
Miscellaneous Tanks
B-1 Pit, B-3 Pit, Crusher House, Mill Building
& Shaft "A" Above Curling Rink**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Sterilize Tanks, collect & Dispose of Hydrocarbons	\$ 59,000.00
Residue, Dismantle and Scrap out Tanks	
Site Preparation	\$ 5,000.00
Sub Total	\$ 65,000.00

**Service Corridors
"A" Shaft, Town Site, "C" Shaft
& Tailings Lines**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Dismantling Structures, Draining Pipes of All Residues Collecting & Disposing of Same, Cutting Piping into Manageable Lengths, Demolishing all Supports & And Disposing of all Materials	\$ 110,000.00
Site Preparation	\$ 9,000.00
Sub Total	\$ 120,000.00

**Hydro Lines
Across All Property**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Dismantling all Structures and Disposing of Same	\$ 33,000.00
Site Preparation	\$ 1,000.00
Sub Total	\$ 35,000.00

**T.R.P. Site
Cold Storage**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Dismantle & Remove or Demolish & Dispose	\$ 9,500.00
Site Preparation	\$ 1,000.00
Sub total	\$ 11,000.00

**T.R.P. Site
Lime Silo & Tanks**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Neutralize all Tanks	\$ 5,500.00
Dismantle & Remove or Demolish & Dispose	\$ 20,000.00
Removal of all Machinery & Piping	\$ 5,000.00
Concrete Demolition	\$ 500.00
Site Preparation	\$ 1,000.00
Sub total	\$ 33,000.00

**T.R.P. Site
General Site Clean up
Original Infrastructure**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Removal of Equipment & Machinery	\$ 5,000.00
Dismantling of Steel Structural	\$ 18,000.00
Demolition of Buildings	\$ 4,500.00
Concrete Demolition	\$ 7,000.00
Site Preparation + Clean Up	\$ 20,000.00
Sub total	\$ 55,000.00

**T.R.P. Site
Office Trailers**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Dismantle & Remove or Demolish & Dispose	\$ 8,500.00
Site Preparation	\$ 1,000.00
Sub total	\$ 10,000.00

**T.R.P. Site
Carbon Reactivator Building**

ITEM	COSTS
Hazardous Substances Investigation	\$ 1,000.00
Removal of Steel Siding, Roofing & Insulation	\$ 29,000.00
Dismantling of Steel Structural	\$ 12,000.00
Equipment or Machinery Removal	\$ 13,000.00
Demolition of Remnants of Building	\$ 6,000.00
Concrete Demolition	\$ 2,000.00
Site Preparation +Transformers + Fencing	\$ 2,000.00
Sub total	\$ 65,000.00

**T.R.P. Site
Steel Trestle**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Dismantling of Steel Structural	\$ 7,500.00
Disposal of Miscellaneous Materials	\$ 2,000.00
Concrete Demolition	\$ 500.00
Site Preparation	\$ 500.00
Sub total	\$ 10,500.00

**T.R.P. Site
Screen House**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Dismantling Steel Roofing, Siding & Insulation	\$ 29,000.00
Dismantling of Steel Structural & Piping	\$ 11,000.00
Concrete Demolition	\$ 1,500.00
Site Preparation	\$ 1,000.00
Sub total	\$ 43,000.00

**T.R.P. Site
Outside Thickener & Circuit Tanks**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Removal of Equipment & Machinery	\$ 9,500.00
Dismantling of Steel Structural	\$ 26,000.00
Disposal of Miscellaneous Materials	\$ 1,500.00
Concrete Demolition	\$ 1,000.00
Site Preparation	\$ 500.00
Sub total	\$ 39,000.00

**T.R.P. Site
Tank Farm**

ITEM	COSTS
Hazardous Substances Investigation	\$ 500.00
Removal of Equipment & Machinery	\$ 19,500.00
Dismantling of Steel Structural	\$ 30,000.00
Tank Demolition	\$ 65,000.00
Disposal of Miscellaneous Materials	\$ 5,000.00
Concrete Demolition	\$ 3,000.00
Site Preparation	\$ 3,000.00
Sub total	\$ 126,000.00

APPENDIX D
PRIORITY LIST COST BREAKDOWN

Priority List of Demolition

Cost Breakdown

Phase 1 \$ 1,986,300.00

Phase 2 \$ 265,000.00

Phase 3 \$ 454,200.00

Phase 4 \$ 1,049,500.00

Phase 5 \$ 221,000.00

Sub Total \$ 3,976,000.00

+ 20% Contingency \$ 795,200.00

+ 10% Contingency for Arsenic Dust & Residue \$ 397,600.00

Total Cost Estimate \$ 5,168,800.00

Work Scope

011-9804

Priority List of Demolition

Phase 1

"A" Shaft

Curling Rink #081	\$ 20,000.00
Recreation Hall #008	\$ 11,500.00
Storage Shed #021	\$ 3,200.00
Vent House	\$ 20,000.00
Diesel Compressors & Hoist House #58 & #002	\$ 25,600.00
Ex powder Magazine	\$ 9,000.00
Exploration Building #003	\$ 19,000.00

Sub Total: \$108,300.00

Akaitcho Mine site

Cook House & Cafeteria	\$ 6,800.00
Bunkhouses	\$ 12,000.00
Exploration Building	\$ 39,400.00

Sub Total: \$ 58,200.00

C-1 Pit

House #210	\$ 4,000.00
Service Building #017	\$ 9,500.00
C-1 Sub Station	\$ 29,000.00

Sub Total: \$ 42,500.00

Priority List of Demolition

Phase 1 Continued

"C" Shaft

Arsenic Scale & Silo	\$ 45,700.00
Ex Powder Mag., Ex PCB's #087	\$ 22,500.00
Old Roaster Building #110	\$ 150,000.00
New Refractory #117	\$ 38,500.00
Bag House #167	\$ 86,500.00
Laboratory Building #169	\$ 22,000.00
Sinking Building #171	\$ 12,200.00
Warehouse # 4 Building #146	\$ 18,500.00
Grease Storage Shed #152	\$ 3,000.00
Planer Shop #144	\$ 29,000.00
Pipe Storage #154	\$ 14,000.00
Calcining Plant #162	\$ 210,000.00
Carpenter Shop #142	\$ 24,500.00
Electrical Building Behind Main Office	\$ 5,000.00
Assay Office #131	\$ 30,000.00
Chemical reagent shed @ Old Mill	\$ 8,400.00
Service corridor Between Old Mill & Roaster	\$ 10,000.00
House Above Mobile Repair Shop	\$ 2,000.00
Dorrco Plant #143	\$ 195,000.00
Cottrell Plant #134	\$ 200,000.00
Reagent Warehouse #109	\$ 8,000.00
Surface Ore Load Out Building #115	\$ 23,000.00
Conveyor between Ore Load Out & Crusher House	\$ 11,000.00
Warehouse In Conveyor Belt Yard #085	\$ 5,000.00
Chimney	\$ 52,500.00
Fan house & Structural Steel #148	\$ 18,500.00

Sub Total: \$ 1,244,800.00

Priority List of Demolition

Phase 1 Continued

T.R.P. Area

Office Trailers	\$	10,000.00
Carbon Reactivator	\$	65,000.00
Cold Storage Building	\$	11,000.00
Lime Silo & Tanks	\$	33,000.00
Steel Trestle	\$	10,500.00
Screen House	\$	43,000.00
Outside Thickener & Tanks	\$	39,000.00
Tank Farm	\$	126,000.00
General site Preparation	\$	55,000.00
Sub total	\$	392,500.00

Miscellaneous Sites:

"A" Shaft Tank Farm	\$	40,000.00
"C" Shaft Tank Farm	\$	35,000.00
Miscellaneous tanks	\$	65,000.00
Sub Total	\$	140,000.00

Sub Total for phase 1 \$ 1,986,300.00

Priority List of demolition

Phase 2

"A" Shaft

Town Site Houses	\$ 159,000.00
Boiler Building #037	\$ 37,000.00
Diesel generator Shack	\$ 3,100.00
Pump house @ Lake #075	\$ 15,400.00
Pump House #076	\$ 6,000.00
Sewage :Lift Station	\$ 6,000.00

Sub Total: \$ 226,500.00

"C" Shaft

Office Building #155	\$ 38,500.00
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Sub Total: \$ 38,500.00

Sub Total for Phase 2 \$ 265,000.00

Priority List Of Demolition

Phase 3

"A" Shaft

Head Frame # 024	\$ 24,500.00
Sub Station #4 #004	\$ 9,200.00

Sub Total: \$ 33,700.00

Akaitcho Mine Site

Head Frame	\$ 32,000.00
Warehouse & Hoist	\$ 48,000.00
Air Compressor Building	\$ 8,000.00

Sub Total: \$ 88,000.00

"C" Shaft

Crusher House#101	\$ 75,500.00
Warehouse #3 #133	\$ 28,500.00
Screen House #102	\$ 27,000.00
Electrical shop #150	\$ 26,500.00
Boiler Building #172	\$ 45,000.00
Powder Magazine #147	\$ 3,000.00
Out Buildings @ Machine Shop	\$ 9,500.00
Mobile Repair Shop	\$ 52,500.00
Pump Shack	\$ 5,000.00
Machine Shop # 122 & #084	\$ 34,000.00

Sub Total: \$ 306,500.00

Miscellaneous

Mobile Repair Tank farm	\$ 26,000.00
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Sub Total: \$ 26,000.00

Sub Total for Phase 3 \$ 454,200.00

Priority List of Demolition

Phase 4

B Pits

B-1 Pit Vent Complex	\$ 103,500.00
B-3 Pit Vent Complex	\$ 97,000.00
Sub Total:	\$ 200,500.00

"C" Shaft

Head frame # 129	\$ 94,000.00
No.5 Sub Station	\$ 14,500.00
Hoist Room # 127	\$ 40,000.00
Mine Rescue Trailer #016	\$ 1,000.00
No.3 Pump House #112	\$ 3,500.00
C DRY Building	\$ 55,500.00
Standby Generators #059	\$ 25,500.00
Old Mill Complex #106	\$ 260,000.00

Sub Total: \$ 494,000.00

Miscellaneous

Service Corridors	\$ 120,000.00
Hydro lines	\$ 35,000.00
General Clean Up	\$ 200,000.00

Sub Total: \$ 355,000.00

Sub Total for Phase 4 \$ 1,049,500.00

Priority List of Demolition

Phase 5

Water Treatment Complex	\$ 221,000.00
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Sub Total:	\$ 221,000.00
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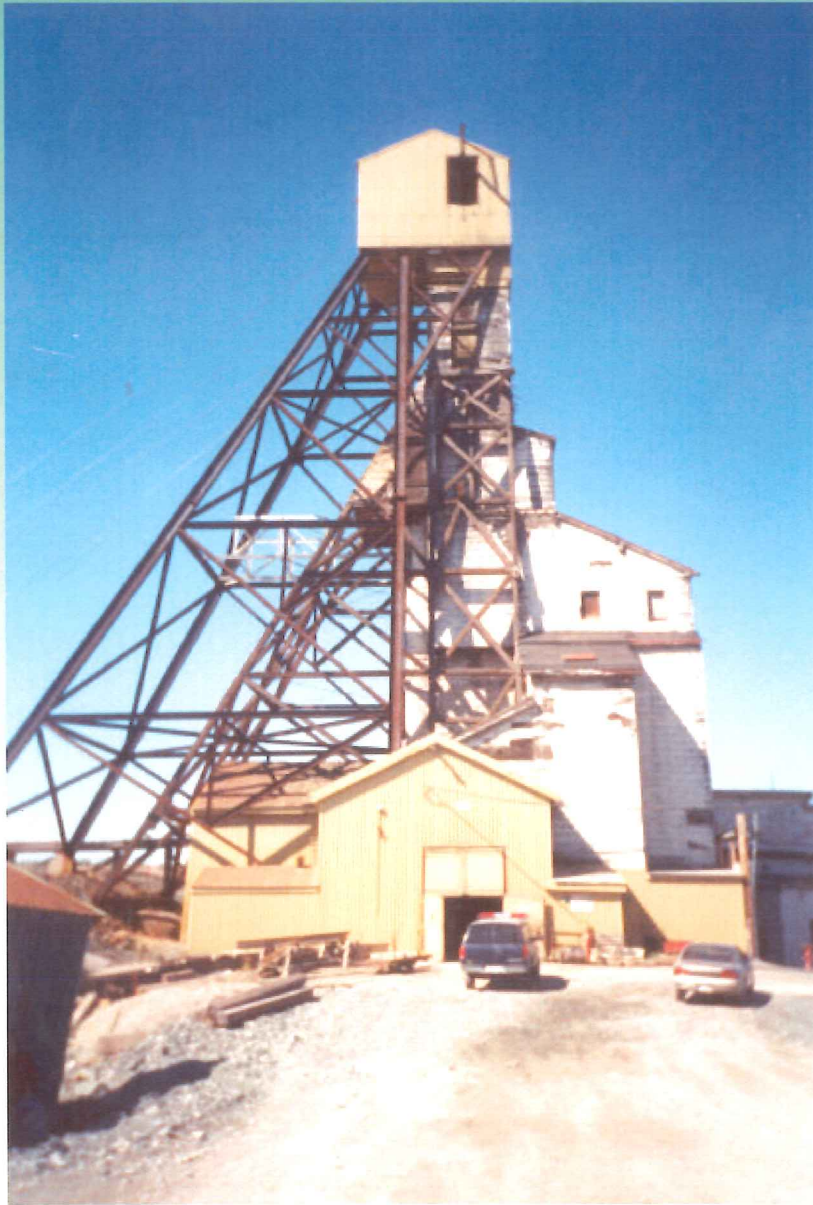
Sub Total for Phase 5	\$ 221,000.00
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Prioritization of Demolition Sequence
for Site Rehabilitation of
Miramar Giant Mine
Yellowknife N.T.

011-9804

Volume 2

March 2001



Miramar Giant Mine
Yellowknife N.T.

**"A" SHAFT
BUILDING #024
HEAD FRAME AND COLLAR HOUSE**



Interior



South View



Interior Ceiling

GAIA Contractors

Use

- ventilation shaft for underground works

Construction

- wood frame; wood siding; wood foundation; pitched felt roof; and concrete floor.

Size

- 8.1 m x 16.7 m x 21 m H (average)

Work Plan

- owner shall locate and de-energize all utilities attached to the structure;
- owner may remove any item, material, or equipment deemed salvageable and transport to designated area on mine property;
- check dates of manufacturing and labelling of florescent lights which are suspected of containing PCBs in ballast;
- if identified, remove ballast, properly contain and ship off site to proper disposal facility;
- provide temporary cover over open shaft complete with safety barriers;
- demolish structure using mechanical means and dispose in designated landfill;
- construct permanent shaft cap over opening as per standard regulations; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Shaft cap installation
- Suspected PCBs

Health & Safety Issues

- all workers wear Class "D" as minimum protection;
- enforce all safety procedures for working around an open shaft; and
- enforce proper handling and storage of PCBs, if encountered.

**"A" SHAFT
BUILDING #076
#2 MAIN PUMP HOUSE**



Interior Showing Steel Roof Supports
Asbestos Type 1 on Walls & Ceiling and Concrete Pedestal

**Use**

- water to mine

Construction

- 1-storey wood frame structure; steel supports for roof; concrete foundation & pedestals; and Asbestos Type 1 panels on interior walls and ceiling.

Size

- 8.5 m x 6.1 m x 3.7 m H

Work Scope

- owner shall locate and de-energize all utilities attached to the structure;
- owner may remove all equipment deemed salvageable and transport to designated site on mine property;
- check manufacturers' dates and labels on ballast of fluorescent lights for possible PCBs;
- if identified, then remove, properly contain and ship off site;
- suspect lead paint on piping;
- remove and properly dispose of Asbestos Type 1 panels in designated landfill;
- mechanically demolish building and dispose of in designated landfill;
- demolish concrete pedestals and foundations, dispose of concrete rubble in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Possible PCBs
- Possible lead paint
- Asbestos Type 1
- Water

Health & Safety Issues

- all workers to wear Class "C" complete with dust particle respirators as minimum protection;
- proper handling of Asbestos material;
- proper handling of PCBs; and
- proper handling of lead painted items.

**"A" SHAFT
BUILDING #004
SUB STATION**



Use

- sub station (town site and boiler house)

Construction

- single-storey frame building; pitched felt roof; concrete foundation; concrete pads; light structural steel; Asbestos Type 1 interior walls and ceiling; Asbestos Type 2 pipe and tank insulation; electrical switch gear; and 6 Ferranti transformers.

Size

- 3.6 m x 3.6 m x 3.6 m H

Work Plan

- owner shall locate and de-energize all utilities attached to structure;
- owner may remove any items deemed salvageable and transport to designated site on mine property;
- sample transformer fluids and send to lab for testing for suspect PCBs;
- if identified, then remove, properly contain and ship off site;

- inventory electrical switch gear for suspect PCBs in capacitors and switch gear possibly containing mercury;
- drain liquid transformers of fluid and collect in proper containers and ship off site to designation dependent on test results;
- remove Asbestos Type 2 and properly dispose of in designated landfill;
- remove Asbestos Type 1 panel from interior and properly dispose of in designated landfill;
- demolish building using mechanical means and dispose of all materials in designated landfill site;
- remove all structural steel and associated equipment, disposing of same in designated landfill;
- remove transformers and dispose in designated landfill;
- demolish concrete foundation and pads and dispose of in designated landfill;
- remove perimeter fence and dispose of in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Asbestos Type 2
- Asbestos Type 1
- Suspect PCBs
- Electrical transformer
- Electrical switch gear

Health & Safety Issues

- all workers to wear Class "C" complete with dust particle respirators as minimum protection;
- enforce all regulations on the proper handling and disposal of hazardous materials; and
- enforce safe working habits for demolition type projects.

**"A" SHAFT
BUILDING #008
RECREATION HALL**



Northwest View



Northeast View

Use

- occasional, Air Cadets

Construction

- 1½ frame building; concrete foundation; and asphalt roof.

Size

- 20.6 m x 24.7 m x (4.3 m H average)

Work Plan

- owner shall locate and de-energize all utilities attached to the structure;
- owner may remove any items deemed salvageable and transport to designated area on mine property;
- check manufacturers' dates and labels on ballast of fluorescent lights for suspect PCBs;
- if identified, then remove and place in proper containers and ship off site;
- remove chain link fence from site and dispose of in designated landfill;
- demolition building using mechanical means and dispose of material in designated landfill;
- demolish concrete foundations and dispose of material in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Propane tank on site to be removed by others
- Suspect PCBs in light ballast

Health & Safety Issues

- all workers to wear Class "D" as minimum protection.

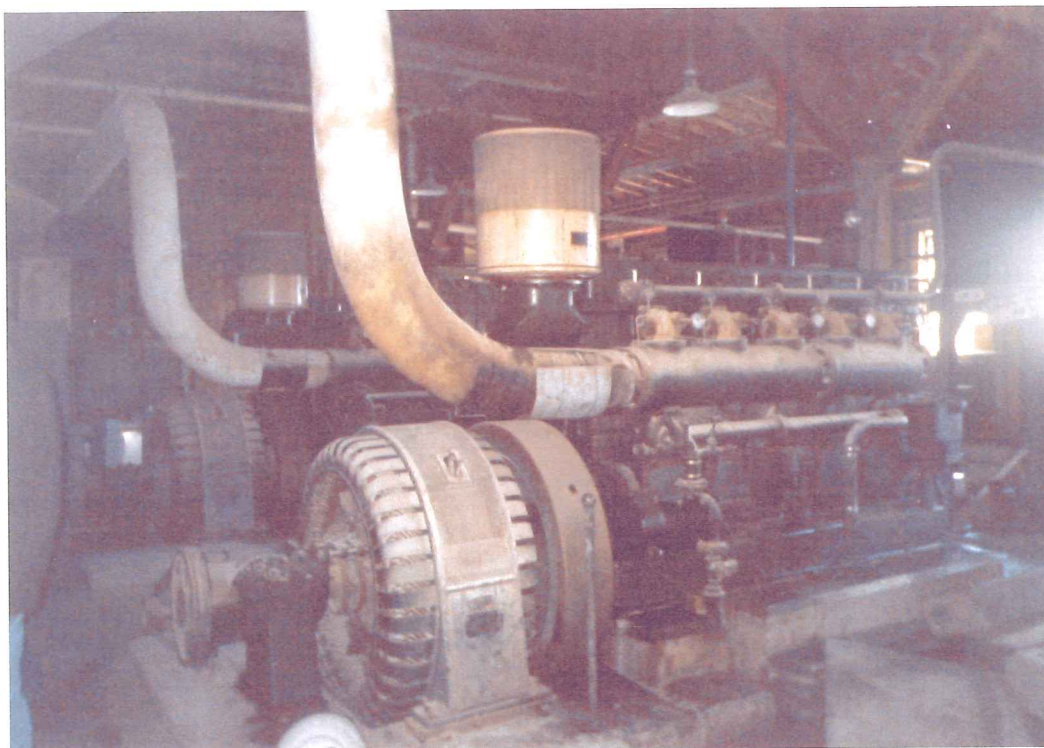
**"A" SHAFT
BUILDING #58 AND #2
DIESEL HOUSE AND HOIST ROOM**



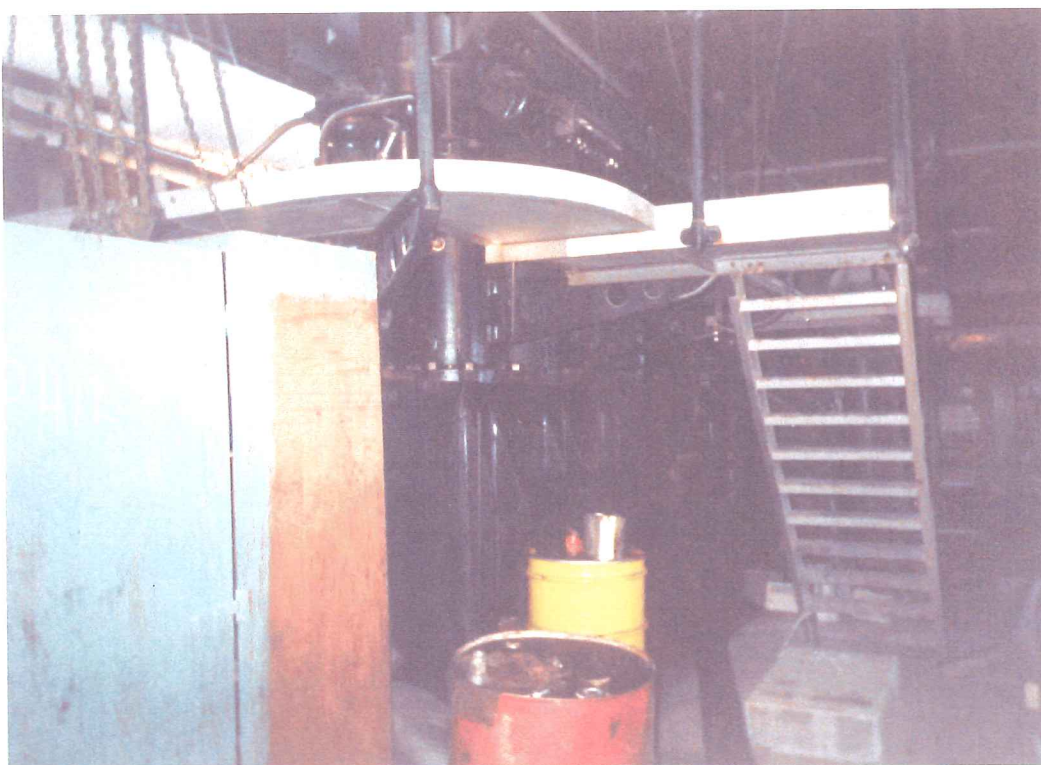
North View



Northwest View



Compressors



Old Compressor



Typical Interior

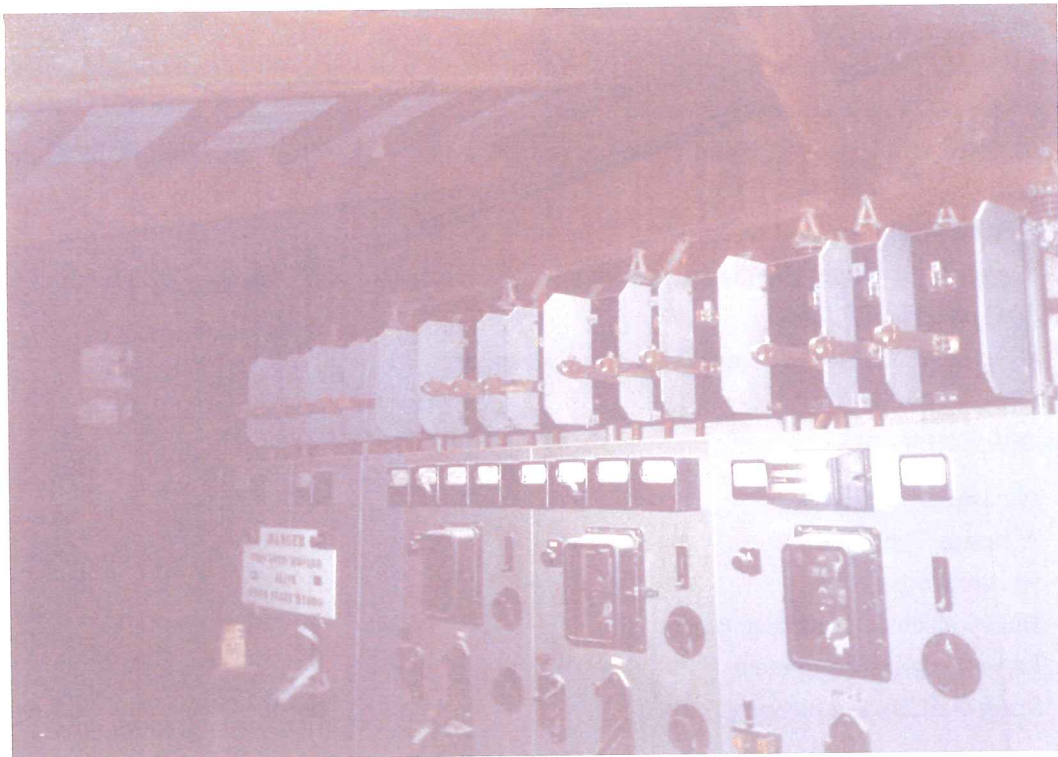


Hoist Room Interior

GAIA Contractors



Fuel Tank



Electrical Equipment

Use

- compressor house; abandoned hoist

Construction

- single-storey frame structure; concrete foundation; concrete pedestals for equipment; pitched felt roof; Asbestos Type 1 wall and ceiling of hoist room; Asbestos Type 2 pipe wrap; heavy equipment and machinery; interior fuel tank; and electrical equipment.

Size

- 21.3 m x 18.0 m + 11.5 m x 8.9 m (4.0 m H average)

Work Plan

- owner shall locate and de-energize all utilities attached to structure;
- owner may remove any machinery, equipment, or items deemed salvageable and transport to designated area on mine property;
- inventory all electrical equipment for suspect capacitors containing PCBs and switch gear for mercury;
- if identified, then remove, properly contain and ship off site;
- remove Asbestos Type 2 using proper procedures, place in proper containers and dispose of in designated landfill;
- remove Asbestos Type 1 and place in proper containers and dispose of same in designated landfill;
- recover any hydrocarbons, clean and purge fuel tank, associated fuel lines and sinks;
- dispose of hydrocarbons as directed;
- demolition of building using mechanical means and disposal of all material in designated landfill;
- remove machinery and equipment;
- demolish concrete foundations, footings and pedestals and dispose of all concrete in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Asbestos Type 1
- Asbestos Type 2
- Hydrocarbons
- Heavy machinery and equipment
- Large electrical equipment
- Suspect PCBs and mercury

Health & Safety Issues

- all workers to wear Class "C" complete with dust particle respirators as minimum protection;
- enforce proper handling and disposal of hazardous materials; and
- enforce safe work guidelines relating to demolition works.

**"A" SHAFT
BUILDING #021
STORAGE SHED**



Use

- storage of miscellaneous items

Construction

- single storey, wood frame; wood foundation; asphalt shingles

Size

- 9.2 m x 3.6 m x 3.4 m H

Work Plan

- owner to locate and de-energize all utilities attached to structure;
- owner to remove all stored equipment from structure deemed as salvageable assets;
- demolish structure using mechanical means and dispose in designated landfill site;
- clean up, grade site and leave in an orderly manner.

Special Items

- no known hazards

Health & Safety Issues

- all workers to wear Class "C" complete with dust particle respirators as minimum protection; and
- enforce safe working habits for demolition type projects.

**"A" SHAFT
BUILDING #081
CURLING RINK LOOKING NORTH**



North View



Curling Club Looking Northeast (Note Asbestos Roof Panels)



Curling Rink Looking West



Interior Common Room (Note Asbestos Panels, Walls & Ceiling)

Use

- abandoned Curling Club

Construction

- single-storey frame structure; on-grade wood timber foundation; Asbestos Type 1 roof panels; asphalt single roof; Asbestos Type 1 panels interior walls & ceiling in common room area; and cooling pipes buried in dirt floor of arena.

Size

- 44.8 m x 9.7 m + 15.0 m x 7.3 m (2.7 m H average)

Work Scope

- owner shall locate and de-energize all utilities attached to the structure;
- owner may remove any items deemed salvageable and transport to designated site on mine property;
- check manufacturers' dates and labels of ballast in fluorescent lights for possible PCBs;
- if located, then remove ballast and properly store for shipping off site;
- remove Asbestos Type 1 Panels from interior ceiling & walls, place in containers and dispose of same in designated landfill;
- remove Asbestos Type 1 siding from roof and properly dispose of in designated landfill;
- demolish building by mechanical means and dispose of same in designated landfill; and
- clean up, grade site and leave in an orderly manner.

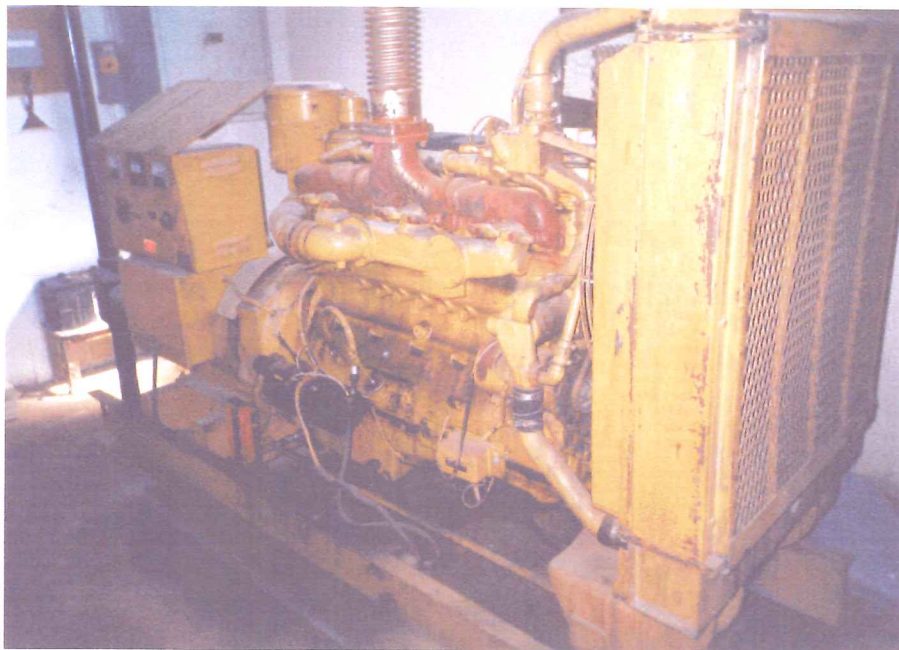
Special Items

- Suspect PCBs
- Suspect lead paint and pipes
- Asbestos Type 1

Health & Safety Issues

- all workers to wear Class "C" complete with dust particle respirators as minimum protection.

**“A” SHAFT
DIESEL GENERATOR BUILDING
BEHIND BOILER BUILDING**



Use

- standby diesel generator

Construction

- steel frame; steel siding and roof; insulated with fibreglass; and concrete slab.

Size

- 3.7 m x 2.4 m x 2.4 m H

Work Plan

- owner to locate and de-energize all utilities attached to structure;
- remove generator and all auxiliary equipment and place in designated area on mine site;
- dismantle steel siding roof;
- remove insulation;
- dismantle steel frame;
- mechanically demolish concrete pad and remove to designated landfill;
- clean up, grade site and leave in an orderly manner.

Special Items

- no known hazards

Health & Safety Issues

- all workers to wear Class "D" complete with dust particle respirators as minimum protection;
and
- practice safe work habits for demolition type projects.

**"A" SHAFT
BUILDING #025
EX POWDER MAGAZINE
LOCATED BACK ROAD @ BONE YARD**



Powder Magazine Looking South and Showing Perimeter Fence

Use

- old powder magazine

Construction

- single-storey; wood frame; steel siding and roof; wood foundation; wood interior; and fenced perimeter.

Size

- 14.0 m x 9.2 m x 2.4 m H

Work Plan

- owner to locate and de-energize all utilities attached to structure;
- owner may remove any items, equipment, machinery or materials deemed salvageable and store in an orderly manner in a designated area on the mine site;
- demolish building using mechanical means and dispose in designated dump, the north or northwest pond;
- remove and dispose of perimeter fence to dump; and
- clean up, grade site and leave in an orderly manner.

Special Items

- no known hazards
- contents unknown

Health & Safety Issues

- all workers to wear Class "D" as minimum protection; and
- enforce safe work habits for demolition type projects.

**“A” SHAFT
BUILDING #003
EXPLORATION SHOP**



Northwest View



Steel Roof

Use

- storage of exploration equipment & miscellaneous items

Construction

- 1½ frame building; steel siding & roofing; wooden foundation on bedrock; wooden interior walls; concrete sidewalk; and perimeter chain link fence.

Size

- 32.0 m x 13.4 m x 4.9 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the structure;
- owner may remove all items deemed salvageable and transfer to designated site within the mine property;
- check interior for stored hydrocarbons; if identified, then remove, properly contain and ship off site;
- check manufacturers' dates and labels on fluorescent light ballast for possible PCBs;
- if identified, remove and place in proper containers and ship off site;
- remove all store material from perimeter of building including chain link fence and dispose of same in designated landfill;
- remove steel siding and roofing (optional);
- demolish building using mechanical means and dispose of material in designated landfill; and
- grade site and leave in an orderly manner.

Special Items

- Possible stored hydrocarbons
- Possible PCBs

Health & Safety Issues

- all workers to wear Class "D" as minimum protection; and
- enforce safe working habits for demolition type projects.

**"A" SHAFT
BUILDING #037
OLD BOILER HOUSE LOOKING NORTHEAST**



Northeast View

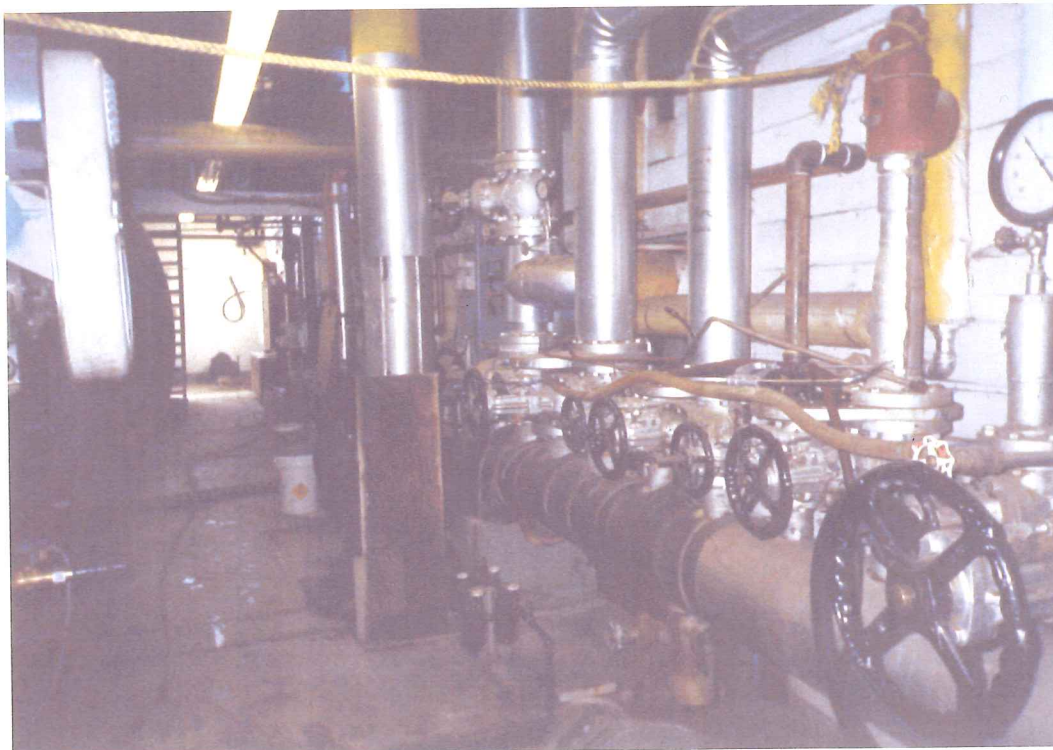


Old Boiler House Looking South

GAIA Contractors



Looking Down on Boiler from Mezzanine



Some Interior Piping



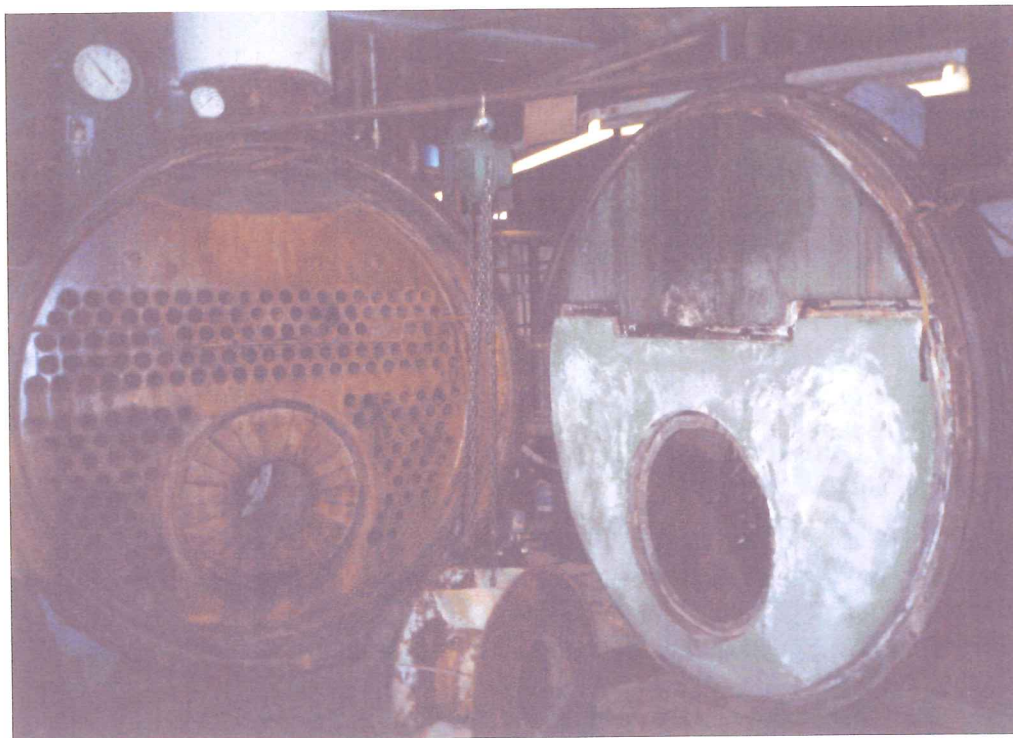
Front View of Mezzanine



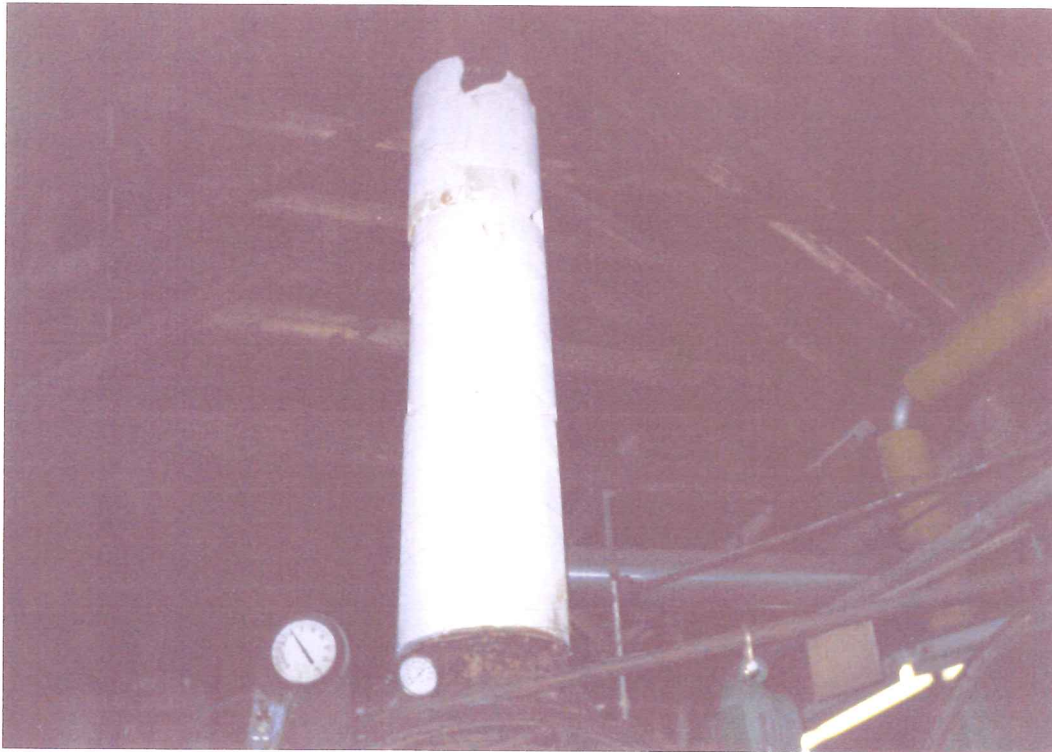
Typical Ceiling and Wall Panels Type 1 Asbestos
and Fluorescent Lights



Asbestos Type 2 Pipe Insulation



Boiler Asbestos Type 2 Insulation



Asbestos Type 2 Insulation

Use

- produces steam heat for townsite and mine facilities

Construction

- 2-storey frame building; steel infrastructure; steel mezzanine; concrete floor; concrete foundation; steel siding over wood frame; pitched felt roof; Asbestos Type 1 interior ceiling; Asbestos Type 1 interior walls; and Asbestos Type 2 insulation coating, boiler, chimney and parts of the ceiling and walls.

Size

- 23.5 m x 11.7 m x (9.3 m H Average)

Work Scope

- owner shall locate and de-energize all utilities attached to the structure;
- owner may remove all equipment and machinery which is deemed as salvageable assets, and transport to designated site on mine property;
- check electrical equipment for light ballast and capacitors that might contain PCBs and mercury switches;
- if identified, then remove and store in proper containers and ship off site;
- remove Asbestos Type 2 material and properly dispose of same in designated landfill;
- remove Asbestos Type 1 material and properly dispose of same in designated landfill;
- remove equipment and machinery from building and dispose of in designated landfill;

- removal of steel siding (optional);
- demolish building with mechanical means and dispose of all material in designated landfill;
- demolish all concrete floors and foundations and dispose of same in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Possible PCBs
- Possible mercury
- Asbestos Type 1
- Asbestos Type 2
- Heavy equipment & machinery

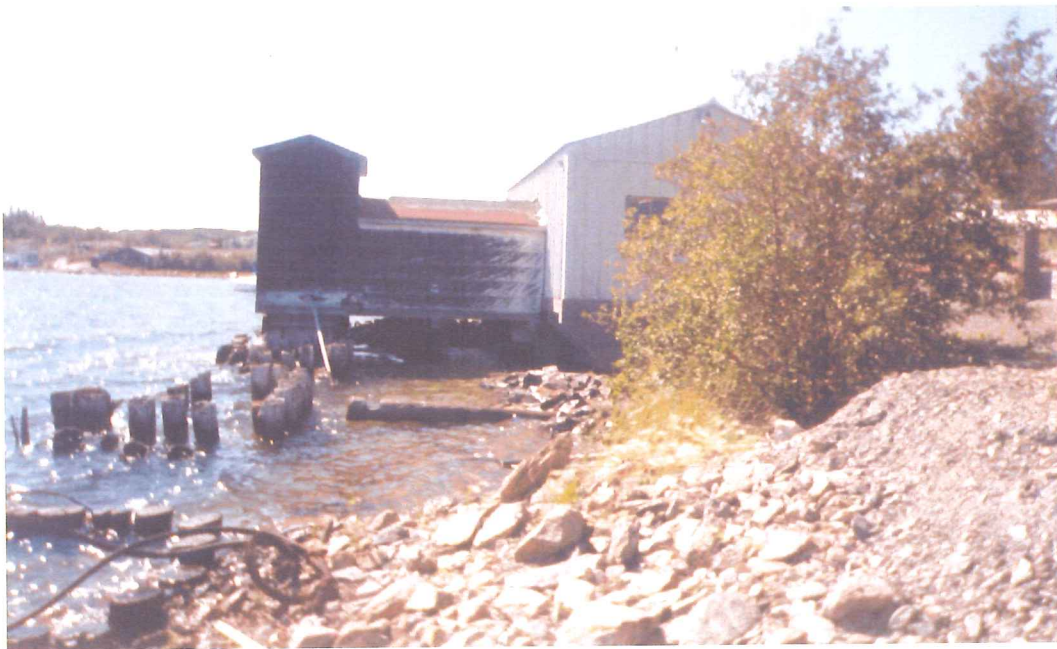
Health & Safety Issues

- all workers to wear Class "C" complete with dust particle respirators as minimum protection; and
- enforce all regulations on the proper handling and disposal of hazardous materials.

**"A" SHAFT
BUILDING #075
PUMP HOUSE AT LAKE**



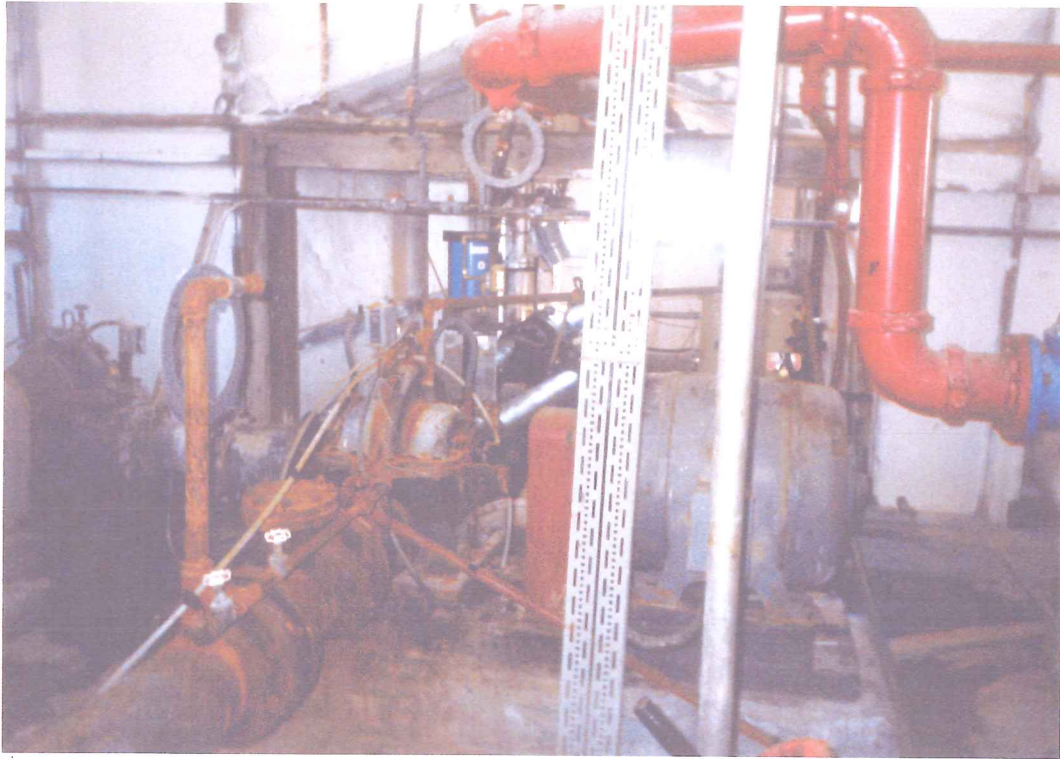
Pump House Looking West



Pump House Extension Looking West



Wooden Deck c/w Steel Infrastructure



Typical Interior Piping



Typical Interior Piping - Asbestos Type 2 on Walls



Steel Structural and Asbestos Type 2 on Ceilings and Walls

Use

- water supply for mine site

Construction

- steel frame building with wood frame extension; Asbestos Type 1 siding panels;
- Asbestos Type 1 roof panels; Asbestos Type 2 insulation walls and ceiling;
- wooden extension and wooden deck on exterior steel frame over water.

Size

- 11.3 m x 6 m + 6.5 m x 3.2 m (3.0 m H) average

Work Scope

- owner to locate and de-energize all utilities attached to structure;
- owner to remove all equipment and machinery which the owner deems as salvageable assets and transport to designated site on mine property;
- barricade off and make safe all pits and sumps within the structure;
- check manufacturing dates and labels of fluorescent lights and capacitors, suspect PCBs in ballast and capacitors;
- if required, remove ballast and capacitors and store in proper containers for shipping off site;

- drain and remove all hydrocarbons from site and properly store for shipping off site;
- remove all Asbestos Type 1 siding and roofing panels complete with Asbestos Type 2 material and properly dispose of them in designated landfill;
- remove steel frame complete with Asbestos Type 2 sprayed on material;
- remove all wooden structure material;
- demolish remaining structure using mechanical means and dispose of material in designated landfill;
- remove steel super structure from over water
- permanently seal off all water access into former structure;
- demolish all concrete floors and footings;
- backfill all pits and sumps; and
- clean up, grade site and leave in an orderly manner.

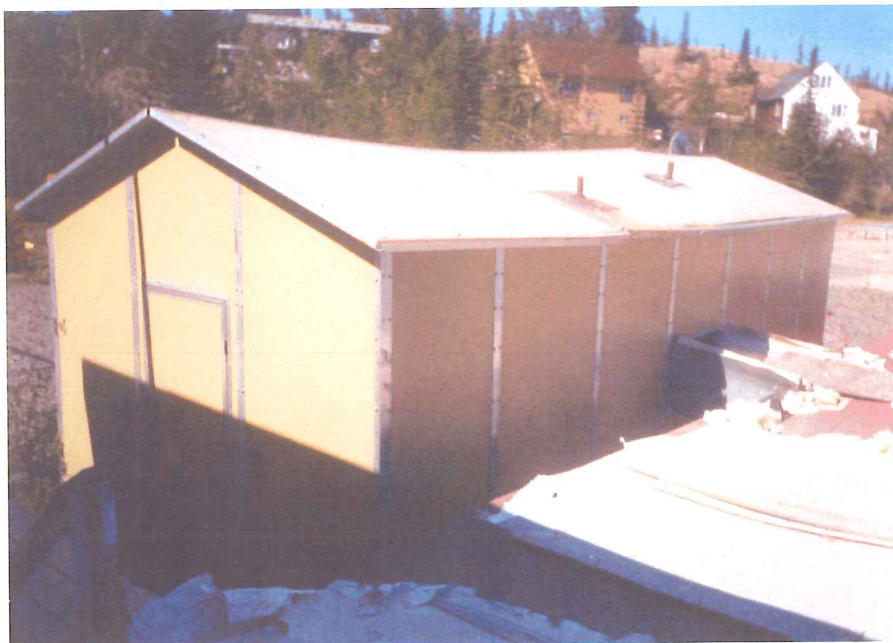
Special Items

- Suspect PCBs in light ballast
- Suspect lead paint
- Asbestos Type 1
- Asbestos Type 2
- Open holes
- Marine environment
- Chlorine stored in building

Health & Safety Issues

- all workers to wear Class "C" complete with dust particle respirators as minimum protection;
- all asbestos to be handled according to regulations governing such work;
- special measures are to be taken to ensure that Asbestos Type 2 is not allowed to enter the environment while dismantling or transporting Asbestos Type 1 and steel sprayed with Asbestos Type 2 material;
- marine environment must be protected from all and any pollution, resulting from demolition practices;
- all open pits and sumps must be properly secured to protect workers; and
- enforce safe working habits for demolition type projects.

**“A” SHAFT
BUILDING #001
SEWAGE LIFT STATION**



Use

- pumps sewage from town site

Construction

- pre-fab metal structure; concrete foundation

Size

- 8.5 m x 3.6 m x 2.4 m

Work Scope

- owner to locate and de-energize all utilities attached to structure;
- owner to remove any equipment or items deemed salvageable and transport to designated site on mine property;
- demolish structure using mechanical means and dispose of in designated landfill site;
- demolish concrete pad and dispose of material as indicated; and
- clean up, grade site and leave in an orderly manner.

Special Items

- remnants of sewage

Health & Safety Issues

- all workers to wear Class “C” complete with organic/vapour respirators as minimum protection.

**"A" SHAFT
TOWN SITE RESIDENCES**



Typical Residence (#207)





Residence 212



Residence 213





Residence 216



Residence 158



Use

- some are occupied at the time of this report; and
- some are abandoned.

Construction

- all wood frame construction on concrete foundations.

Size

- 22 units

Work Plan

- owner shall locate and de-energize all utilities attached to structures;
- demolish all structures;
- demolish all concrete foundations and footings and dispose of all materials resulting from demolition in designated landfill;
- backfill all pits and excavations resulting from demolition with approved material; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Asbestos/Asphalt siding on most residences

Health & Safety Issues

- workers to wear Class "D" as minimum protection.



**"A" SHAFT
VENT HOUSE**



Use

- storage of miscellaneous items

Construction

- 1½ storey frame building; pitched felt roof; wooden foundation; wood floor with concrete covering; Asbestos Type 1 interior walls; Asbestos Type 1 interior ceiling; fiberglass insulation

Size

- 16.4 m x 7.5 m x 4.0 m H (average)

Work Plan

- owner to locate and de-energize all utilities attached to structure;
- remove all stored materials and equipment from interior of structure and, if not salvageable assets, dispose of same in designated landfill;
- remove Type 1 Asbestos panels from ceiling and store in proper containers and dispose of same in designated landfill;
- remove Type 1 Asbestos panels from interior walls, package in proper containers and dispose of same in designated landfill;
- demolish building by mechanical means, load, transport and place in an orderly fashion in designated landfill;
- mechanically demolish concrete pad, load, transport and place in designated landfill;
- site preparation / extent of which shall be determined by soil sampling of site; and
- sample for PCBs, hydrocarbons, metals and arsenic.

Special Items

- Type 1 Asbestos

Health & Safety Issues

- all regulations governing the removal and disposal of asbestos shall be enforced;
- use of moisture spray and HEPA vacuum shall be employed in the removal of the Asbestos Type 1;
- all workers are to wear Class "C" protection complete with dust particle respirators; and
- ensure safe work habits for demolition type projects.

**AKAITCHO MINE SITE
3 BUNK HOUSES**



#1 and #2 Bunkhouses



Wood Foundation #3 Bunk House



Bunk House #1



Bunk Houses



Typical Interior



Typical Interior

Use

- abandoned

Construction

- single-storey frame structures; and wood foundations on bedrock.

Size

- (14.0 m x 9.1 m x 3.1 m H) x 2

Work Plan

- owner shall locate and de-energize all utilities attached to the structures;
- owner may remove any items deemed salvageable and transport to a designated site within the mine property;
- demolish buildings using mechanical means and dispose of materials in designated landfill; and
- grade site and leave in an orderly fashion.

Special Items

- No known hazards

Health & Safety Issues

- workers to wear Class "D" as minimum protection; and
- enforce safe work practices for demolition type projects.

**AKAITCHO MINE SITE
EXPLORATION BUILDING**



Interior 2nd Floor - Asbestos Type 1 and Type 2



Interior Asbestos Type 2 Steel Frame



Interior Asbestos Type 2



Lower Level Showing Storage Items and
Asbestos Type 1 on Ceiling

Use

- storage of small tools and miscellaneous items

Construction

- 2-storey steel frame building; aluminum siding & roof panels; wood interior walls; Asbestos Type 2 sprayed on insulation; Asbestos Type 1 interior walls & ceiling; and concrete foundation.

Size

- 30.0 m x 12.2 m x 7.3 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the building;
- owner may remove all items deemed salvageable and transfer to designated site within the mine property;
- check manufacturers' dates and labels on fluorescent light ballast for possible PCBs;
- if identified, then remove, properly contain and ship off site;
- check stored items for hydrocarbons and, if located, remove, properly contain and ship off site;
- remove all Asbestos Type 1 from interior of building, place in proper containers and dispose of same in designated landfill;
- remove all wood from interior of building and dispose of same in designated landfill;
- remove aluminum panels from roof complete with Asbestos Type 2 insulation attached and dispose of same in designated landfill;
- remove aluminum siding complete with Asbestos Type 2 insulation attached and dispose of same in designated landfill;
- remove steel frame complete with Asbestos Type 2 insulation attached and dispose of same in designated landfill;
- demolish concrete foundation and dispose of material in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Asbestos Type 1
- Asbestos Type 2
- Possible PCBs
- Possible stored hydrocarbons

Health & Safety Issues

- all workers to wear Class "C" complete with dust particle respirators as minimum protection;
- measures must be taken to ensure that Asbestos Type 2 insulation attached to siding, roofing and steel is not allowed to escape into the environment during the demolition and transportation of same; and
- enforce safe working habits for demolition type projects.

**AKAITCHO MINE SITE
COOKHOUSE AND CAFETERIA**



Cookhouse and Cafeteria



Interior Cafeteria

Use

- abandoned

Construction

- single-storey wood structure; and wood foundation on bedrock.

Size

- 24.4 m x 8.5 m + 9.1 m x 3.6 m (3.6 m H average)

Work Plan

- owner shall locate and de-energize all utilities attached to the building;
- owner may remove any items deemed salvageable and transport to designated site within mine property;
- demolish building using mechanical means and dispose of material in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- no known hazards

Health & Safety Issues

- workers to wear Class "D" as minimum protection; and
- enforce safe work practices for demolition type projects.

**AKAITCHO SITE
AIR COMPRESSOR BUILDING**



Compressor



Air Tank

Use

- supplies air for ventilation underground

Construction

- wood frame structure; steel siding & steel roof; double walled; fiberglass insulation; concrete pad foundation; and machinery.

Size

- 6.1 m x 5.5 m x 3.7 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the structure;
- owner may remove any equipment or items deemed salvageable and transport to a designated site within the mine property;
- if not removed by owner, drain all hydrocarbons out of compressor, properly contain and ship off site;
- if not removed by owner, remove equipment from building and the outside perimeter and dispose of same in designated landfill;
- remove any stored hydrocarbons from building;
- dismantle interior steel siding and steel roofing (optional)
- remove insulation and properly package for disposal (optional);
- dismantle exterior steel siding and roof materials (optional);

- demolish remnant of building using mechanical means;
- demolish concrete pad and dispose of all material resulting from the demolition in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Hydrocarbon

Health & Safety Issues

- all workers to wear Class "D" as minimum protection;
- enforce safe and proper handling procedures for hydrocarbons; and
- enforce safe work practices for demolition type projects.

**AKAITCHO MINE SITE
STEEL HEAD FRAME**



North View



Wood Structure Over Shaft



Wood Structure Over Shaft

Use

- ventilation for underground

Construction

- structural steel head frame; wood frame structure; concrete pad; and concrete footings.

Size

- 25.4 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the structure;
- owner may remove any items or equipment deemed salvageable and transport to designated site on mine property;
- place temporary cover over open shaft and install all necessary safety barricades around opening;
- demolish steel head frame and place in designated landfill site;
- demolish concrete footings and place material in designated landfill site;
- demolish wood structure and place in designated landfill site;
- construct a permanent poured-in-place concrete shaft cap over opening as per standard specifications that regulate the construction for shaft caps; and
- grade site and leave in an orderly fashion.

Special Items

- Poured-in-place shaft cap
- Open Hole

Health & Safety Issues

- workers to wear Class "D" as minimum protection;
- enforce all regulations for working around open holes; and
- enforce safe work practices for demolition type projects.

**AKAITCHO MINE SITE
WAREHOUSE AND HOIST ROOM**



West View



Interior Shows Asbestos Type 1 Wall Panels and
Sprayed On Asbestos Type 2 on Super Structure



Sprayed On Asbestos Type 2 Steel Structure



Hoist Location



Interior Walls



Hoist



Electrical Equipment



Sub Station #1



Sub Station #2

Use

- abandoned
- empty except for hoist and some related equipment

Construction

- steel frame building; steel siding & steel roofing; wood foundation; Asbestos Type 2 sprayed on insulation on walls & ceiling; Asbestos Type 1 panels on interior walls; dirt floor; concrete pedestals; electrical equipment; electrical sub stations; transformers; and perimeter fencing.

Size

- 30.5 m x 12.2 m x 3.7 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the structure;
- owner may remove any items or equipment deemed salvageable and transport to designated site within mine property;
- take fluid samples of all transformers and send to lab for testing for possible PCBs;
- drain hydrocarbons completely from all transformers, properly contain and ship off site as per lab results;
- check electrical equipment for possible PCBs in capacitors and for mercury in switches;
- if identified, then use proper handling protocol to remove, properly contain and ship off site;
- remove all Asbestos Type 1 from interior, properly contain and dispose of same in designated landfill;

- remove perimeter chain link fences;
- remove electrical poles from sub stations including all auxiliary apparatus;
- remove all wooden dividing walls and associated interior structures and dispose of same in designated landfill;
- remove roof steel panels complete with sprayed on Asbestos Type 2 insulation within the panels and dispose of same in designated landfill;
- remove steel siding panels complete with sprayed on Asbestos Type 2 insulation within the panels and dispose of same in designated landfill;
- remove steel skeleton complete with sprayed on Asbestos Type 2 insulation and dispose of same in designated landfill;
- check machinery and equipment for hydrocarbons and, if identified, drain completely into proper containers and ship off site;
- remove heavy machinery & electrical equipment and dispose of same in designated landfill;
- demolish all concrete pads & pedestals; and
- grade site and leave in an orderly fashion.

Special Items

- Asbestos Type 2
- Asbestos Type 1
- Liquid electrical transformers
- Hydrocarbons
- Electrical equipment
- Possible PCBs
- Possible mercury
- Heavy machinery

Health & Safety Issues

- all workers to wear Class "C" complete with dust particle respirators as minimum protection;
- measures must be taken to ensure Asbestos Type 2 insulation attached to removed steel siding, roofing & steel frame is contained and not released into the environment during demolition and transportation;
- enforce safe and proper handling and storing protocol for hydrocarbons; and
- enforce safe work practices for demolition type projects.

**"B-1" VENT SHAFT
ELECTRICAL SUB-STATION**



Electrical Sub-Station – Switch Gear Building

Use

- electrical power grid

Construction

- single-storey wood frame building; fiberglass insulation; concrete slab foundation; concrete pedestals; wood fence; chain link fence; transformers; and wood poles and electrical apparatus.

Size

- Building (6.1 m x 3.05 m x 3.7 m H)

Work Plan

- owner shall arrange for station to be taken off power grid and de-energize;
- owner may remove any equipment or items deemed salvageable assets and transport to designated site within mine property;
- take sample of liquid from transformers and send to lab for analysis; check for PCBs;
- properly drain, store transformer fluids and ship off site as per lab results;
- check electrical equipment for capacitors that might contain PCBs;
- if identified, then remove, properly contain and ship off site;
- dismantle perimeter fence and dispose of in designated landfill;
- dismantle power line poles c/w electrical apparatus and dispose of in designated landfill;
- remove transformers and dispose of in designated landfill;
- demolish switch gear building using mechanical means and dispose of all material in designated landfill;
- demolish all concrete foundations and pedestals and dispose of material in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Suspect PCBs
- Hydrocarbons

Health & Safety Issues

- all workers to wear Class "D" as minimum protection;
- enforce safe and proper work practices for the handling and shipping of hydrocarbons;
- enforce safe work practices for the handling Shipping of PCBs; and
- enforce safe and proper work practices for demolition type projects.

**"B-1" VENT SHAFT
NEW COMPRESSOR BUILDING**



Use

- supplies air for underground ventilation

Construction

- Butler Type steel building; steel frame; steel siding & roof; double walled; fiberglass insulation; concrete floor & foundation; heavy machinery; and perimeter chain link fence.

Size

- 12.8 m x 6.1 m x 6.1 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the structure;
- owner may remove all machinery and items deemed salvageable and transport to designated site within mine property;
- remove chain link fence and dispose of same in designated landfill;
- check manufacturers' dates and labels on fluorescent light ballast for possible PCBs;
- if identified, then remove, place in proper containers and ship off site;
- if not removed by owner, then completely drain all hydrocarbons from compressors and associated equipment including fuel tank, properly contain and ship off site;

- if not removed by owner, then remove all equipment and machinery from building and dispose of in designated landfill;
- dismantle all interior steel siding and ceiling panels and dispose of same in designated landfill;
- remove all insulation and dispose of same in designated landfill;
- dismantle outer layer of steel roof and siding and dispose of same in designated landfill;
- dismantle steel frame work and dispose of same in designated landfill;
- demolish concrete floor and foundations and dispose of same in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Suspect PCBs
- Hydrocarbons
- Heavy Equipment

Health & Safety Issues

- workers to wear Class "D" as minimum protection;
- enforce safe and proper handling of hydrocarbons; and
- enforce safe work practices for demolition type projects.

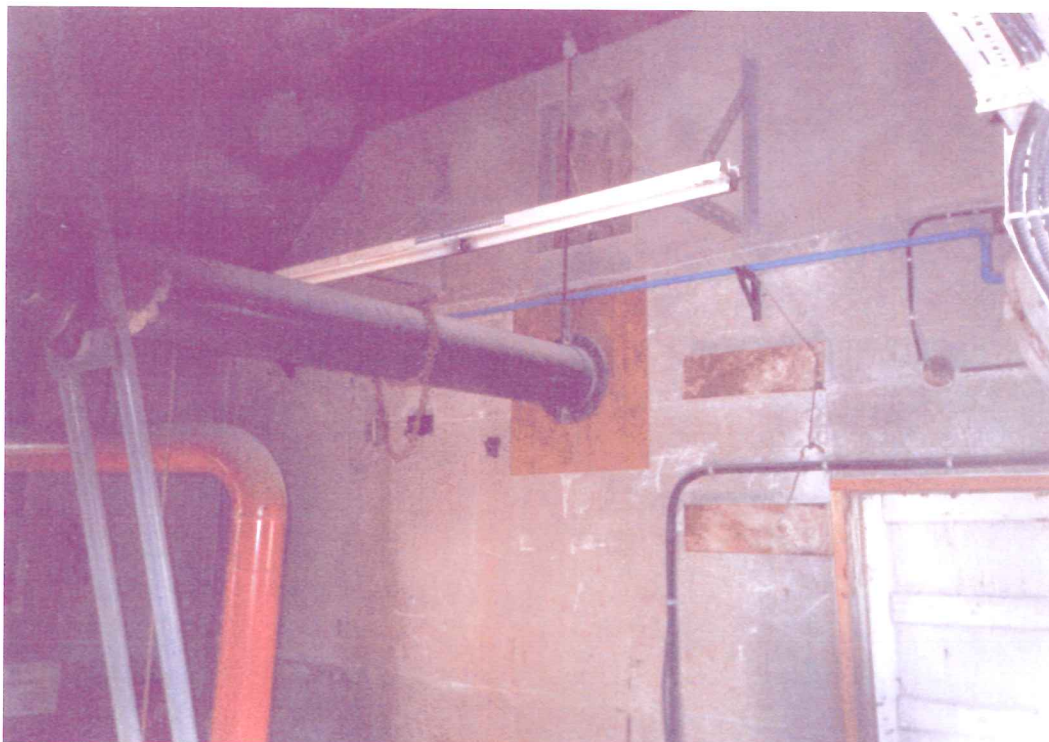
"B-1" VENT SHAFT



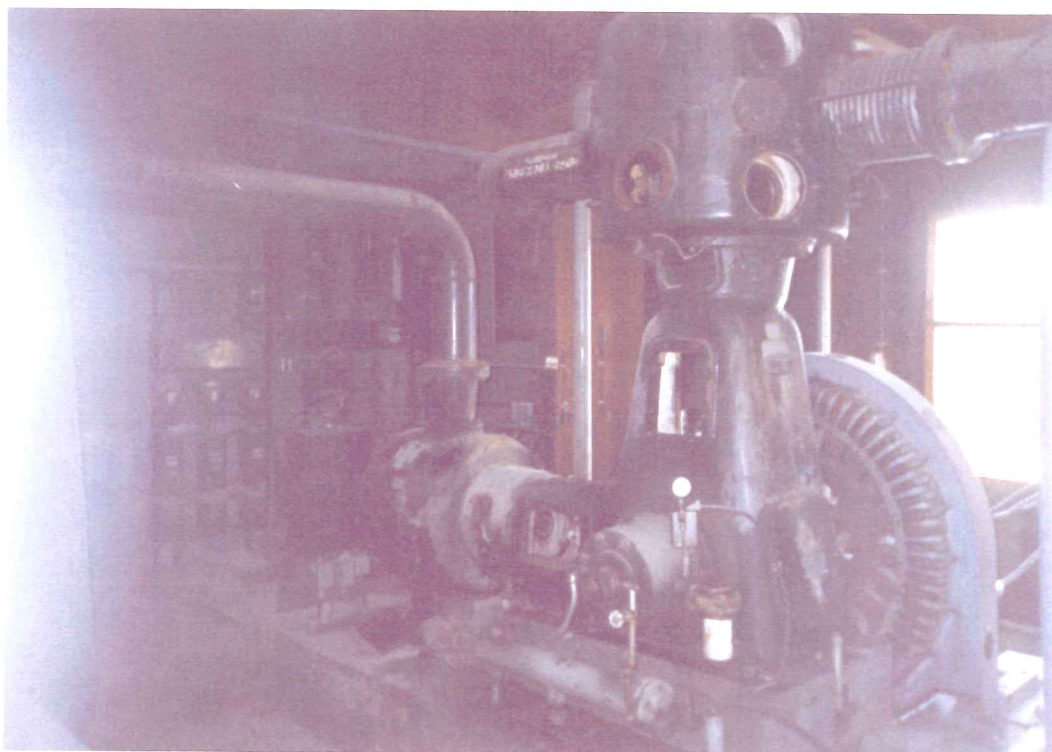
Old Compressor Building



Baker Creek Adjacent to the Old Compressor Building



Interior of Old Compressor Building
Asbestos Type 1 Panels



Interior of Old Compressor Building

Use

- abandoned

Construction

- 1-storey wood frame structure; concrete foundation & floor; pitch felt roof; Asbestos Type 1 panels on interior walls; heavy equipment; electrical equipment; and marine environment.

Size

- 11.0 m x 6.1 m x 4.9 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the building;
- owner may remove any equipment or items deemed salvageable and transport to designated site within mine property;
- check manufacturers' dates and labels on fluorescent ballast and capacitors located in the electrical equipment for suspect PCBs;
- if identified, then remove, properly contain and ship off site;
- check electrical equipment for mercury switches; if identified, then remove, contain properly and ship off site;
- completely drain all equipment and machinery of hydrocarbons, properly contain and ship off site;
- remove Asbestos Type 1 from interior, store in proper containers and dispose of in designated landfill;
- demolish building using mechanical means and dispose of material in designated landfill;
- remove heavy equipment and machinery and dispose of in designated landfill;
- demolish concrete foundations and footings and dispose of material in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Suspect PCBs
- Suspect Mercury
- Asbestos Type 1
- Hydrocarbons
- Marine Environment
- Heavy Equipment
- Electrical Equipment

Health & Safety Issues

- all workers to wear Class "C" complete with dust particle respirators as minimum protection;
- protective measures must be taken to protect Baker Creek from any and all pollution which might result from demolition of building;
- enforce safe and proper handling and disposal practices for PCBs, mercury, Asbestos Type 1 and hydrocarbons; and
- enforce safe work practices for demolition type projects.

"B-1" VENT SHAFT PROPANE STORAGE TANK**Use**

- propane storage

Construction

- large propane tank mounted on concrete pedestals; and steel post snow break structure.

Work Plan

- owner to arrange with gas supplier to de-energize and remove tank from site;
- demolish all concrete pedestals and dispose of material in designated landfill;
- dismantle all snow break structure and dispose of in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Propane Gas
- Propane residue Vapour

Health & Safety Issues

- workers to wear Class "D" as minimum protection;
- take measures to provide proper ventilation;
- in order to prevent the accumulation of propane gas vapour NO SMOKING; and
- enforce safe work practices for demolition type projects.

"B-1" VENT RAISE COMPLEX



Vent Raise Steel Super Structure with
Electrical Room in Foreground Rt



B-1 Vent Raise Ventilation Fans
Steel Super Structure Vent Raise

Use

- underground ventilation

Construction

- steel super structure; exhaust fans; large piping; and shaft entrance.

Size

- undetermined

Work Plan

- owner shall locate and de-energize all utilities attached to the structure;
- owner may remove any equipment or items deemed salvageable assets and transport to designated site within mine property;
- provide temporary cover and barricade off shaft openings;
- completely drain all equipment of hydrocarbons, properly contain and ship off site;
- demolish the structure using mechanical means and dispose of all materials in designated landfill;
- construct permanent poured-in-place concrete shaft caps as per standard specifications; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Hydrocarbons
- Shaft Capping

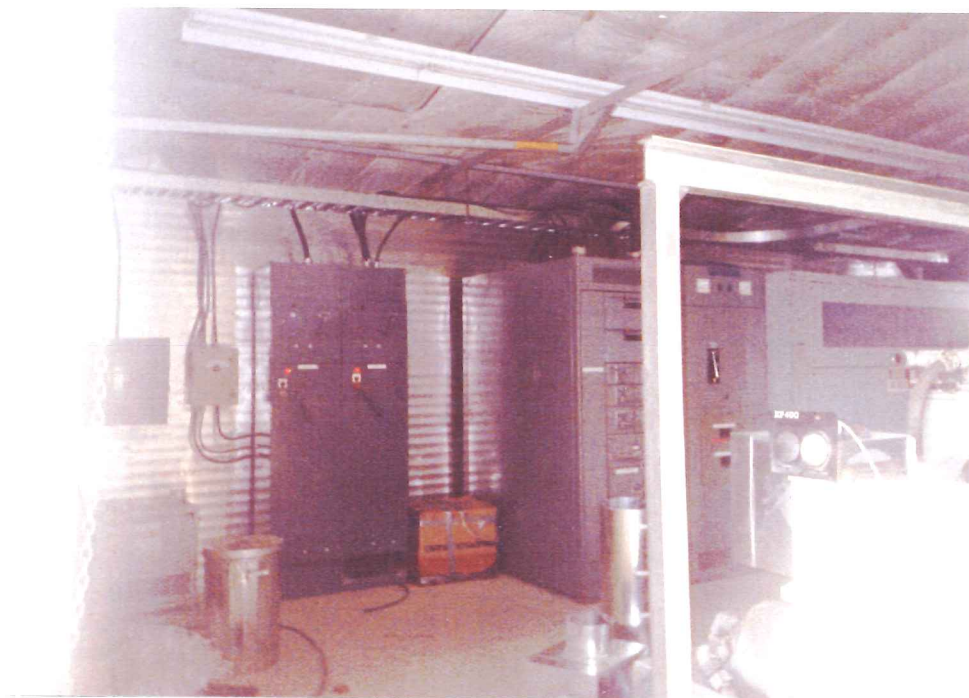
Health & Safety Issues

- workers to wear Class "D" as minimum protection;
- enforce safe and proper practices for handling and disposing of hydrocarbons;
- enforce safe work practices for working around open holes; and
- enforce safe work practices for demolition type projects.

**"B-3" VENT PLANT
COMPRESSOR BUILDING**

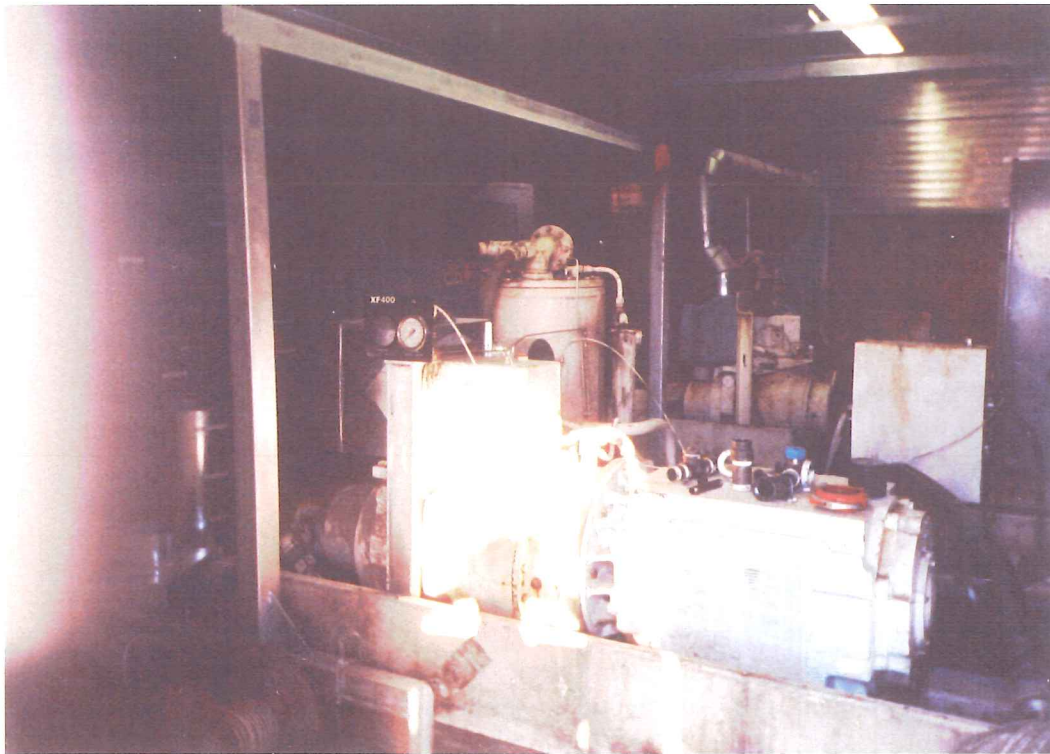


West View of Complex



Interior Compressor Building

GAIA Contractors



Interior Compressor Building

Use

- provides air for underground

Construction

- Butler type building; steel frame; steel siding and roof; double walled; fibreglass insulation; concrete floor and foundation; electrical equipment; and heavy machinery.

Size

- 9.1 m x 7.9 m x 3.05 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the building;
- owner may remove any equipment or items deemed salvageable and transport to designated site within mine property;
- check manufacturer's date and labels on fluorescent light ballast, suspect PCB's;
- check electrical switchgear for capacitors with PCBs and mercury switches;
- if identified, then remove, properly contain and ship off site
- drain compressors completely of hydrocarbons, properly contain and ship off site;

GAIA Contractors

- remove heavy equipment and electrical equipment and dispose of in designated landfill;
- dismantle and remove interior steel siding and dispose of same in designated landfill;
- remove Insulation and dispose of same in designated landfill;
- dismantle steel roof and siding and dispose of same in designated landfill;
- dismantle steel frame and dispose of same in designated landfill;
- demolish Concrete floor and concrete foundation and dispose of same in designated landfill;
and
- clean up, grade site and leave in an orderly manner.

Special Items

- Suspect PCBs
- Suspect mercury
- Hydrocarbons
- Electrical equipment
- Heavy machinery

Health & Safety Issues

- workers to wear Class “D” as minimum protection;
- enforce safe and proper handling and storage procedures for hydrocarbons; and
- enforce safe work practices for demolition type projects.

**"B-3" VENT SHAFT
FAN HOUSING AND VENTILATION STRUCTURE**



Southwest View



Fan and Housing Ventilation Showing Shaft Locations

Use

- supplies underground ventilation

Construction

- steel fan housings; structural steel; large piping; ventilation fans; and shaft openings.

Size

- undetermined

Work Plan

- owner shall locate and de-energize all utilities attached to the structure;
- owner may remove all items or equipment deemed salvageable and transport to designated site within mine property;
- drain all equipment completely of hydrocarbons, store in proper containers and ship off site;
- dismantle all steel structures and associated apparatus and dispose of in designated landfill;
- demolish all concrete foundations and pedestals and dispose of in designated landfill;
- remove steel covers over open shafts and construct 2 permanent poured-in-place concrete shaft caps as per standard specifications; and
- clean up, grade and leave site in an orderly manner.

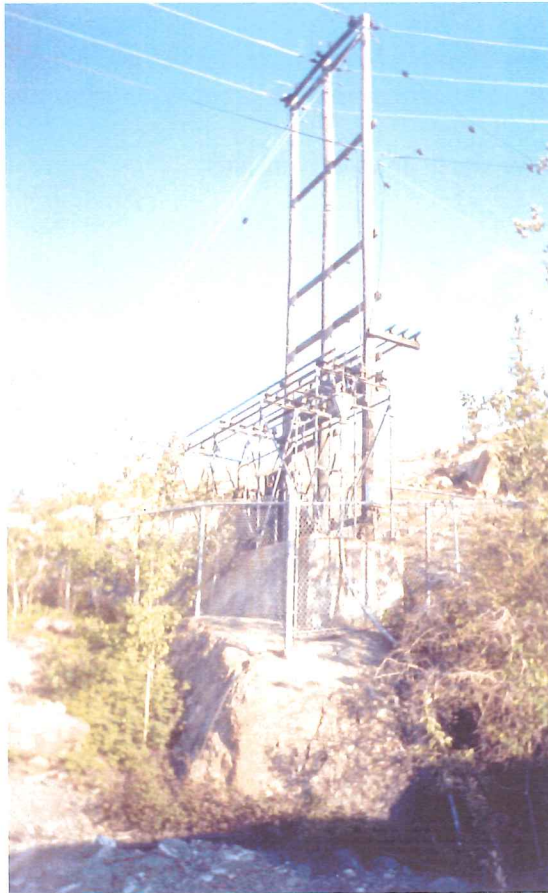
Special Items

- Shaft Capping
- Hydrocarbons

Health & Safety Issues

- workers to wear Class "D" as minimum Protection;
- enforce safe work practices when working around open holes; and
- enforce safe work practices for demolition type projects.

**"B-3" VENT SHAFT
HYDRO TRANSFORMER STATIONS (2)**



Use

- supplies hydro from grid

Construction

- hydro transformers; hydro poles; associated electrical apparatus; concrete foundations & pedestals; and perimeter chain link fencing.

Size

- undetermined

Work Plan

- owner shall de-energize stations from local power grid;
- owner may remove any items or equipment deemed salvageable;
- take fluid samples from each transformer and send to lab to check for PCBs;

- drain all transformers into proper containers and ship all hydrocarbons off site as per lab results;
- dismantle perimeter fence and dispose of same in designated landfill;
- dismantle all poles and associated electrical apparatus and dispose of same in designated landfill;
- remove transformers and dispose of same in designated landfill;
- demolish all concrete foundations and pedestals and dispose of material in designated landfill; and
- clean up, grade and leave site in an orderly manner.

Special Items

- Suspect PCBs
- Hydrocarbons

Health & Safety Issues

- workers to wear Class "D" as minimum protection;
- enforce safe handling practices for hydrocarbons; and
- enforce safe work practices for demolition type projects.

**"B-3" VENT SHAFT
OLD COLLAR HOUSE**



Use

- abandoned

Construction

- single-storey frame building; Asbestos Type 1 panels on interior; concrete floor with embedded railway tracks; and pitch felt roof.

Size

- 5.5 m x 2.4 m x 3.05 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the building;
- owner may remove any items deemed salvageable and transport to designated site within mine property;
- remove Asbestos Type 1 panelling from interior, store in proper containers and dispose of same in designated landfill;
- demolish building using mechanical means and dispose of material in designated landfill;
- demolish concrete foundations and floor including the removal of railway tracks and dispose of material in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Asbestos Type 1

Health & Safety Issues

- all workers to wear Class “C” complete with dust particle respirators as minimum protection; and
- enforce safe work practices for demolition type projects.

"B-3" VENT PLANT STORAGE SHED



Use

- storage of materials

Construction

- wood frame building; steel siding and roof; double walled; fibreglass insulation; and concrete slab foundation.

Size

- 3.05 m x 2.4 m x 2.4 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the building;
- owner may remove any items deemed salvageable and transport to designated area within mine site;
- dismantle interior steel siding and ceiling (optional);
- remove insulation and store in containers (optional);
- dismantle exterior steel roofing and siding (optional);
- demolish remainder of structure using mechanical means and dispose of all materials in designated landfill;
- demolish concrete foundation and dispose of material in designated landfill; and
- clean up, grade and leave site in an orderly manner.

Special Items

- no known hazards

Health & Safety Issues

- all workers to wear Class “D” as minimum protection.

**"C-1" PIT AREA
SUB STATION**



Looking West



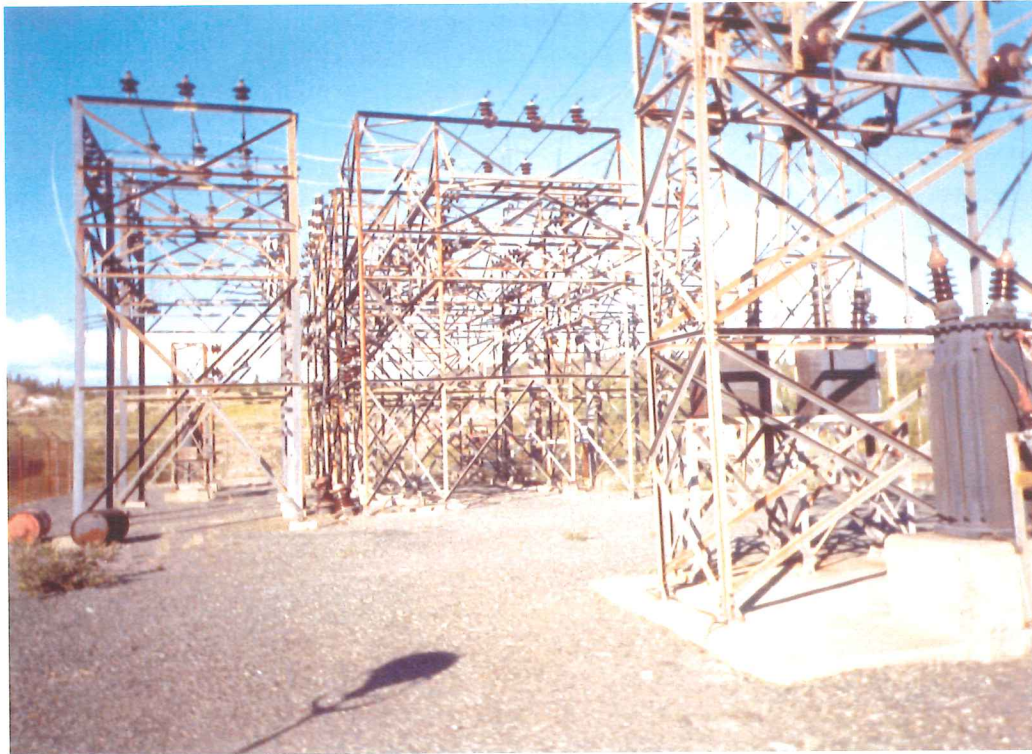
Sub Station Building Exterior



Interior Showing Electrical Equipment and
Asbestos Type 1 Panelling



Sub Station Yard Looking West



Sub Station Yard Looking East

Use

- abandoned electrical power station

Construction

- single-storey wood structure; felt pitch roof; concrete floor & foundation; Asbestos Type 1 panelling on interior walls & ceiling; fiberglass insulation; electrical switching equipment; structural steel & electrical apparatus; transformers; concrete pedestals and perimeter chain link fence.

Size

- 14.0 m x 3.7 m x 3.05 m H (Building)

Work Plan

- owner shall locate and de-energize all utilities attached to the station;
- owner may remove any items deemed salvageable and transport to designated site within mine property;
- take sample of transformer fluids and send to lab for testing for possible PCBs;
- completely drain transformers of fluids, properly contain and ship off site, as per testing results;
- check electrical equipment for capacitors possibly containing PCBs and for mercury switches;

- if identified, then remove, properly contain and ship off site;
- identify any hydrocarbons stored on site, sample for testing for possible PCBs; properly contain and ship off site, as per test results;
- remove electrical equipment and dispose of in designated landfill;
- remove Asbestos Type 1 panels from interior, place in proper containers and dispose of in designated landfill;
- demolish building using mechanical means and dispose of material in designated landfill;
- dismantle structural steel and electrical apparatus and dispose of material in designated landfill;
- remove transformers and dispose of same in designated landfill;
- demolish all concrete foundations and pedestals and dispose of material in designated landfill;
- dismantle perimeter fence and dispose of in designated landfill; and
- clean up, grade and leave site in an orderly manner.

Special Items

- Possible PCBs
- Possible mercury
- Asbestos Type 1

Health & Safety Issues

- all workers to wear Class "C" complete with dust particle respirators as minimum protection;
- enforce safe and proper handling practices for hydrocarbons, mercury and Asbestos Type 1; and
- enforce safe work practices for demolition type projects.

**"C-1" PIT
HOUSE #210**



Use

- abandoned

Construction

- single-storey frame house; and asphalt shingles.

Size

- 12.2 m x 9.8 m x 3.7 m H

Work Plan

- move or demolish using mechanical means;
- if demolishing, dispose of all material in designated landfill.

Special Items

- No known hazards

Health & Safety Issues

- all workers to wear Class "D" as minimum protection; and
- enforce safe work practices for demolition type projects.

**“C-1” PIT
BUILDING #017
SERVICE BUILDING**



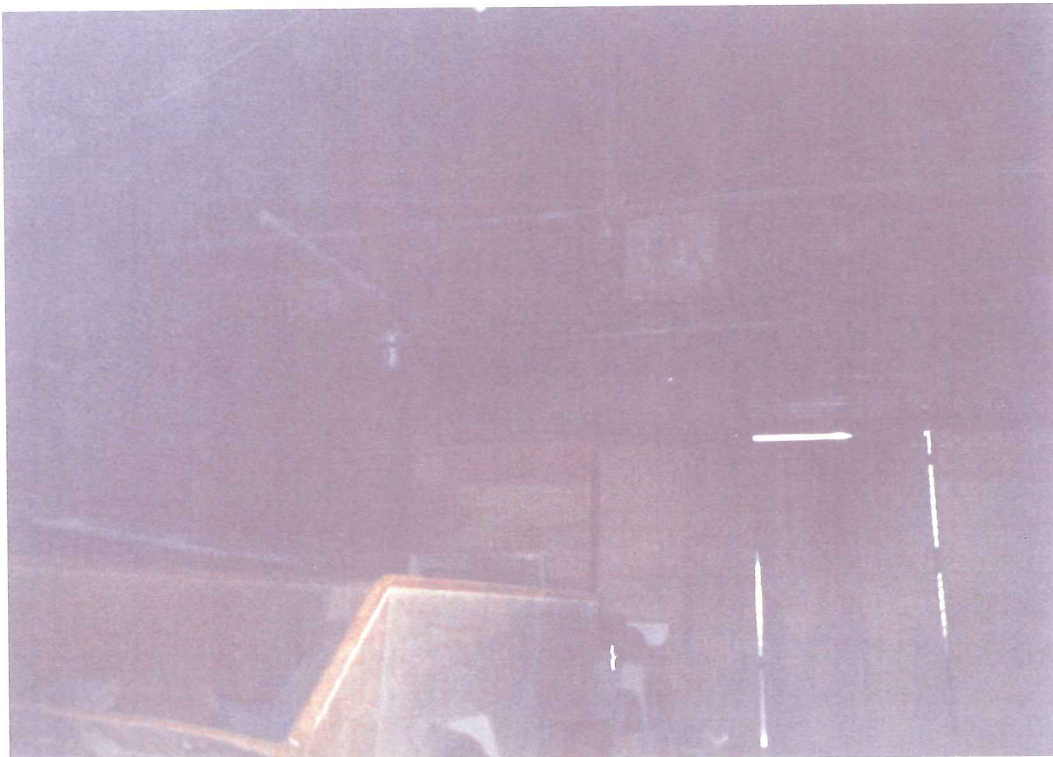
Looking East



“C-1” Pit Service Building Looking South



Miscellaneous Debris in "C-1" Pit



Interior of Building

GAIA Contractors



Wooden Sump



Debris in "C-1" Pit

Use

- abandoned

Construction

- wood frame; steel siding & steel roof; dirt floor; and wood foundation.

Size

- 18.3 m x 8.5 m x 4.9 m H + 3.7 m x 2.4 m x 2.4 m H (wood out-building)

Work Plan

- owner shall locate and de-energize all utilities attached to the structure;
- owner may remove any items deemed salvageable and transport them to a designated site within mine property;
- identify and, if located, drain any hydrocarbons into proper containers and ship off site;
- demolish building using mechanical means and dispose of material in designated landfill;
- demolish wood sump and dispose of material in designated landfill;
- back fill sump excavation with approved material to grade of original ground;
- clean up debris and material in pit area of building and dispose of same in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Assorted oil barrels and tanks (contents unknown)

Health & Safety Issues

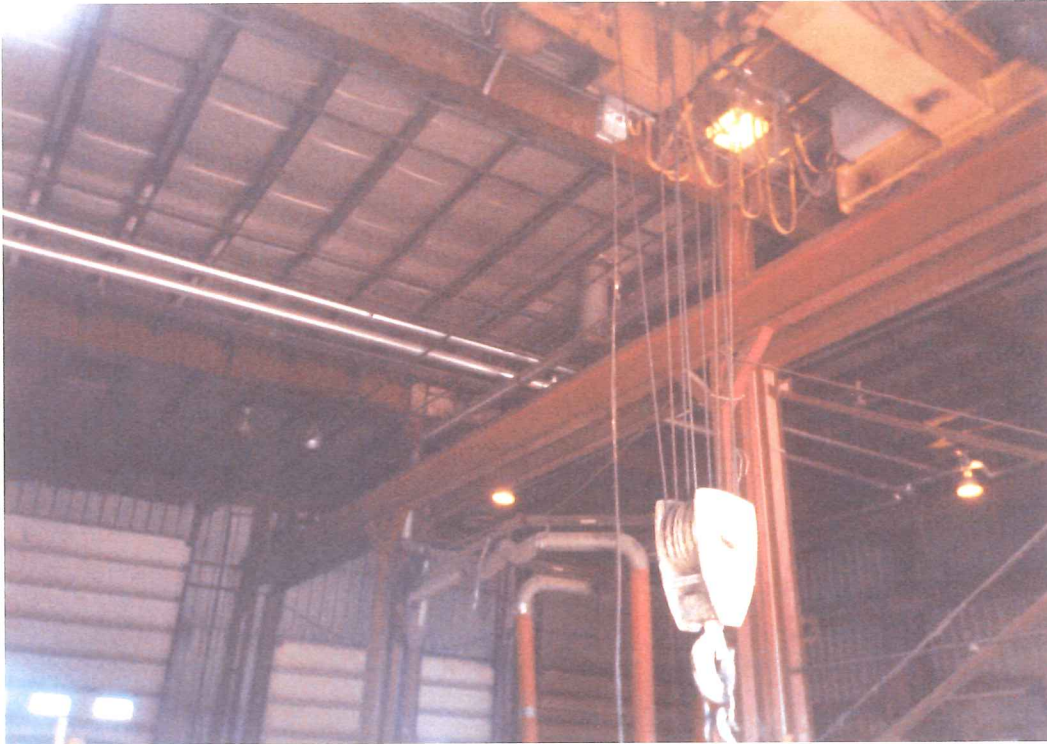
- all workers to wear Class "D" as minimum protection; and
- enforce safe work practices for demolition type projects.

**“C” SHAFT
BUILDING #007
MOBILE REPAIR SHOP**



Typical Interior

GAIA Contractors



Typical Interior

Use

- mobile repair shop

Construction

- Robertson building; steel frame; steel roof & siding; double walled; welded steel; fiberglass insulation; steel mezzanine; concrete floor & footings; machinery & equipment.

Size

- 18.3 m x 15.3 m x 6.1 m H

Work Plan

- owner shall locate and de-energize all utilities attached to building;
- owner may remove any items, material or equipment deemed salvageable and transport to designated area within mine site;
- check for stored hydrocarbons and, if identified, remove, place in proper containers and ship off site;
- check electrical equipment for ballast and capacitors that might contain PCBs;
- check lighting fixtures for presence of mercury vapour;
- if any of these items are identified, then remove, properly store and ship off site;
- dismantle building and dispose of all materials in designated landfill;
- demolish all concrete and dispose of all materials in designated landfill; and
- clean up, grade and leave site in an orderly manner.

Special Items

- Possible PCBs
- Possible mercury vapour
- Hydrocarbons
- Heavy machinery

Health & Safety Issues

- workers to wear Class “D” as minimum protection;
- enforce safe handling practices for hydrocarbons, PCBs and mercury vapour; and
- enforce safe work practices for demolition type projects.

**"C" SHAFT
BUILDING #016
ATCO MINE RESCUE TRAILER**



Use

- mobile completely equipped mine rescue centre

Construction

- portable ATCO trailer

Size

- 12.2 m x 3.05 m x 2.4 m H

Work Plan

- owner shall locate and de-energize all attached utilities;
- relocate to designated area within mine site.

Special items

- No known hazards

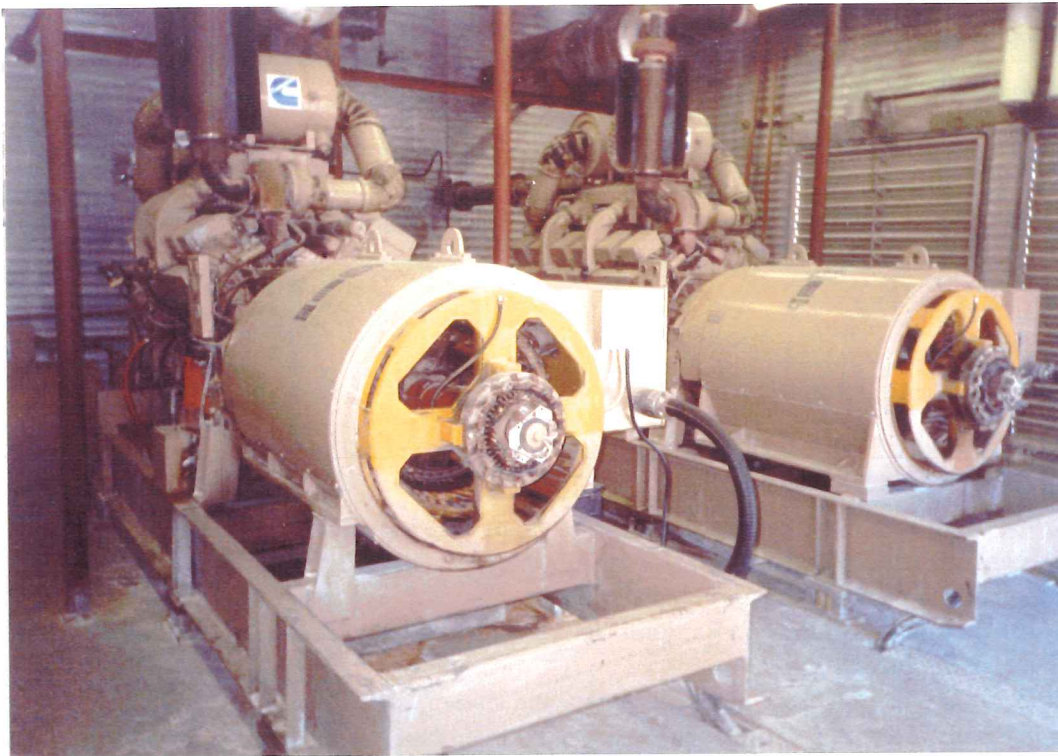
Health & Safety Issues

- all workers to wear Class "D" as minimum protection

**"C" SHAFT
BUILDING #059
STANDBY GENERATORS**



Fuel Tank Looking North



Generators



Interior Ceiling

Use

- emergency electrical power

Construction

- Butler Type building; steel walls and roof double walled; fiberglass insulation; concrete slab foundation; machinery; and electrical apparatus.

Size

- 9.2 m x 7.3 m x 3.7 m H

Work Plan

- owner shall locate and de-energize all utilities attached to building;
- owner may remove any items, equipment or materials deemed salvageable and transport to a designated area within mine property;
- check electrical equipment for light ballast and capacitors that might contain PCBs and switches for mercury;
- if identified, then remove, properly contain and ship off site;
- completely drain all tanks and machinery of hydrocarbons, properly contain and ship off site;
- remove heavy machinery and dispose of same;
- dismantle building;
- demolish remnants of structure;
- demolish all concrete floors and foundations;
- remove fuel tank and cut up to accommodate placement in landfill;
- dispose of all materials resulting from demolition in designated landfill;
- backfill any pits or excavations resulting from demolition with approved material; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Hydrocarbons
- Possible PCBs
- Possible mercury

Health & Safety Issues

- workers are to wear Class "D" as minimum protection;
- enforce safe handling practices for hydrocarbons, PCBs and mercury; and
- ensure safe work practices for demolition type projects.

**"C" SHAFT
BUILDING #085
WAREHOUSE CONVEYOR BELT YARD**



Use

- storage

Construction

- wood structure on wood stilts

Size

- 15.2 m x 9.8 m x 4.3 m H

Work Plan

- no utilities;
- owner may remove any items, materials or equipment deemed salvageable and transport to a designated area within the mine site;
- demolish building using mechanical means and dispose of all materials in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- No known hazards

Health & Safety Issues

- workers to wear Class “D” as minimum protection; and
- enforce safe work practices for demolition type projects.

**"C" SHAFT
BUILDING #087
EX POWDER MAGAZINE – EX PCB STORAGE**



Aluminum Siding

GAIA Contractors



Stored Materials in Interior
Steel Plated Floor



Interior Shows Steel Frame
Aluminum Siding & Roofing and Stored Items

GAIA Contractors

Use

- storage for mine files

Construction

- steel frame; aluminum panels on roof; aluminum siding single wall; wood interior; tongue & groove flooring ½ covered with steel plating; insulated with dirt & grain; wood foundation; chain link perimeter fence; and full of mine files.

Size

- 18.3 m x 7.3 m x 4.3 m H

Work Plan

- owner may remove any items or materials deemed salvageable;
- owner shall locate and de-energize all utilities attached to the structure;
- sample plate flooring for PCBs residue and, if positive, then remove, decontaminate completely and dispose of steel in designated landfill;
- collect all liquids used for decontamination and ship off site as directed;
- dismantle and remove chain link fence, disposing of material in designated landfill;
- dismantle aluminum panels from roof (optional);
- dismantle aluminum siding (optional);
- demolish building using mechanical means and dispose of all materials in designated landfill;
- clean up, grade site and leave in an orderly manner.

Special Items

- Possible PCBs
- Decontamination of some materials might be needed

Health & Safety Issues

- workers to wear Class "D" as minimum protection; and
- enforce safe work practices for demolition type projects.

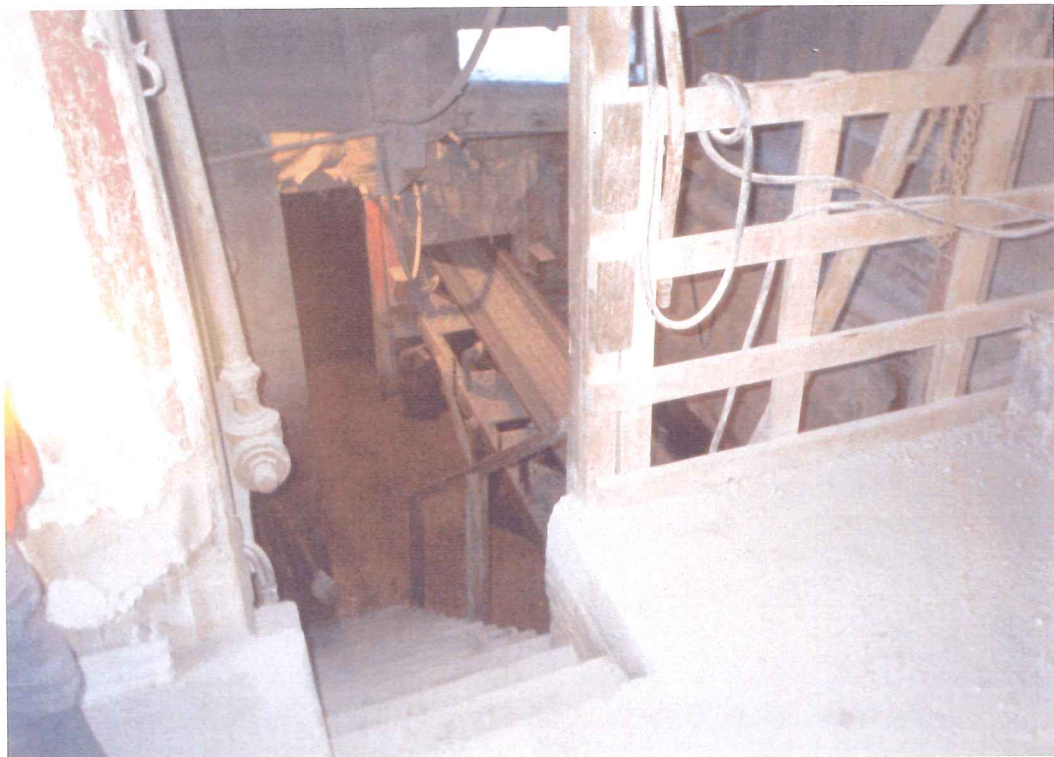
**"C" SHAFT
BUILDING #101
CRUSHER HOUSE**



Crusher House Looking West



Interior Shows Cone Crushers
and Railway Tracks



Conveyor Feed to Screen House



Electrical Room Showing Asbestos Type 1



Typical Interior Structural

Use

- process underground ore

Construction

- multiple level wooden structure; pitch felt roofs; concrete floor & concrete foundations; concrete pedestals for machinery; electrical equipment; Asbestos Type 1 panelling in electrical room; railway tracks and loading zone; heavy machinery & conveyor belt systems; and mezzanines & ore bins.

Size

- 37.1 m x 14.3 m (average) x 8.2 m H (average)

Work Plan

- owner shall locate and de-energize all utilities attached to the structure;
- owner may remove any items or equipment deemed salvageable and transport to designated area within mine property;
- owner has the right to reclaim any building materials, equipment, dust or ore residue that the owner suspects to contain elements of gold;
- this must be done in a timely fashion as to not impede demolition schedules;
- check all electrical equipment and apparatus for possible PCBs in capacitors and fluorescent light ballast;
- if identified, then remove, properly contain and ship off site;
- check electrical equipment for mercury switches and, if identified, remove, properly contain and ship off site;
- source all hydrocarbons used in machinery and identify; if unknown, samples of fluid shall be taken and sent to the lab for verification;
- completely drain all machinery and equipment of hydrocarbons, properly contain and ship off site;
- remove electrical equipment and dispose of same in designated landfill;
- remove Asbestos Type 1 panelling and place in proper containers and dispose of same in designated landfill;
- remove equipment or machinery as demolition provides safe access;
- demolish building using mechanical means and dispose of all material in designated landfill;
- demolish concrete flooring, foundations and pedestals including railway removal, disposing of material in designated landfill;
- backfill all below grade openings with approved material up to original ground elevation; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Elevated levels of arsenic dust
- Asbestos Type 1
- Possible PCBs
- Possible mercury
- Hydrocarbons
- Heavy machinery
- Open holes

Health & Safety Issues

- all workers to wear Class “C” complete with dust particle respirators as minimum protection;
- enforce safe handling practices for asbestos, hydrocarbons, PCBs and mercury;
- enforce personal hygiene for workers handling demolition materials;
- enforce safe work practices for working around open holes; and
- enforce safe work practices for demolition type projects.

**"C" SHAFT
BUILDING #102
SCREEN HOUSE PLUS ENCLOSED CONVEYORS
CONNECTING TO BUILDINGS #101, #102, #106, #108 AND #120**



Screen House and Conveyors Looking Southeast



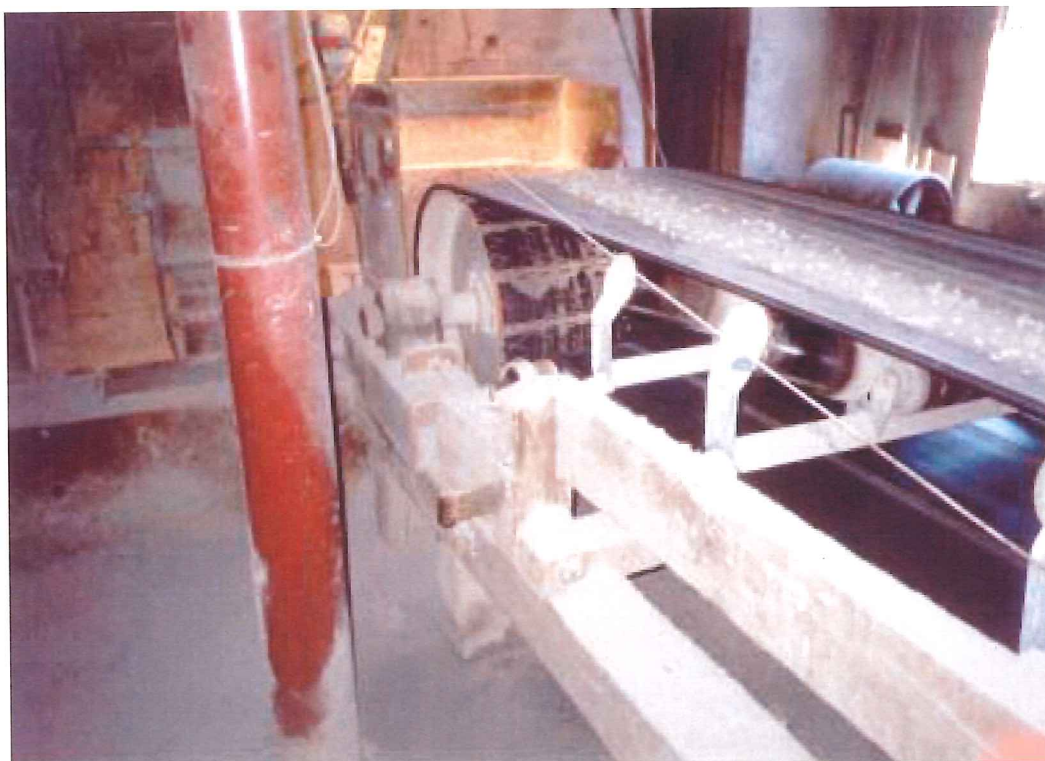
Interior Towards Screen House from Crusher House
(Note: Conveyors are made of Wood)



Upper Screen House Level



Conveyor House Towards Crushed House



End of Conveyor at Screen House

Use

- screens out ore material from crusher for processing in the mill.

Construction

- multiple level wood structure; pitch felt roofs; concrete foundations & footings; wood super structure supporting conveyor ways; and machinery & conveyor belts.

Size

- Screen House: 8.1 m x 6.4 m x 13.4 m H
- Conveyor Houses: 120.4 m x 2.3 x 2.8 m H
52.7 m x 2.3 m x 2.8 m H
27.4 m x 2.3 m x 2.8 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the structures;
- owner may remove any items or equipment deemed salvageable and transport to designated site within mine property;
- owner has first right to reclaim any building material, dust, equipment or ore residue that the owner suspects might contain gold elements;
- this is to be done in a timely fashion as to not interrupt demolition schedules;
- check electrical equipment for capacitors which may contain PCBs;
- if identified, then remove, properly contain and ship off site;
- remove conveyor belting and roll up, using mechanical means and dispose of same in designated landfill;
- demolish all concrete foundations and footings and dispose of material in designated landfill; and
- clean up, grade site and leave in an orderly manner.

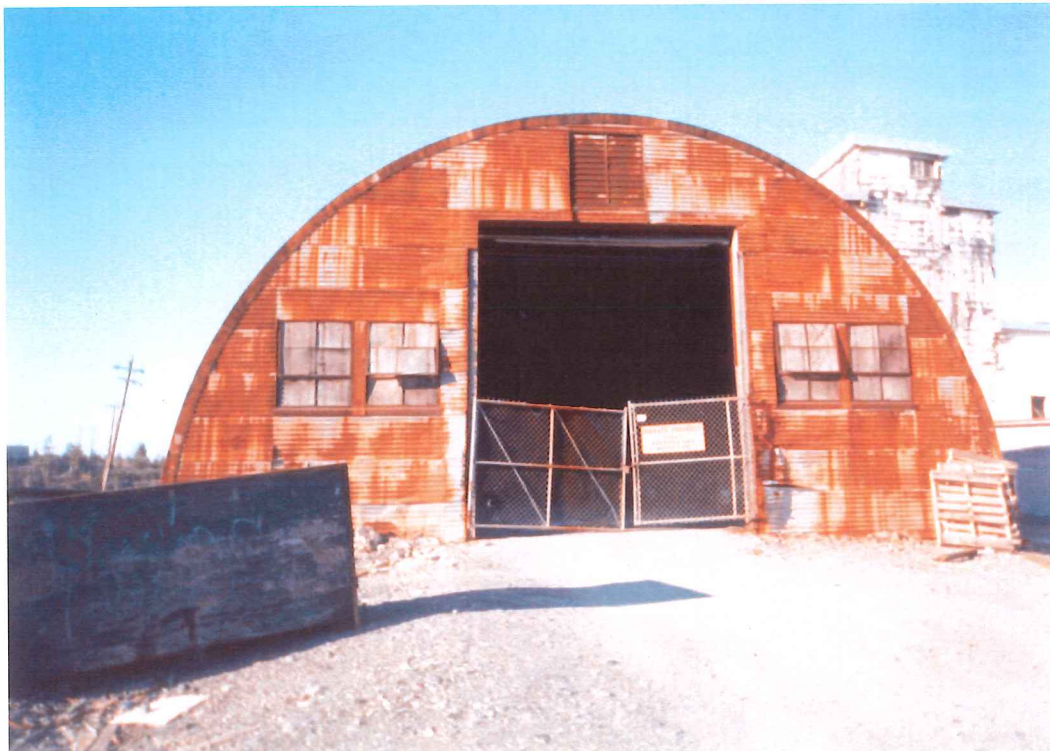
Special Items

- Standing overhead structures
- Elevated levels of arsenic dust

Health & Safety Issues

- all workers to wear Class "C" complete with dust particle respirators as minimum protection; and
- enforce safe work practices for demolition type projects.

**"C" SHAFT
BUILDING #109
REAGENT WAREHOUSE**



Front View

Use

- storage

Construction

- steel nissen hut on timber foundation.

Size

- 30.5 m x 12.2 m x 6.1 m H

Work Plan

- no utilities;
- owner may remove any items deemed salvageable and transport to designated area on the mine property;
- demolish building using mechanical means and dispose of all materials in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- No known hazards

Health & Safety Issues

- workers to wear Class “D” as minimum protection.

**"C" SHAFT
BUILDING #110
OLD ROASTER**



Old Roaster on Left



Old Roaster Looking Southwest



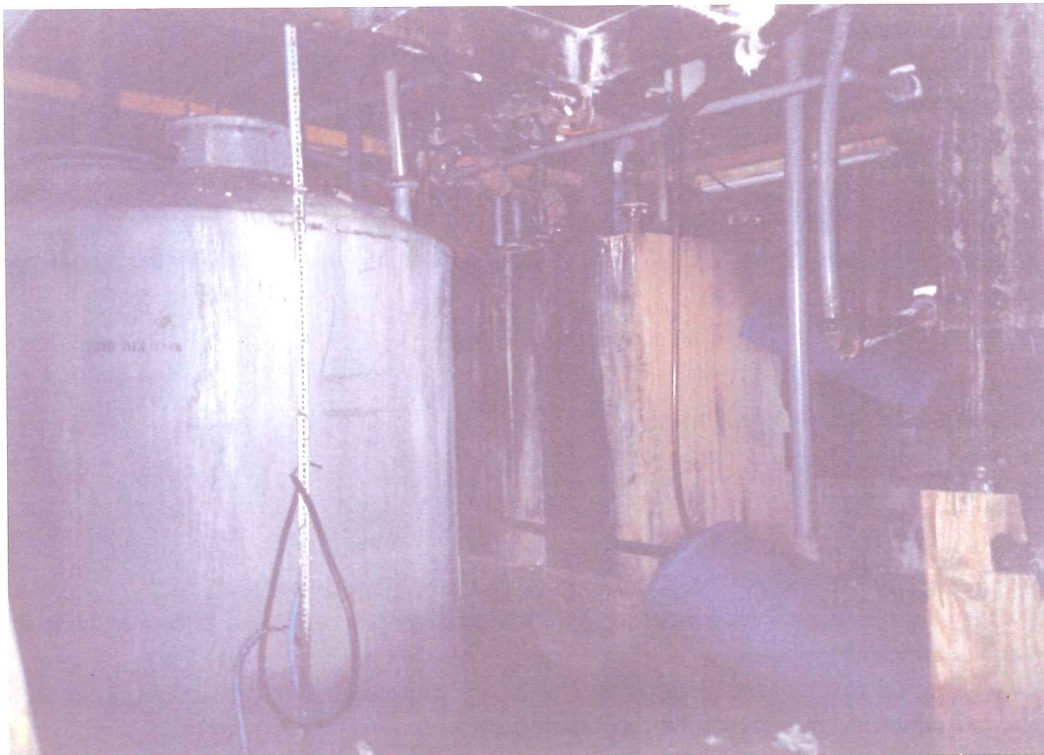
Typical Interior



Chemical Vats



Typical Work Station



Chemical Tanks



Typical Work Station

Use

- abandoned
- some storage

Construction

- multiple level wood structure; pitch felt roof; concrete floor & foundations; concrete pedestals; Asbestos Type 1 panelling; electrical rooms; compressor room; hydro sub station; transformers; chemical tanks & apparatus; heavy equipment & machinery; machine shop; mezzanines; crawl spaces under parts of structure; chain link perimeter fence; and propane tank farm.

Size

- 69.5 m x 20.9 m x (9.1 m H average)

Work Plan

- propane tank to be removed by others;
- owner shall locate and de-energize all utilities attached to the building;
- owner may remove any items or equipment deemed salvageable and transport to designated area within mine property;
- owner has the first right to reclaim any building material, dust, equipment, or ore residue that the owner suspects might contain gold elements;
- locate and identify all chemicals within building by labels or sampling results from labs;
- handle all chemicals in the standard regulatory manner;

- check all manufacturers' dates on fluorescent light ballast and on capacitors on equipment and in switch gear for possible PCBs;
- if identified, remove, properly contain and ship off site;
- check all electrical equipment for possible mercury switches and, if located, remove, properly contain and ship off site;
- take samples of fluid from all transformers and send to lab for testing for possible PCBs;
- drain all transformers completely, store hydrocarbons properly and ship off site as per test results;
- drain all compressors, fuel tanks and other equipment of hydrocarbons, properly contain and ship off site;
- remove all Asbestos Type 1 panelling from electrical & compressor rooms, place in proper containers and dispose of same in designated landfill;
- dismantle and remove perimeter chain link fence, disposing of material in designated landfill;
- remove sub station structural steel and electrical apparatus and dispose of material in designated landfill;
- demolish building using mechanical means and dispose of all material in designated landfill;
- remove heavy equipment and machinery as demolition provides safe access and dispose of as directed;
- demolish all concrete floors, foundations and pedestals and dispose of all material in designated landfill;
- backfill all pits and excavations created by demolition activities with approved backfill material; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Potential for confined spaces
- Elevated levels of arsenic dust
- All materials are impregnated with arsenic
- Chemicals known & unknown on site including cyanide
- Asbestos Type 1
- Possible PCBs
- Possible mercury
- Hydrocarbons

Health & Safety Issues

- do not allow men to work in potential confined space areas;
- all workers to wear Class "C" complete with dust particle respirators as minimum protection;
- when dealing with chemical residues, all workers to wear Class "C" complete with chemical vapour respirators as minimum protection;
- enforce safe hygiene practices by workers;
- enforce safe handling practices for asbestos, hydrocarbons, mercury, PCBs and chemicals.

**"C" SHAFT
BUILDING #112
NO. 3 PUMP HOUSE**



Use

- fire protection service

Construction

- single-storey frame structure; insulated; wall board interior; and concrete foundation.

Size

- 7.3 m x 4.9 m x 3.7 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the structure;
- owner may remove any items, equipment or materials deemed salvageable and transport to a designated area within the mine property;
- demolish building using mechanical means and dispose of all materials in designated landfill;
- demolish all concrete footings and foundations and dispose of all materials in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- No known hazards

Health & Safety Issues

- workers to wear Class "D" as minimum protection.

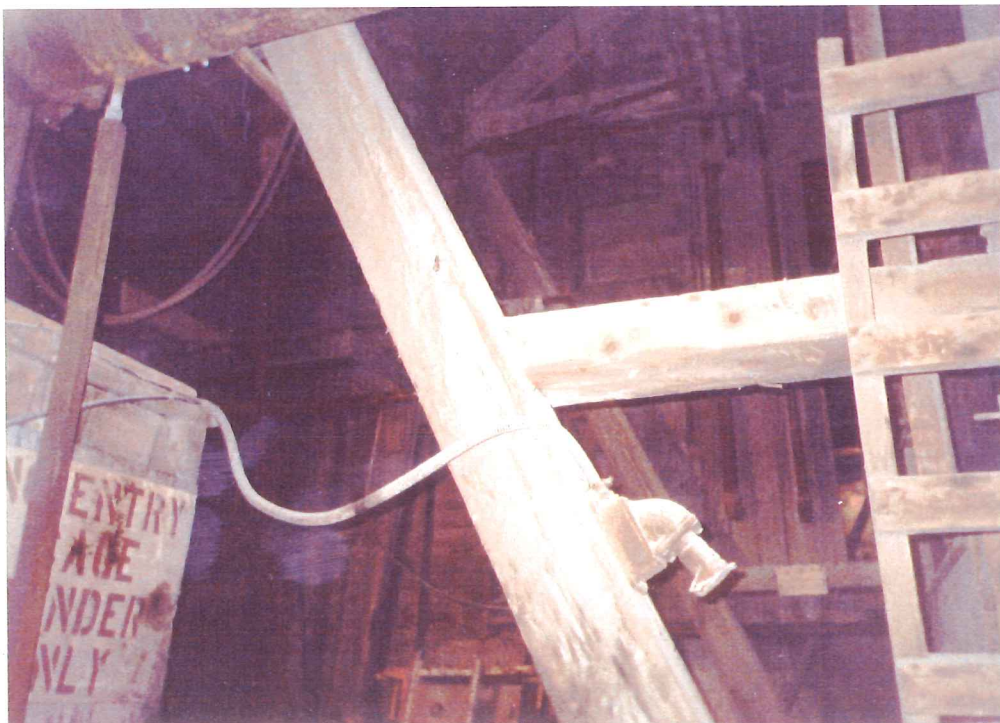
**"C" SHAFT
BUILDINGS #116, #123 AND #129
HEAD FRAME**



Steel Scrap Disposal off Feed Conveyor to Crusher House



Head Frame Looking East



Typical Interior



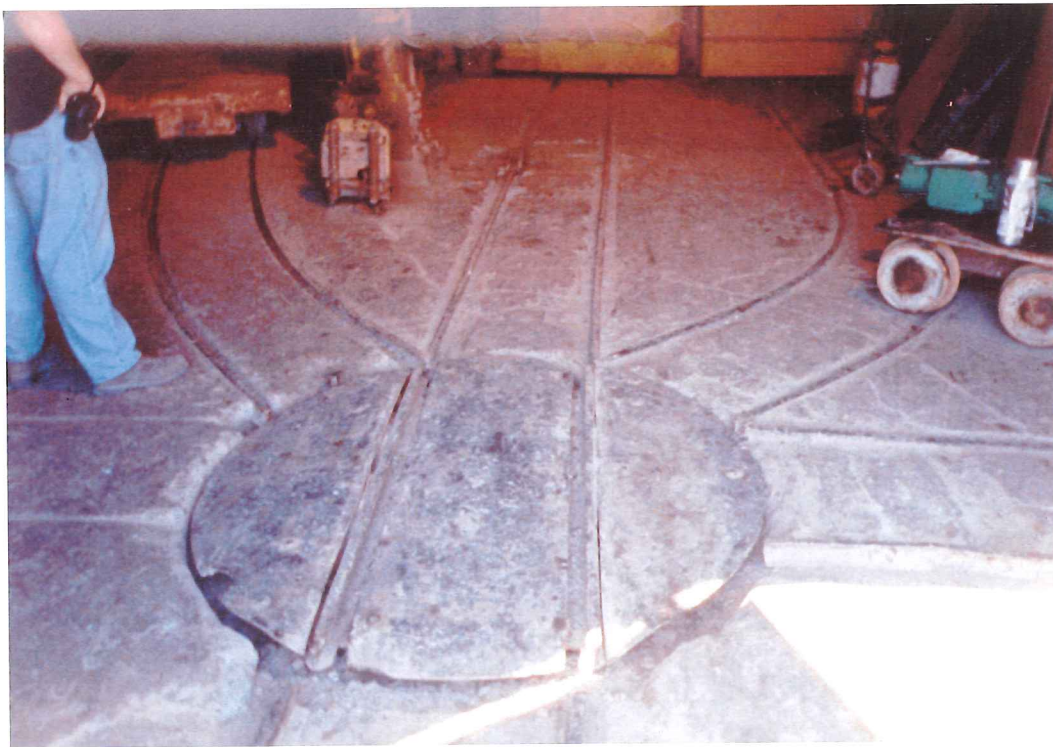
Typical Interior



Interior Showing Steel Super Structure Support



Ore Load Out Bin



Railway Tracks in Collar House Floor

Use

- supply underground with men and material and bring ore to surface.

Construction

- wood structure; pitch felt roof; some steel siding & steel roof; steel super structure; wood super structure; concrete foundation; railway tracks in concrete floor; 3 compartment shafts complete with hoist; ore bin & conveyor system; and machinery.

Size

- 23.5 m x 12.2 m x 45.7 m H
- wood super structure: 38 m H
- steel super structure: 45 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the structure;
- owner may remove any items or equipment deemed salvageable and transport to designated area within mine property;
- owner has the right to reclaim any building materials, dust, equipment, or ore residue that the owner suspects might contain gold elements;
- this must be done in a timely fashion as to not impede demolition;
- if not removed, the contractor is to dismantle and remove hoist system from building and place in designated area as directed;
- place temporary cover over shaft opening and secure site;
- check electrical equipment for manufacturers' dates on ballast of fluorescents lights and capacitors for possible PCBs;
- check building for any stored hydrocarbons; if unknown quality, then samples must be taken and sent to a lab for identification;
- remove the hydrocarbons, store properly and ship off site as determined by sample results;
- remove machinery and equipment (optional);
- remove steel roofing (optional);
- remove steel siding (optional);
- demolish lower wooden structures using mechanical means and dispose of all material in designated landfill;
- demolish wooden super structure using mechanical means and dispose of all material in designated landfill;
- dismantle and dispose of steel super structure in designated landfill;
- demolish concrete floor and foundation and remove railway tracks, disposing of all material in designated landfill;
- construction permanent poured in place shaft cap as per regulatory standards over shaft opening; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Elevated arsenic dust levels
- Gold residue
- Open shaft
- Possible PCBs
- Possible mercury
- Possible hydrocarbons

Health & Safety Issues

- all workers to wear Class "C" complete with dust particle respirators as minimum protection;
- enforce safe handling and storage practices for PCBs, mercury and hydrocarbons;
- enforce safe work practices for working around open shafts;
- enforce good hygiene practices for workers handling demolition materials; and
- enforce safe work practices for demolition type projects.

**"C" SHAFT
BUILDING #126
NO. 5 SUB STATION**



Looking West

Use

- power grid connection for "C" Shaft area.

Construction

- wood frame structure; pitch felt roof; concrete floor; insulated; Asbestos Type 1 panelling on interior walls and ceiling; electrical equipment; transformers; structural steel with electrical apparatus; and perimeter chain link fence.

Size

- 13.7 m x 4.4 m x 4.0 m H
- + 4.9 m x 3.0 m x 4.0 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the structure;
- owner may remove any items or equipment deemed as salvageable assets and transport to designated area with mine property;
- take samples of transformer fluids and send to lab for testing for possible PCBs;
- drain hydrocarbons completely from all transformers, properly contain and ship off site as per lab results;

- check all electrical equipment for capacitors that might contain PCBs and mercury switches;
- if identified, then remove, store properly and dispose of off site as directed;
- dismantle and dispose of perimeter fence in designated landfill;
- dismantle and dispose of structural steel complete with electrical apparatus in designated landfill;
- remove transformers and dispose of same in designated landfill;
- remove Asbestos Type 1 from interior of building, place in proper containers and dispose of same in designated landfill;
- demolish building using mechanical means and dispose of all materials in designated landfill;
- demolish all concrete flooring and dispose of all material in designated landfill; and
- clean up, grade and leave site in an orderly manner.

Special Items

- Asbestos Type 1
- Hydrocarbons
- Possible PCBs
- Possible mercury

Health & Safety Issues

- all workers to wear Class "C" complete with dust particle respirators as minimum protection;
- enforce safe and proper handling practices for asbestos, PCBs, hydrocarbons and mercury; and
- enforce safe work practices for demolition type projects.

**"C" SHAFT
BUILDING #127
HOIST HOUSE COMPRESSOR BUILDING**



Looking East

Use

- main hoist for "C" Shaft

Construction

- Butler Type building; single-storey, steel frame; steel siding & roof; double walled; insulated; structural steel is of Rivet construction; concrete floor, foundation & pedestals; 2 pedestals (9 m x 6 m x 1 m thick); electrical equipment; air compressors; heavy machinery (2 hoists); and Asbestos Type 1 panels.

Size

- 13.7 m x 12.8 m x 7.6 m H
- + 18.3 m x 6.09 m x 5.2 m H
- + 6.09 m x 6.09 m x 5.2 m H
- + 4.6 m x 2.0 m x 4.0 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the structures;
- owner may remove any items, equipment or machinery deemed as salvageable assets and transport to designated area with mine property;
- if not already done, decommission hoist and remove cable, properly handle and dispose of in designated landfill;
- check all electrical equipment for capacitors that might contain PCBs and mercury switches;
- if identified, then remove, properly contain and dispose of off site as directed;
- drain all machinery, equipment, tanks and compressors of hydrocarbons, store properly in containers and ship off site;
- remove Asbestos Type 1 panels from interior of building, place in proper containers and dispose of same in designated landfill;
- dismantle steel roofing and siding (optional);
- demolish building using mechanical means and dispose of all materials in designated landfill;
- remove heavy machinery and equipment when safe access is provided by progress of demolition and dispose of all equipment in designated landfill;
- all steel tanks must be cut up in order to accommodate placement in landfill;
- demolish all concrete foundations, floors and pedestals and dispose of all materials in designated landfill;
- backfill all pits or excavations resulting from demolition with approved material up to elevations of original contours of ground; and
- clean up, grade and leave site in an orderly manner.

Special Items

- Asbestos Type 1
- Hydrocarbons
- Possible PCBs
- Possible mercury
- Heavy machinery

Health & Safety Issues

- all workers to wear Class "C" complete with dust particle respirators as minimum protection;
- enforce safe and proper handling practices for asbestos, PCBs, hydrocarbons and mercury; and
- enforce safe work practices for demolition type projects.

**"C" SHAFT
BUILDING #131
ASSAY OFFICE**

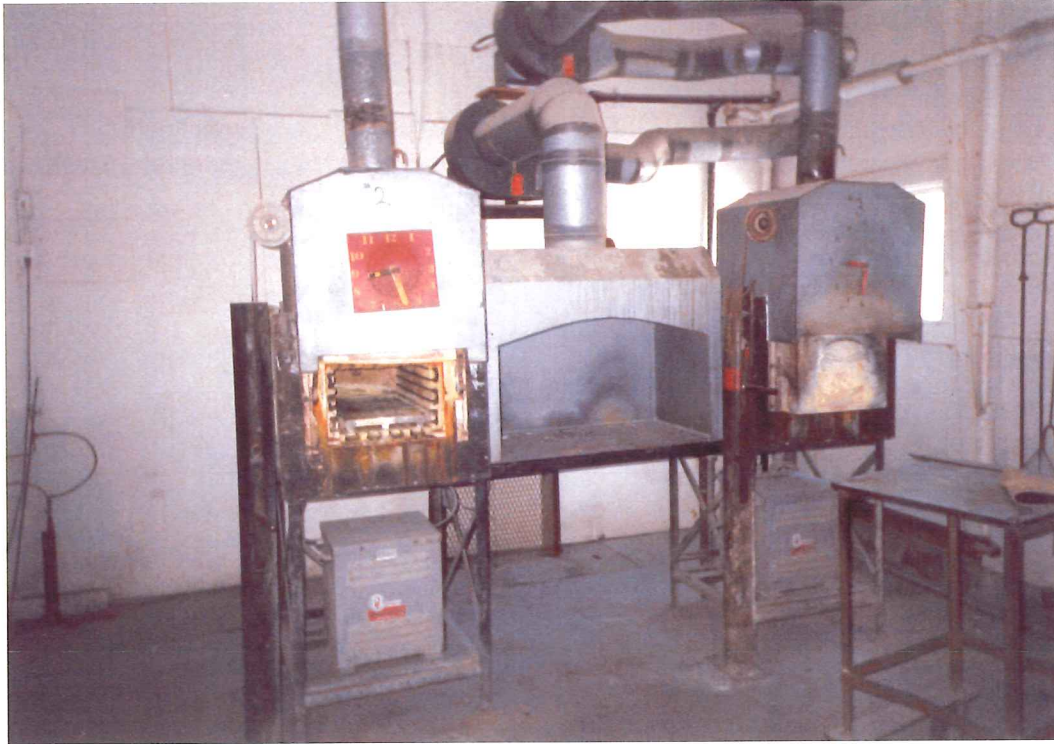


Northwest View



Exterior Showing Foundation

GAIA Contractors



Furnaces & Asbestos Type 1 and Type 2

Use

- abandoned

Construction

- steel frame; steel roof & steel siding; concrete floor over timber foundation; Asbestos Type 1 panelling on interior walls & ceiling; Asbestos Type 2 pipe wrap; and includes wood walkway between assay & laboratory.

Size

- 25.6 m x 9.75 m x 4.0 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the building;
- owner may remove any items, equipment or materials deemed salvageable and transport to designated site within mine property;
- check for any stored chemicals and, if identified, then remove, store in proper containers and ship off site;
- remove Asbestos Type 2 pipe wrap, store in proper containers and dispose of same in designated landfill;

- remove interior Asbestos Type 1 panelling, store in proper containers and dispose of same in designated landfill;
- dismantle steel exterior (optional);
- dismantle steel frame (optional);
- demolish remnants of structure and dispose of all materials in designated landfill;
- demolish concrete floor complete with timber foundations and dispose of all materials in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Possible stored chemicals
- Asbestos Type 1
- Asbestos Type 2

Health & Safety Issues

- all workers to wear Class "C" complete with dust particle respirators as minimum protection;
- enforce safe handling practices for chemicals and asbestos; and
- enforce safe work practices for demolition type projects.

**"C" SHAFT
BUILDING #134
COTTRELL PLANT**



Exterior Looking West

GAIA Contractors



Exterior Looking East



Exterior View Looking Southwest



Exterior View Looking Northwest

Use

- abandoned

Construction

- multiple levels; steel frame; Asbestos Type 1 roof; Asbestos Type 1 siding on interior and exterior; Asbestos Type 2 pipe wrapping; concrete foundation and pedestals; electrical equipment; and heavy machinery.

Size

- 27.7 m x 16.5 m x 8.9 m H (average)

Work Plan

- owner shall locate and de-energize all utilities attached to the building;
- owner may remove any item, material or equipment deemed salvageable and transport to a designated site within the mine property;
- collect and package all arsenic residue and dispose of in designated landfill;
- check all electrical equipment for ballast and capacitors which may contain PCBs and mercury switches;
- if identified, then remove, properly contain and dispose of same off site;
- if found, sample all transformer fluids and send to lab for testing for possible PCBs;
- completely drain all equipment, machinery, tanks and transformers of hydrocarbons, properly contain and ship off site as per test results;

- remove all Asbestos Type 2, package properly and dispose of same in designated landfill;
- remove all Asbestos Type 1, transport and dispose of same in designated landfill;
- demolish remnants of building using mechanical means and dispose of all materials in designated landfill;
- remove heavy machinery when demolition provides safe access to do so;
- demolish all concrete footings, foundations and pedestals and dispose of all material in designated landfill;
- backfill any pits, or excavations caused from the demolition with approved material; and
- clean up, grade site and leave in an orderly manner.

Special items

- Elevated levels of arsenic
- Asbestos Type 1
- Asbestos Type 2
- Hydrocarbons
- Possible PCBs
- Possible Mercury
- Heavy machinery

Health & Safety Issues

- workers to wear Class "B" when cleaning up arsenic dust;
- all workers to wear Class "C" complete with dust particle respirators as minimum protection;
- enforce safe handling practices for asbestos, arsenic, hydrocarbons, PCBs and mercury;
- minimize dust resulting from arsenic and asbestos removal and disposal; and
- enforce safe work practices for demolition type projects.

**"C" SHAFT
BUILDING #142
CARPENTER SHOP**



Use

- storage

Construction

- wood frame building; steel roofing over pitch felt; wood sill foundation; wood floor; Asbestos Type I panels interior; and Asbestos Type 1 panels exterior.

Size

- 17.1 m x 7.4 m x 3.7 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the building;
- owner may remove any item, material, or equipment deemed salvageable and transport to a designated area within the mine property;
- check manufacturers' dates on fluorescent light ballast and capacitors on electrical equipment for possible PCBs;
- if identified, then remove, store in proper containers and ship off site as directed;
- remove all Asbestos Type 1 and place in proper containers, disposing of same in designated landfill;
- demolish building using mechanical means and dispose of all materials in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Asbestos Type 1
- Possible PCBs

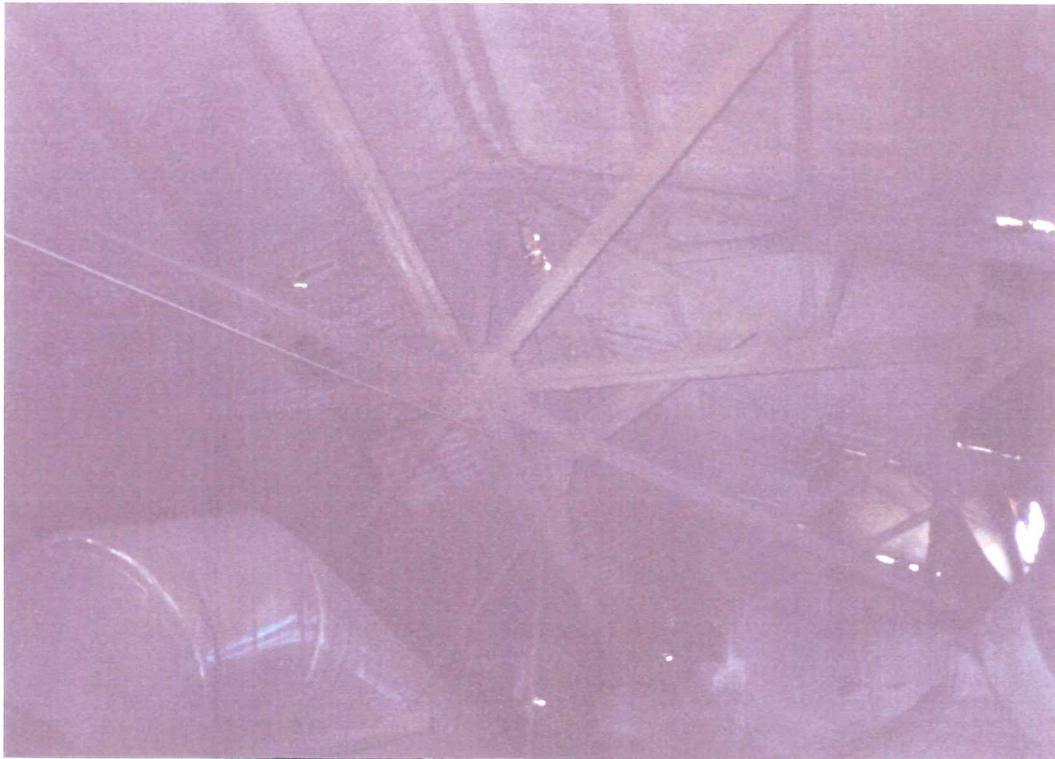
Health & Safety Issues

- all workers to wear Class "C" complete with dust particle respirators as minimum protection;
- enforce safe handling practices of Asbestos and PCBs; and
- enforce safe work practices for demolition type projects.

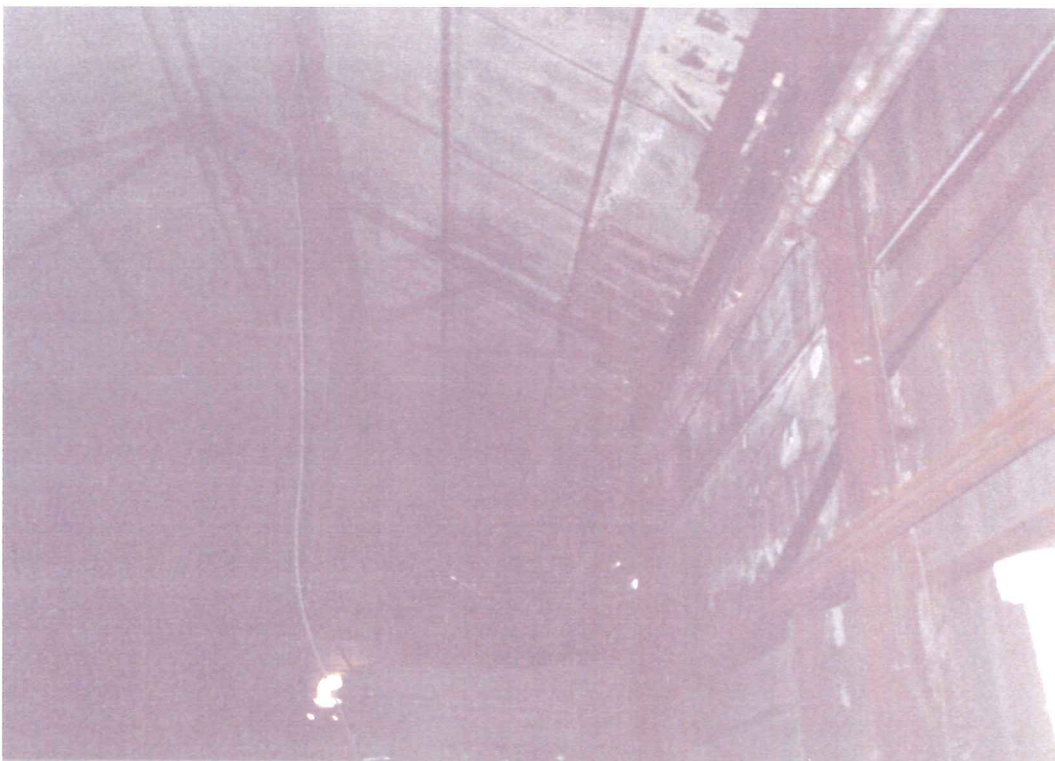
**"C" SHAFT
BUILDING #143
DORRCO PLANT**



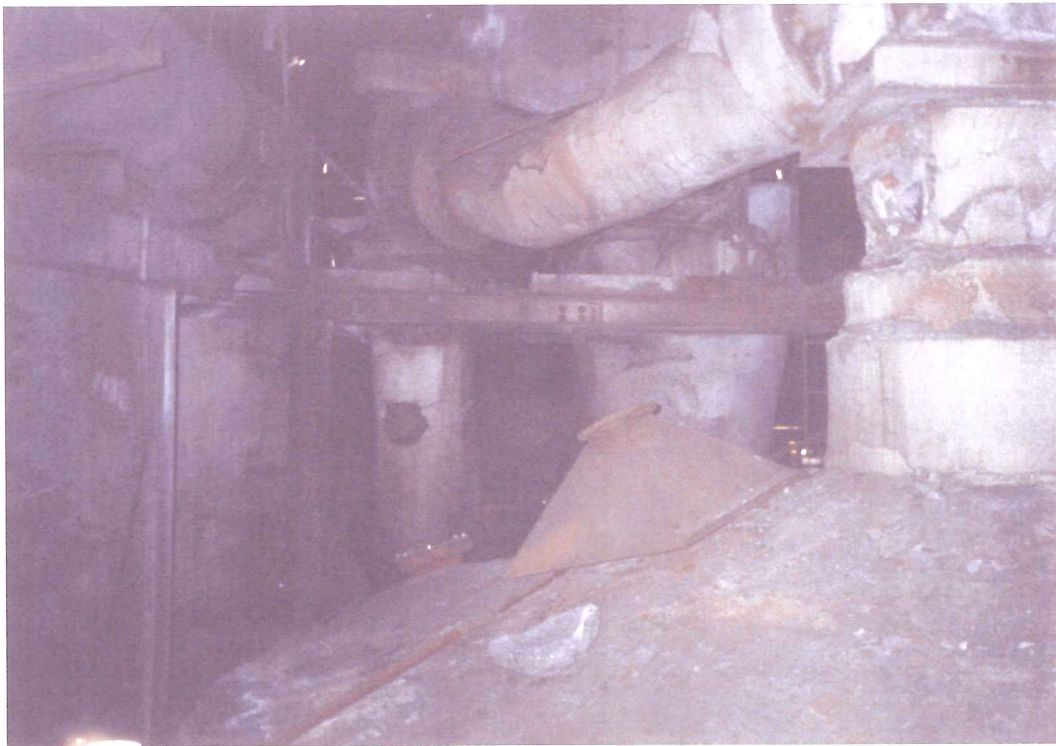
Typical Exterior



Typical Steel Structural Interior



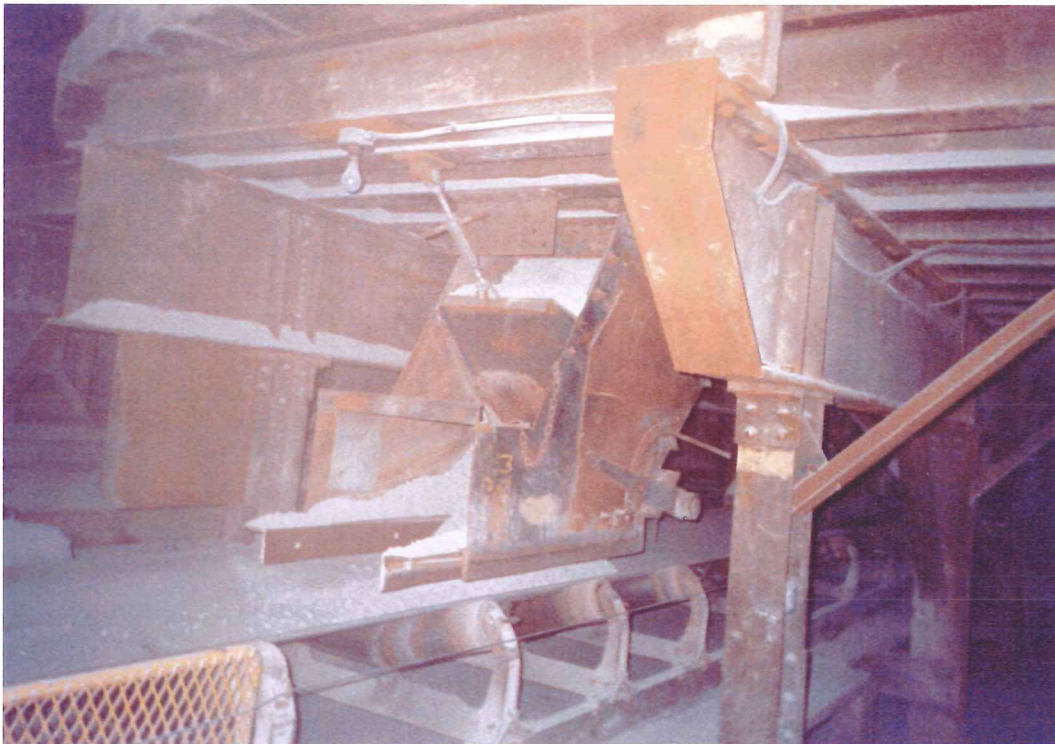
Typical Ceiling & Wall Showing Asbestos Type 2



Typical Asbestos Type 2 Pipe Insulation



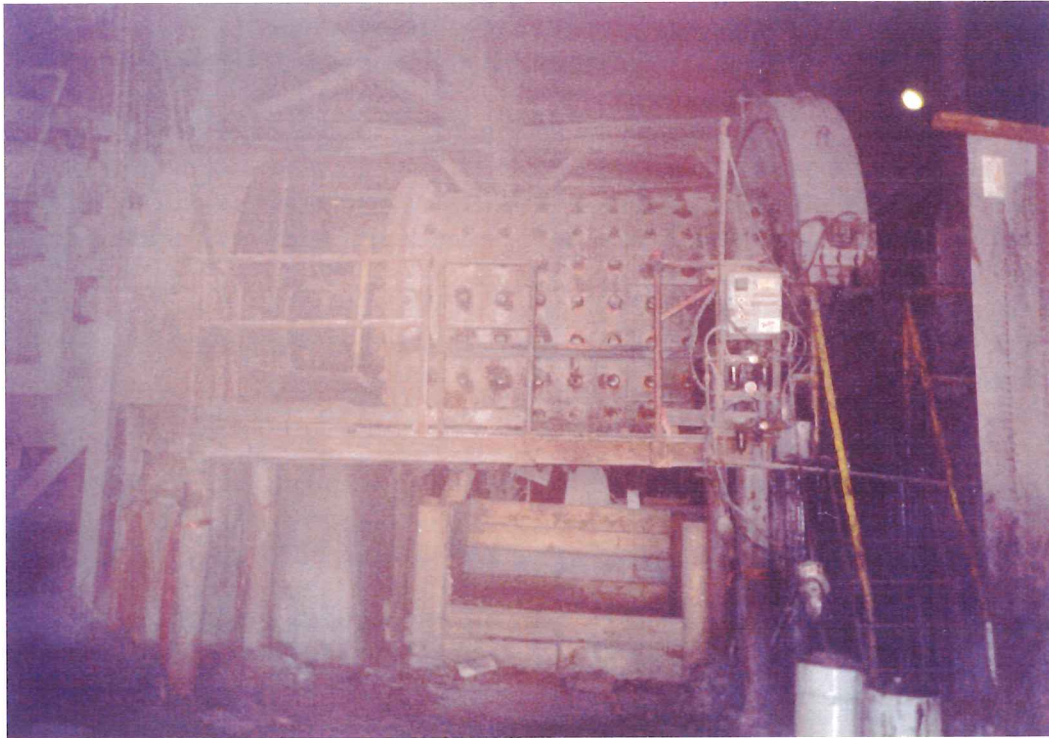
Typical Steel Structural



Typical Machinery



Wood Infrastructure



Ball Mill Typical Equipment

Use

- abandoned

Construction

- multiple level structure; steel frame; Asbestos Type I roofing; Asbestos Type 1 siding; Asbestos Type 2 insulation & on machinery; structural steel; concrete floor, foundation & pedestals; electrical room; and heavy equipment.

Size

- 29.4 m x 24.7 m x 11.8 m H (average)

Work Plan

- owner shall locate and de-energize all utilities attached to structure;
- owner may remove any items, materials or equipment deemed salvageable and transport to a design area within the mine property;
- owner has first right to reclaim any building materials, equipment, dust or ore residue that might contain elements of gold;
- this must be done in such a manner as to not impede demolition schedules;
- check all electrical equipment for ballast or capacitors that might contain PCBs or mercury switches;
- if identified, then remove, properly contain and ship off site;
- completely drain all equipment, machinery and tanks of hydrocarbons, properly contain and ship off site;
- remove Asbestos Type 2, properly contain and dispose of same in designated landfill;
- remove all exterior Asbestos Type 1 and dispose of same in designated landfill;
- demolish remnants of structure and dispose of all materials in designated landfill;
- remove heavy machinery as safe access is provided by progress of demolition;
- demolish all concrete footings, foundations and pedestals and dispose of all material in designated landfill;
- backfill all pits or excavations caused by demolition with approved material; and
- clean up, grade site and leave in an orderly manner.

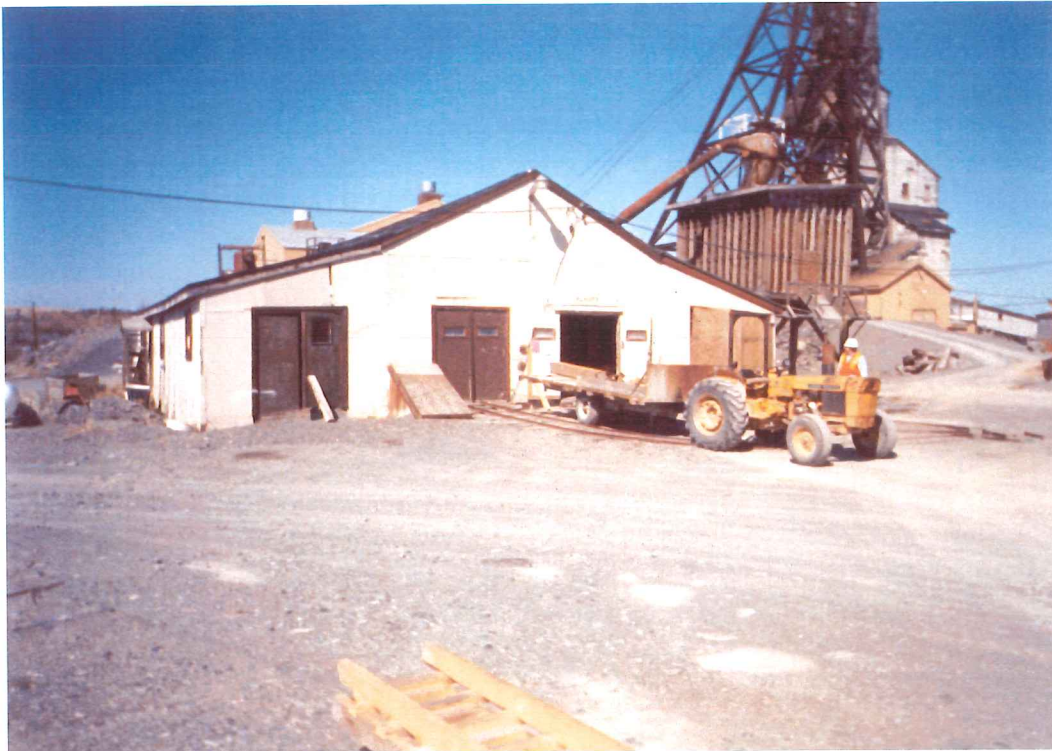
Special Items

- Elevated levels of arsenic dust
- Asbestos Type 1
- Asbestos Type 2
- Hydrocarbons
- Possible PCBs
- Possible mercury
- heavy machinery

Health & Safety Issues

- all workers to wear Class "C" complete with dust particle respirators as minimum protection;
- enforce work practices that minimize the creation of arsenic and asbestos dust;
- enforce safe handling practices for asbestos, hydrocarbons, mercury and arsenic impregnated materials;
- enforce good hygiene for workers; and
- enforce safe work practices for demolition type projects.

**"C" SHAFT
BUILDING #144
PLANER SHOP**



Looking West



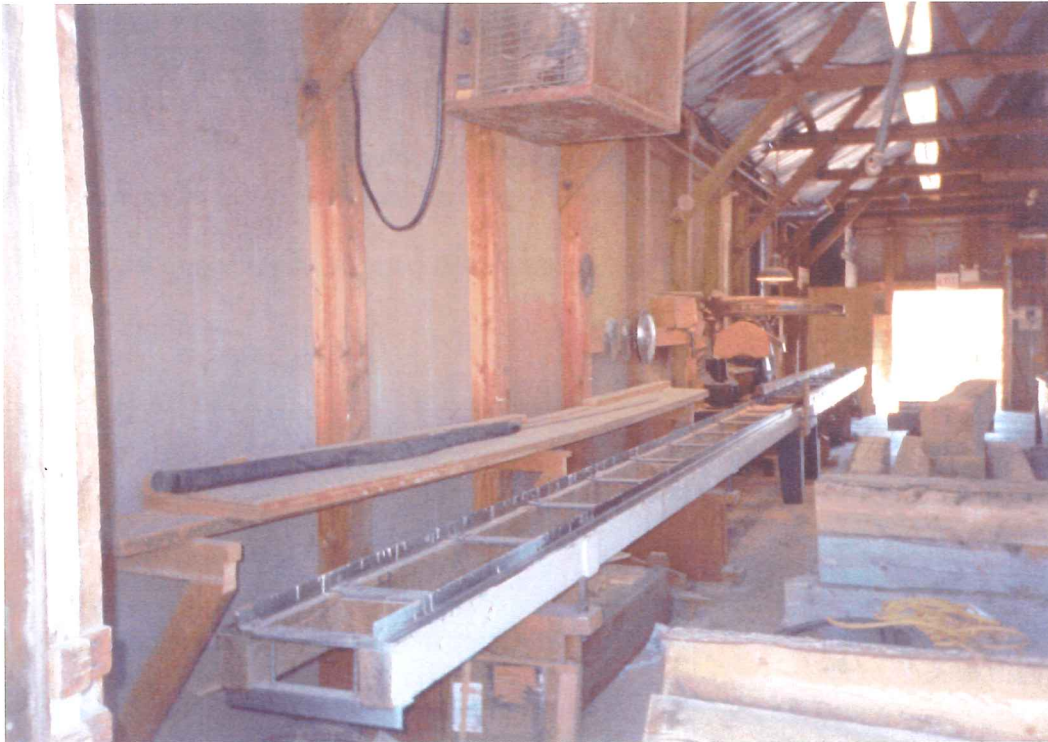
Saw Dust Bin



Interior



Interior – Asbestos Type 1 on Walls



Interior Asbestos Type 1 on Walls

Use

- storage

Construction

- wood frame structure; steel roof covered with pitch felt; some exterior Asbestos Type 1 siding; interior siding of Asbestos Type 1; wood sill foundation; wood floor; light rail in floor; and adjacent saw dust bin.

Size

- 17.06 m x 15.0 m x 4.6 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the building;
- owner may remove any items, material or equipment deemed salvageable and transport to a designated area within the mine property;
- check manufacturers' dates and labels on fluorescent light ballast and capacitors on electrical equipment for possible PCBs;
- if identified, then remove, properly contain and ship off site;
- remove all Asbestos Type 1 and place in proper containers, disposing of same in designated landfill;
- demolish building using mechanical means and dispose of all materials, including railway tracks in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Asbestos Type 1
- Possible PCBs

Health & Safety Issues

- all workers to wear Class "C" complete with dust particle respirators as minimum protection;
- enforce safe handling practices for asbestos and PCBs; and
- enforce safe work practices for demolition type projects.

**"C" SHAFT
BUILDING #147
POWDER MAGAZINE**



Powder Magazine Site

Use

- powder magazine

Construction

- wood frame; pitch felt roof; wood foundation; and chain link perimeter fence.

Size

- 7.9 m x 4.9 m x 2.4 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the building;
- owner may remove any items deemed salvageable and transport to a designated area within the mine site;
- dismantle and dispose of chain link fence in designated landfill;
- demolish building using mechanical means and dispose of all materials in designated landfill; and
- clean up, grade site and leave in an orderly manner.

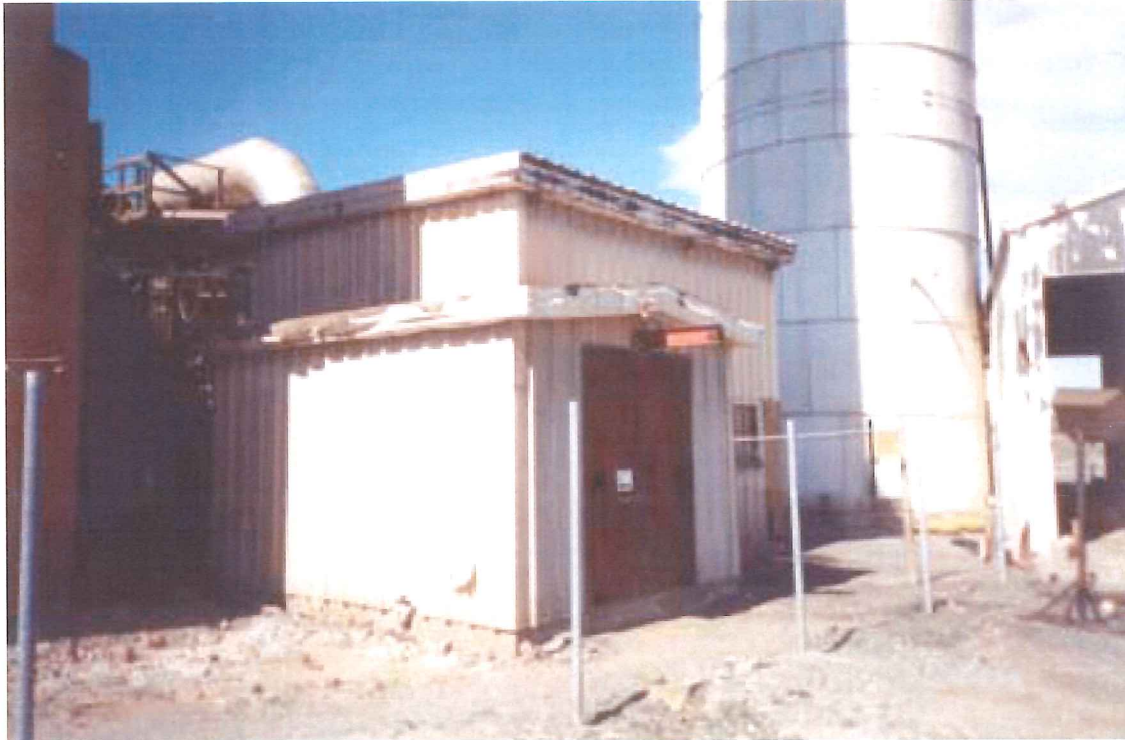
Special Items

- No known hazards

Health & Safety Issues

- workers are to wear Class "D" as minimum protection; and
- enforce safe work practices for demolition type projects.

**"C" SHAFT
BUILDING #148
FAN HOUSE AND STRUCTURAL STEEL**



Use

- abandoned

Construction

- steel frame; Asbestos Type 1 siding; Asbestos Type 1 roof; concrete slab foundation; machinery; exterior piping; and exterior structural steel.

Size

- 9.8 m x 6.1 m x 4.9 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the structure;
- owner may remove any items, material or equipment deemed salvageable and transport to a designated area within the mine site;
- remove all Asbestos Type I panels from roof and siding;
- demolish remnants of structure, piping and steel structure;
- demolish concrete foundations;
- dispose of all materials in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Asbestos Type 1

Health & Safety Issues

- workers to wear Class “D” as minimum protection;
- enforce safe handling practices for asbestos; and
- enforce safe work practices for demolition type projects.

**"C" SHAFT
BUILDING #150
ELECTRICAL SHOP**



Looking North



Storage Trailer



Sub Station



Interior

Use

- electrical maintenance

Construction

- wood frame construction; concrete foundation & floor; interior steel structural; steel mezzanine; interior steel panelling partial; interior Asbestos Type 1 panelling, partial wall & ceiling; large oil tank; electrical sub station; transformers; storage trailer; and perimeter chain link fence.

Size

- 12.8 m x 12.2 m x 5.5 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the building;
- owner may remove any items or equipment deemed salvageable and transport to designated site within mine property;
- take sample of fluids from transformers and send to lab for testing for possible PCBs;
- completely drain transformers of hydrocarbons, properly contain and ship off site as per test results;
- remove all Asbestos Type 1 panelling from interior of structure, store in proper containers and dispose of same in designated landfill;
- dismantle and dispose of chain link fence in designated landfill;
- remove hydro poles and electrical apparatus and dispose of material in designated landfill;
- remove transformers and dispose of same in designated landfill;
- demolish building by mechanical means and dispose of all material in designated landfill;
- all steel tanks are to be cut up for landfill purposes;
- demolish concrete foundations and floor and dispose of all material in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Asbestos Type 1
- Possible PCBs
- Hydrocarbons

Health & Safety Issues

- all workers to wear Class "C" complete with dust particle respirators as minimum protection;
- enforce safe handling practices for asbestos, PCBs and hydrocarbons;
- enforce safe work practices for demolition type projects.

**"C" SHAFT
BUILDING #152
GREASE STORAGE SHED**



Use

- abandoned
- storage

Construction

- wood frame building; wood sill foundation; dirt floor; and pitch felt roof.

Size

- 4.9 m x 3.7 m x 2.4 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the building;
- owner may remove any items, materials or equipment deemed salvageable and transport to a designated area within mine property;
- remove any stored hydrocarbons, properly contain and ship off site as directed;
- demolish building using mechanical means and dispose of all material in designated landfill; and
- clean up, grade and leave site in an orderly manner.

Special Items

- Hydrocarbons

Health & Safety Issues

- all workers to wear Class "D" as minimum protection; and
- enforce safe work practices for demolition type projects.

**"C" SHAFT
BUILDING #154
PIPE STORAGE (2 STRUCTURES)**



Northeast View of Building #1



Northwest View of Building #2



Typical Interior

Use

- steel pipe storage

Construction

- wood frame structures; wood sill foundations; pitch felt roofs; and dirt floors.

Size

- 11.0 m x 7.6 m x 3.7 m H + 14.6 m x 11.0 m x 3.7 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the structures;
- owner may remove any items, materials or equipment deemed salvageable and transport to a designated site within the mine property;
- demolish buildings using mechanical means and dispose of all materials in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- No known hazards

Health & Safety Issues

- workers to wear Class “D” as minimum protection; and
- enforce safe work practices for demolition type projects.

**"C" SHAFT
BUILDING #155
OFFICE BUILDING LOOKING NORTH**



Northeast View



Office Building Looking South

GAIA Contractors

Use

- site security office
- health & safety office

Construction

- 2-storey frame structure; pitch felt roof; concrete foundation; full basement; concrete vaults; Asbestos Type 1; and Asbestos Type 2.

Size

- 30.0 m x 12.4 m x 9.3 m H
- concrete vaults: (4.3 m x 3.7 m x 2.4 m H) x 2 vaults
- walls are .5 m thick

Work Scope

- owner shall locate and de-energize all utilities attached to the structure;
- owner may remove all items deemed salvageable and transport to designated site within mine site;
- check manufacturers' dates and labels on ballast of fluorescent lights for possible PCBs;
- remove Asbestos Type 2 Pipe wrap, place in proper containers and dispose of in designated landfill;
- remove Asbestos Type 1 panels from interior, place in proper containers and dispose in designated landfill;
- demolish building using mechanical means and dispose of material in designated landfill;
- demolish all concrete foundations and concrete structures and dispose of material in designated landfill;
- backfill basement with approved material to original ground level; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Asbestos Type 2 pipe wrap
- Asbestos Type 1 Panelling
- Possible PCBs
- Concrete vaults

Health & Safety Issues

- all workers to wear Class "C" complete with dust particle respirators as minimum protection; and
- enforce safe and proper handling practices for asbestos and PCBs removal; and
- enforce safe work practices for demolition type projects.

**"C" SHAFT
BUILDING #160
ARSENIC LOADING SCALE
COMPLETE WITH ARSENIC STORAGE SILO**



Weigh Scale House

GAIA Contractors



Interior Showing Truck Scale and Debris

Use

- abandoned

Construction

- scale building
 - modular steel building; concrete foundation; and commercial electronic truck scale.
- silo
 - prefabricated steel structure; self contained steel storage silo; steel cover; concrete foundation; electrical control room; Asbestos Type 1 panelling in Control Room; and light machinery.

Size

- scale: 21.3 m x 6.1 m x 4.9 m H
- silo: 20.1 m H x 7.3 m dia.

Work Plan

- owner shall locate and de-energize all utilities attached to the structure;
- owner may remove any items or equipment deemed salvageable and transport to a designated site within mine property;
- dismantle scale shed and dispose of material in designated landfill;
- remove scale if not already done by owner and dispose of as directed;
- check fluorescent light ballast and electrical equipment for capacitors containing PCBs;
- if identified, remove, properly contain and ship off site;

- remove all Asbestos Type 1 panelling from Control Room, place in proper containers and dispose of same in designated landfill;
- dismantle silo and dispose of material in designated landfill;
- demolish concrete foundations and dispose of material in designated landfill;
- backfill open pit from scale removal with approved material; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Elevated levels of arsenic dust
- Asbestos Type 1
- Confined space (SILO)

Health & Safety Issues

- do not allow any worker to enter the silo which is a confined space;
- all workers to wear Class "C" complete with dust particle respirators as minimum protection;
- dismantle silo by mechanical means to eliminate the potential hazard of a confined space; and
- enforce safe work practices for demolition type projects.

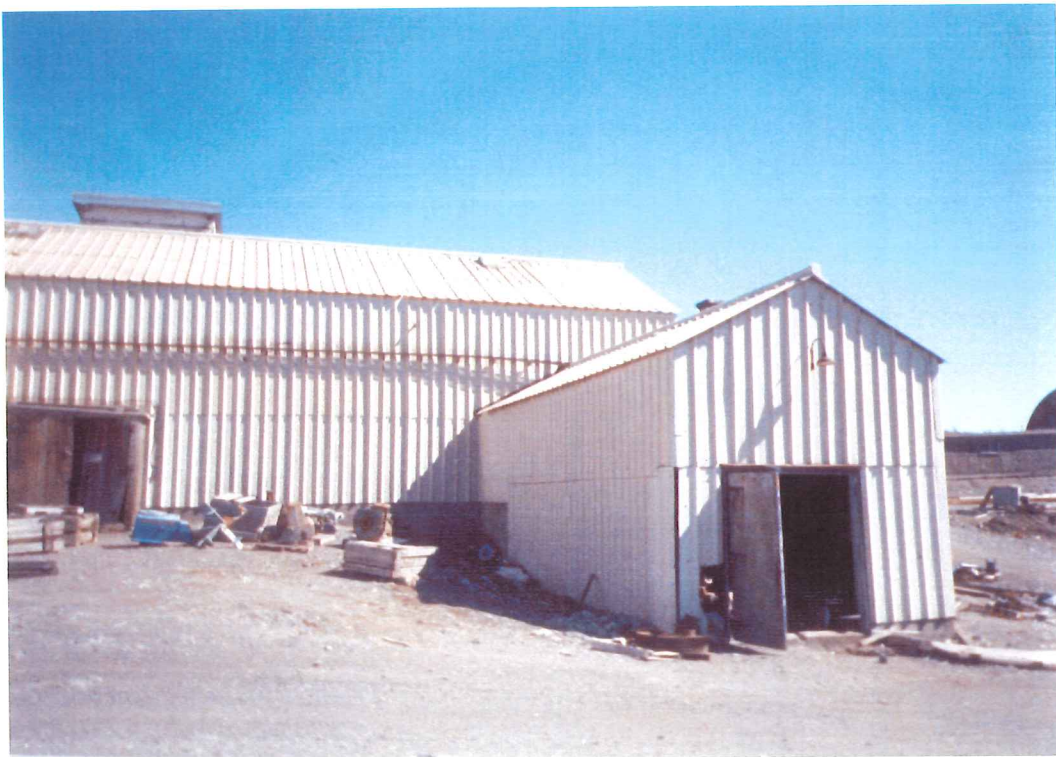
**"C" SHAFT
BUILDING #162
CALCINING PLANT**



Interior – Concrete Pedestals Kiln



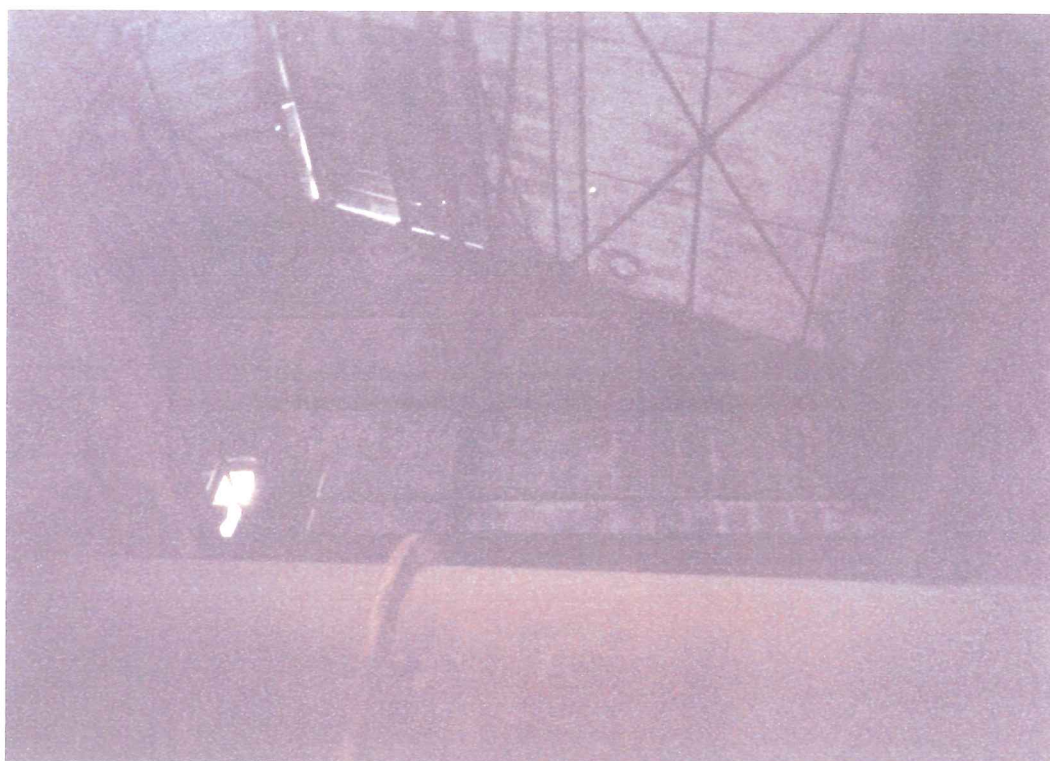
6' x 80' Kiln



Typical Exterior



Interior Showing Asbestos Type 2 Insulation



Typical Interior Roof

Use

- abandoned

Construction

- steel frame; multiple levels; several mezzanines; Asbestos Type 1 roofing panels; Asbestos Type 1 siding panels; Asbestos Type 2 insulation; and Asbestos Type 3 present.

Size

- 12.3 m x 5.0 m x 5.2 m H
- +22.4 m x 9.2 m x 6.3 m H
- +22.8 m x 13.9 m x 11.0 m H

Work Plan

- owner shall locate and de-energize all utilities attached to structure;
- owner may remove any items, equipment, or material deemed salvageable and transport to designated area within mine property;
- owner has first right to reclaim any building materials, equipment and dust or ore residue that may contain elements of gold;
- check all electrical equipment for ballast and capacitors that might contain PCBs;
- check all electrical equipment for mercury switches;
- if identified, then remove, contain properly and ship off site;
- drain all tanks, equipment, storage barrels, and machinery of hydrocarbons, contain properly, and dispose of off site;
- remove all Asbestos Type 2 from interior walls and ceiling, place in proper containers and dispose of same in designated landfill;
- clean up all Asbestos Type 3 from interior of structure, place in proper containers and dispose of same in designated landfill;
- dismantle Asbestos Type 1 panels from roof & siding, disposing of same in designated landfill;
- demolish remnants of building using mechanical means and dispose of all material in designated landfill;
- remove heavy machinery as demolition allows access and dispose in designated area;
- demolish all concrete foundations, footings, stairways and pedestals and dispose of all materials in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Asbestos Type 1
- Asbestos Type 2
- Asbestos Type 3
- Hydrocarbons
- Possible PCBs
- Possible mercury
- Heavy machinery

Health & Safety Issues

- all workers to wear Class “C” complete with dust particle respirators as minimum protection;
- take measures to control asbestos dust from migrating from building site;
- enforce safe handling practices for asbestos, hydrocarbons and mercury; and
- enforce safe practices for demolition type projects.

**"C" SHAFT
BUILDING #166
"C" DRY**



Looking Southwest



West End of Building

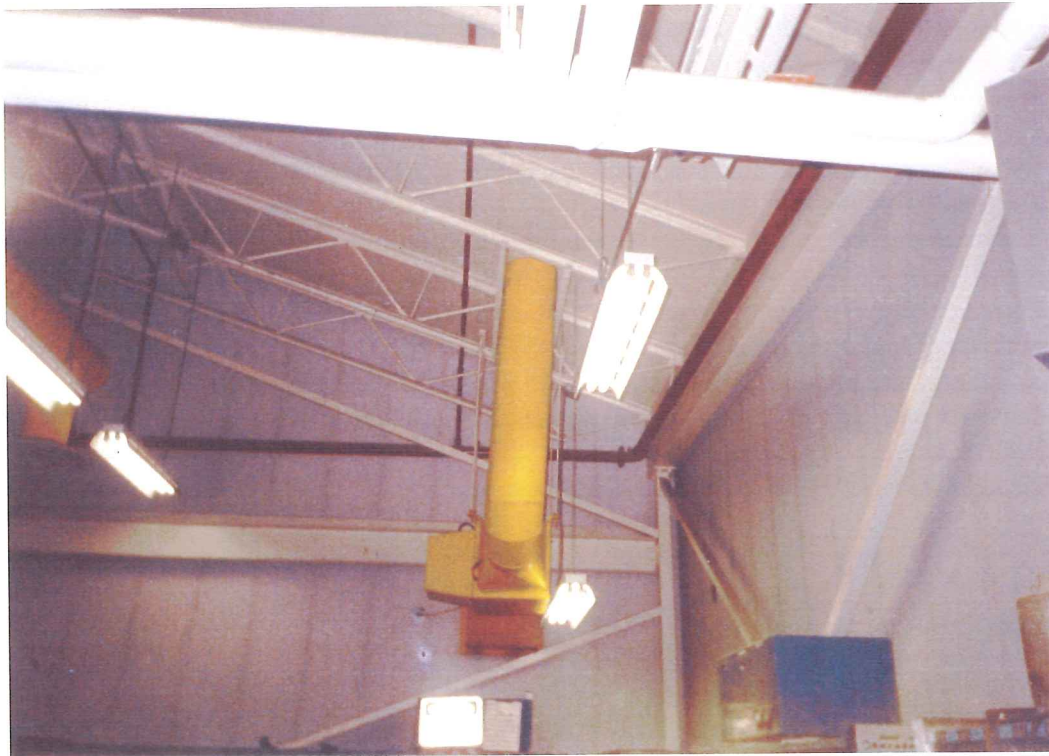
GAIA Contractors



Exterior Looking North



2nd Level Interior



Interior Steel Details

Use

- office complex
- dry

Construction

- 2-storey steel structure; steel frame; steel roof & steel siding; dry wall interior; insulated; foundation of concrete supported on steel pilings; and electrical equipment.

Size

- 53 m x 19.8 m x 6.1 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the building;
- owner may remove all items and equipment deemed salvageable and transport to designated area within mine site;
- identify and remove any stored hydrocarbons or chemicals, properly contain and ship off site;
- check manufacturers' dates and labels on ballast of fluorescent lights and any capacitors in electrical equipment for possible PCBs;
- if identified, remove, properly contain and ship off site;
- remove electrical equipment from building if not already done so by owner;
- dismantle steel roof and dispose of material in designated landfill (optional);
- remove roofing insulation, package and dispose of same in designated landfill (optional);
- dismantle steel frame and dispose of same in designated landfill (optional);
- demolish remnants of structure using mechanical means and dispose of material in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Possible PCBs
- Hydrocarbons
- Electrical equipment

Health & Safety Issues

- workers to wear Class "D" as minimum protection;
- enforce safe work practices for demolition type projects.

**"C" SHAFT
BUILDING #167
BAG HOUSE**



Looking South



Auxiliary Structures - Looking East

Use

- collection of arsenic dust

Construction

- Robertson Type building; steel frame; steel roof & steel siding; double walled; fiberglass insulation; concrete foundation; large machinery (arsenic bags); and auxiliary structures.

Size

- 12.2 m x 12.2 m x 9.1 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the structures;
- contractor shall decontaminate structure by collecting, containing and disposing of all arsenic dust and residue found within building, collection bags, auxiliary apparatus and structures by approved methods;
- after decontamination is complete, the owner may remove any items or equipment deemed salvageable and transport to an area designated within the mine property;
- check electrical equipment for possible PCBs in light ballast and capacitors;
- check for mercury switches;
- if either are identified, then remove, store properly and ship off site as directed;
- dismantle interior steel roofing and siding;
- remove insulation, place in containers;
- dismantle exterior steel roofing and siding;
- dismantle steel structure;
- dismantle or demolish auxiliary structures;
- demolish all concrete foundations and footings;
- dispose of all materials resulting from demolition activities in designated landfill; and
- clean up, grade and leave site in an orderly manner.

Special Items

- Elevated levels of arsenic dust and residue
- Possible PCBs
- Possible mercury

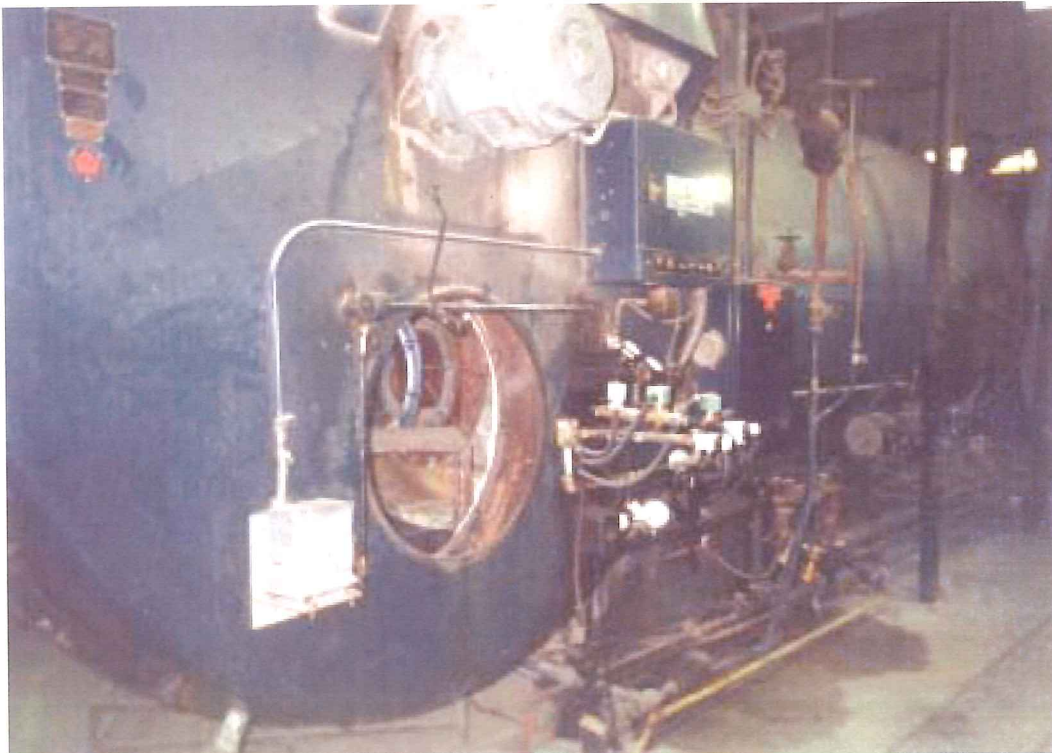
Health & Safety Issues

- when decontaminating structure and equipment, workers are to wear Class "B" as minimum protection;
- workers must be qualified by proper training to work in these conditions;
- treat arsenic bags as confined spaces; work accordingly;
- enforce safe handling practices for arsenic, PCBs and mercury; and
- enforce safe work practices for demolition type projects.

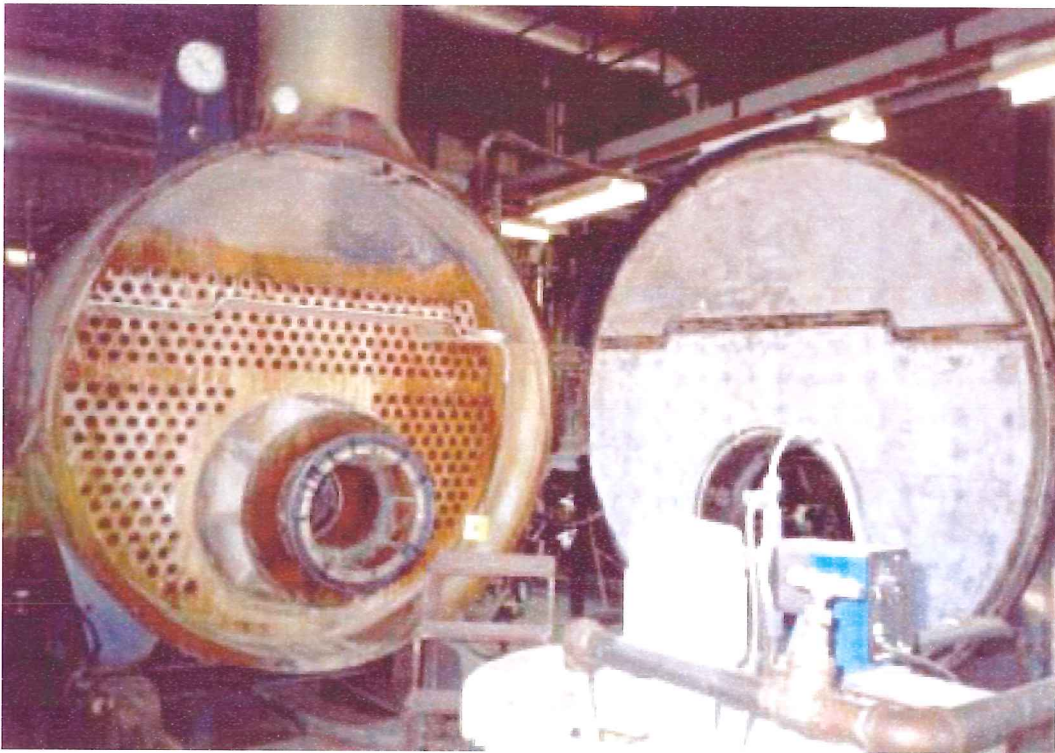
**"C" SHAFT
BUILDING #172
BOILER BUILDING**



North View



Typical Boiler



Typical Boiler



Interior



Interior

Use

- supplies steam heat to mine buildings

Construction

- Robertson Type building; steel frame; steel siding & steel roofing double walled; fiberglass Insulation; steel mezzanine; concrete floor & foundation; concrete sump; oil tank; heavy machinery; and electrical equipment.

Size

- 15.9 m x 12.2 m x 6.1 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the building;
- owner may remove any items, equipment or materials deemed salvageable and transport to a designated area within mine site;
- check all electrical equipment for ballast and capacitors that might contain PCBs, and lights and switches that might contain mercury or mercury vapours;
- if identified, then remove, properly contain and ship off site;
- drain all equipment, tanks and machinery completely of hydrocarbons, place in proper containers and ship off site as directed;
- dismantle steel roof;
- remove and package insulation;

- dismantle interior steel siding and ceiling;
- remove and package insulation;
- dismantle steel siding;
- dismantle steel frame;
- demolish remnants of structure;
- dispose of all materials in designated landfill;
- cut up oil tank to accommodate placement in landfill;
- remove heavy machinery such as boilers and dispose of same as directed;
- demolish all concrete foundations, flooring and pedestals and dispose of all materials in designated landfill;
- backfill any pits or excavations, caused as a result of the demolition, with approved material; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Hydrocarbons
- Possible PCBs
- Possible Mercury
- Heavy Machinery

Health & Safety Issues

- all workers to wear Class "D" as minimum protection;
- enforce safe work practices for handling hydrocarbons, PCBs and mercury; and
- enforce safe work practices for demolition type projects.

**"C" SHAFT
BUILDINGS #100 AND #115
ORE LOADOUT**



Typical Interior



Outside Structural



Exterior Area



Interior



Conveyor to Crusher

Use

- abandoned
- truck dump from open pits
- supply crusher house

Construction

- steel frame; steel siding; insulated fiberglass; concrete foundations & pedestals; structural steel; heavy equipment; and conveyor belts.

Size

- 9.1 m x 9.1 m x 27.4 m H

Work Plan

- owner shall locate and de-energize all utilities attached to structure;
- owner may remove any items, equipment, or material deemed salvageable and transport to designated area within the mine site;
- owner has first right to reclaim any building materials, equipment, ore residue or dust that might contain elements of gold;
- check electrical equipment for capacitors that might contain PCBs or mercury switches or mercury vapours;
- if identified, then remove, properly contain and ship off site;
- dismantle steel siding;
- remove insulation and properly contain;
- dismantle steel frame & structural;
- remove conveyor belts and roll up for shipping;
- remove heavy machinery as demolition permits safe access;
- demolish remnants of structure using mechanical means;
- demolish all concrete structures;
- dispose of all materials resulting from demolition in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Suspect PCBs
- Possible mercury vapours

Health & Safety Issues

- workers to wear Class "D" as minimum protection; and
- enforce safe handling practices for PCBs and mercury.

**"C" SHAFT
BUILDINGS #122 AND #84
MACHINE SHOP AND PIPE SHOP**



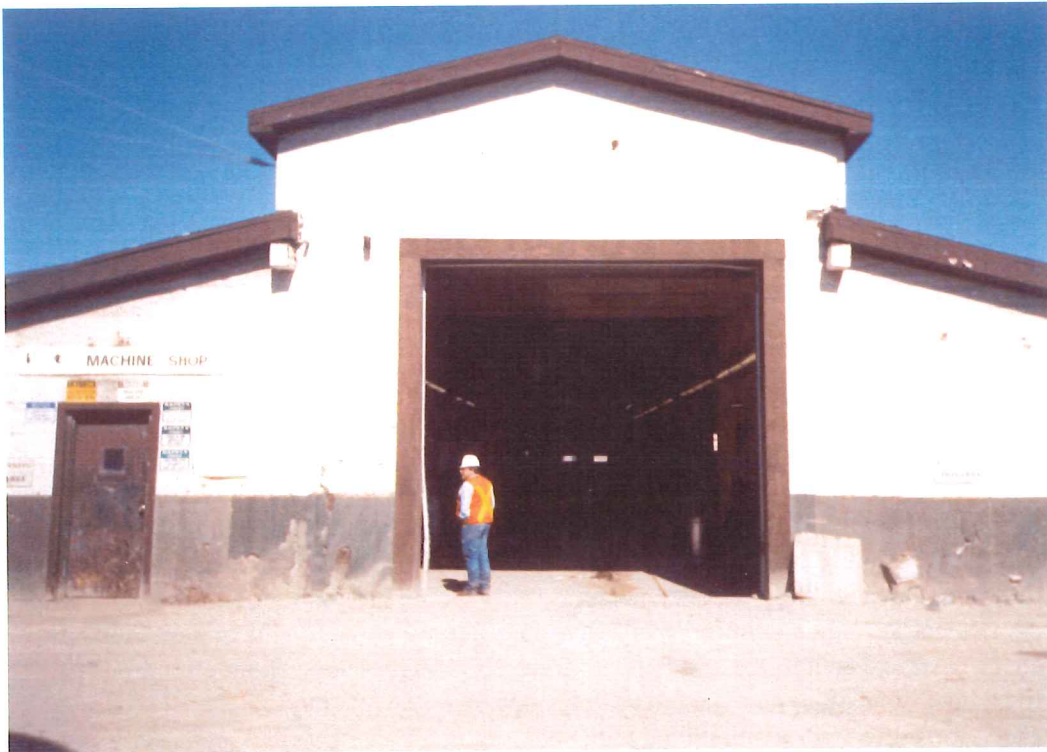
Northeast View



Typical Interior



Typical Machinery



Main Entrance



Typical Machinery
Steel Siding on Interior

Use

- repair shop

Construction

- wood frame structure; concrete floor complete with railway tracks; some steel siding on interior; insulated walls; and machinery.

Size

- 33.2 m x 22.6 m x 4.6 m H

Work Plan

- owner shall locate and de-energize all utilities attached to building;
- owner may remove any items, materials or equipment deemed salvageable and transport to designated area within mine site;
- check electrical equipment for light ballast and capacitors that might contain PCBs;
- check electrical equipment and lights for mercury switches and vapours;
- if any identified, then remove, properly contain and ship off site;
- check for stored hydrocarbons and remove;
- completely drain all machinery of hydrocarbons, properly contain and ship all hydrocarbons off site;
- remove machinery;
- demolish building using mechanical means;
- demolish concrete footings and floor including removal of tracks;
- dispose of all demolition materials in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Hydrocarbons
- Possible PCBs
- Possible Mercury

Health & Safety Issues

- workers to wear Class "D" as minimum protection;
- enforce safe handling practices for hydrocarbons, PCBs and mercury; and
- enforce safe work practices for demolition type projects.

**"C" SHAFT
BUILDING #171
BUTLER BUILDING**



Use

- abandoned

Construction

- Butler Style; steel frame; steel roof and siding; double walled; fiberglass insulation; sprayed on Asbestos Type 2; concrete slab foundation; and building sinking.

Size

- 9.7 m x 7.3 m x 3.7 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the structure;
- owner may remove any items, material or equipment deemed salvageable and transport to designated area on mine property;
- dismantle interior steel with sprayed on Asbestos Type 2;
- dismantle remainder of building;

- demolish concrete slab foundation;
- dispose of all materials resulting from demolition in designated landfill;
- backfill excavation resulting from demolition with approved material; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Asbestos Type 2
- Building sinking

Health & Safety Issues

- all workers to wear Class “C” complete with dust particle respirators as minimum protection;
- take special measures to ensure that during removal and transportation of Asbestos Type 2 the dust is not allowed to escape into the environment; and
- enforce safe work practices for demolition type projects.

**"C" SHAFT
CHEMICAL REAGENT BUILDING
AT OLD MILL**



Use

- reagent storage tanks

Construction

- steel frame; steel roof & siding; double walled; fiberglass insulation; and concrete slab foundation.

Size

- 6.1 m x 5.5 m x 3.05 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the building;
- owner may remove any items deemed salvageable and transport to a designated site within the mine property;
- remove reagent tanks and dispose of them in designated landfill;
- dismantle building and dispose of all material in designated landfill;
- demolish concrete and dispose of all material in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Possible chemical residues

Health & Safety Issues

- workers to wear Class “D” as minimum protection.

**"C" SHAFT
CHIMNEY**



Use

- abandoned

Construction

- brick chimney; Asbestos Type 2 liner; and concrete foundation.

Size

- 4.9 m dia. @ base
- 2.7 m dia. Inside lining 45.7 m H

Work Plan

- owner shall locate and de-energize all utilities attached to structure;
- chimney demolition;
- collect, properly package and dispose of all asbestos and arsenic residue in designated landfill;
- demolish concrete foundation;
- dispose of all materials resulting from demolition in designated landfill; and
- clean up, grade site and leave in orderly manner.

Special Items

- Elevated levels of arsenic dust
- Elevated levels of asbestos dust

Health & Safety Issues

- demolition to be done in best manner possible to contain dust;
- all workers to wear Class "C" complete with dust particle respirators as minimum protection;
- enforce safe work practices for demolition type projects.

**"C" SHAFT
CONVEYOR FROM
ORE LOAD TO CRUSHER BUILDING**



Use

- abandoned

Construction

- steel plated construction; conveyor belt; structural steel; and concrete footings.

Size

- 61 m x 1.2 m x 1.8 m H

Work Plan

- owner shall locate and de-energize all utilities attached to structure;
- owner may remove any items, equipment or materials deemed salvageable and transport to a designated area within the mine property;
- owner has first right to reclaim any item, equipment, building material, ore residue or dust that might contain elements of gold;
- dismantle steel structure;
- remove conveyor belt and roll up for transport;
- remove machinery;
- demolish remnants of structure;
- demolish concrete footings;
- dispose of all materials resulting from demolition in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- No known hazards

Health & Safety Issues

- workers to wear Class “D” as minimum protection.

**"C" SHAFT
ELECTRICAL BUILDING
BEHIND OFFICE BUILDING**



Use

- electrical supply for office
- switch gear

Construction

- steel frame; steel roof & siding; double walled; insulated; and concrete slab foundation.

Size

- 6.7 m x 3.05 m x 2.4 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the building;
- owner may remove any items, materials or equipment deemed salvageable and transport to a designated area within the mine property;
- check electrical equipment for capacitors and light ballast that might contain PCBs and check for mercury switches;
- if identified, then remove, properly contain and ship off site as directed;
- remove electrical equipment;

- dismantle building and dispose of all materials in designated landfill;
- demolish concrete slab and dispose of material in designated landfill; and
- clean up, grade site, and leave in an orderly manner.

Special Items

- electrical equipment

Health & Safety Issues

- all workers to wear Class “D” as minimum protection.

**"C" SHAFT
HOUSE ABOVE MOBILE EQUIPMENT SHOP**



Use

- abandoned

Construction

- single-storey wood structure; and wood foundation.

Size

- 6.1 m x 4.6 m x 3.05 m H

Work Plan

- no attached utilities;
- demolish using mechanical means and dispose of material in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- no known hazards

Health & Safety Issues

- workers to wear Class "D" as minimum protection; and
- enforce safe work practices for demolition type projects.

**"C" SHAFT
BUILDING #169
LABORATORY**



East View



North View

GAIA Contractors



Typical Basement Storage



Laboratory Equipment



Laboratory Equipment



Typical Stored Chemicals



Typical Stored Chemicals

Use

- abandoned
- storage

Construction

- Butler Type building; steel frame; steel roof & siding; insulated; wood interior; wood foundation; and full basement.

Size

- 25 m x 12.2 m x 4.1 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the structure;
- owner may remove any items, materials or equipment deemed salvageable and transport to designated area within mine property;
- identify and remove all chemicals and hydrocarbons; properly contain and ship off site;
- check electrical equipment for any ballast or capacitors that might contain PCBs and electrical switches for mercury;
- if either is identified, then remove, properly contain and ship off site;
- dismantle steel roofing (optional);
- dismantle steel siding (optional);
- remove and package all insulation in proper containers for disposal (optional);
- dismantle steel frame (optional);

- demolish remains of building and dispose of all material resulting from demolition in designated landfill;
- backfill all excavations or pits created as a result of the demolition with approved material up to level of original ground contours; and
- clean up, grade and leave site in an orderly manner.

Special Items

- Stored chemicals
- Possible PCBs
- Possible mercury

Health & Safety Issues

- all workers to wear Class “D” as minimum protection;
- enforce safe handling practices for chemicals, PCBs, hydrocarbons and mercury; and
- enforce safe work practices for demolition type projects.

**"C" SHAFT
BUILDINGS #106, #108 AND #120
MILL BUILDING COMPLEX**



Mill Looking Northwest



Mill Looking North



Mill Looking North
Note Steel Siding & Wood Siding



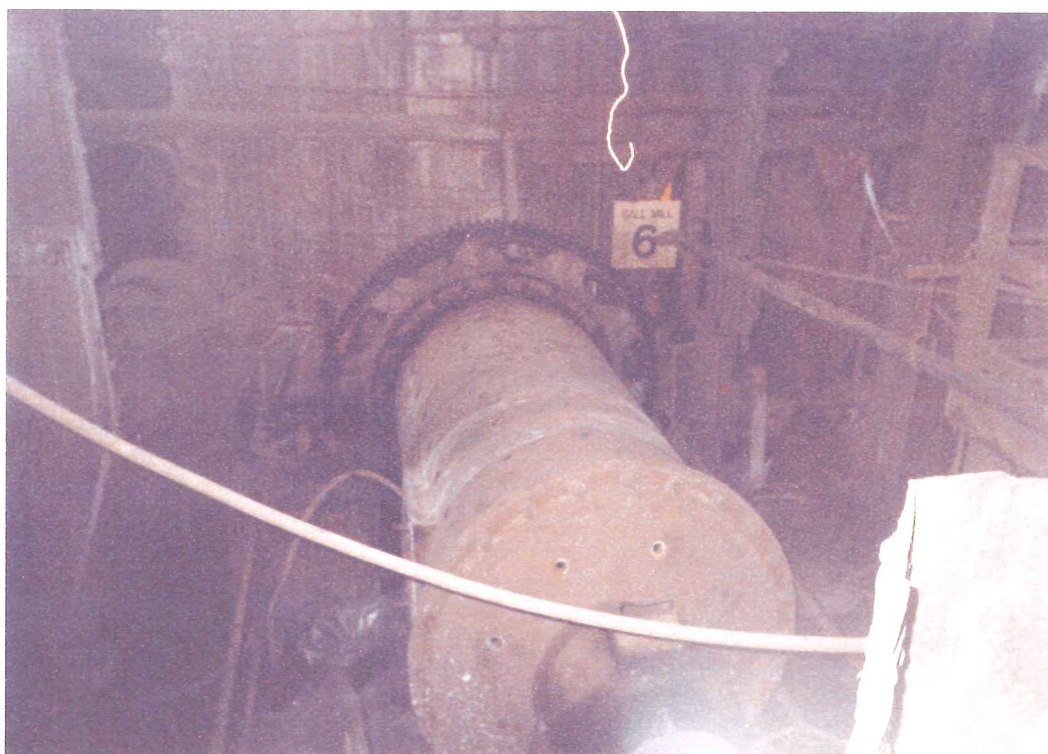
Mill Looking Southwest
Showing Exterior Asbestos Siding Type 1 and Lime Silo



Typical Concrete Supports for Tanks



Typical Wood Structure



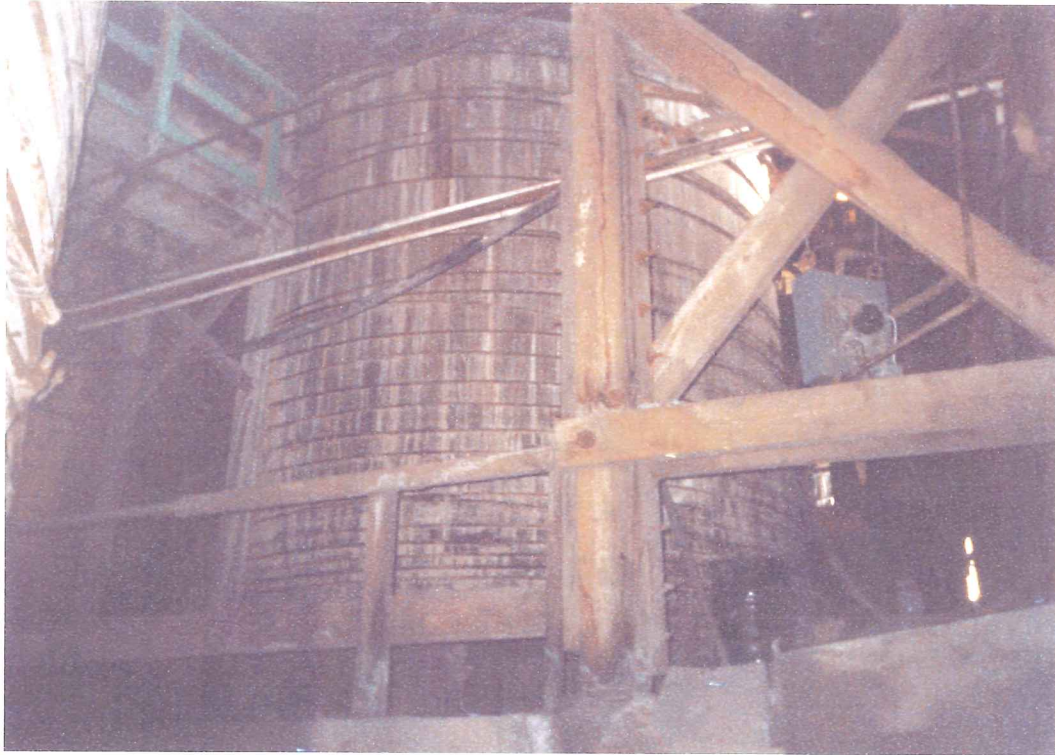
One of Several Ball Mills



Typical Wood Infrastructure



Conveyor to Ore Bins



Typical Ore Bin



Electrical Room Showing Asbestos Type 1 on Walls

Use

- use is minimal

Construction

- multiple level wood structure; partial wood siding; partial steel siding; partial asphalt roof; concrete foundations & floor; concrete pedestals and supports; structural steel; large steel tanks and silos; large wood tanks; heavy processing machinery & equipment; electrical equipment; and Asbestos Type 1.

Size

- 83.8 m x 73.2 m x 17.1 m H
- 15.2 m x 15.2 m x 13.7 m H
- 15.2 m x 15.2 m x 9.1 m H
- 55 m x 6.1 m x 9.1 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the structure;
- owner may remove any items or equipment deemed salvageable and transport to designated area within mine site;
- owner has first right to reclaim any building materials, dust, equipment, machinery, or ore residue that the owner believes contains elements of gold;
- identify all stored hydrocarbons on site, sampling and testing at lab, if necessary;
- drain all machinery, equipment and tanks of hydrocarbons, properly contain and ship off site;
- check all manufacturers' dates and labels on ballast of fluorescent lights and capacitors, on electrical equipment for possible PCBs;
- if identified, then remove, store properly and ship off site as directed;
- check electrical equipment for mercury switches and, if identified, remove, store properly and ship off site as directed;
- remove all Asbestos Type 1 panelling from all interior rooms of building, store in proper containers and dispose of same in designated landfill;
- dismantle Asbestos Type 1 panelling from exterior of building and dispose of same in designated landfill;
- dismantle all steel roofing and siding and dispose of material in designated landfill (optional);
- remove all conveyor belts, roll up and dispose of same in designated landfill;
- demolish building using mechanical means and dispose of all material in designated landfill;
- remove heavy equipment and machinery once safe access is made available by the demolition process and dispose of as directed;
- all steel tanks, containers and silos must be cut up for placement purposes in landfill;
- demolish all concrete foundations, footings, pedestals, supports and floors and dispose of all material in designated landfill;
- backfill any pits or excavations resulting from the demolition up to original ground contours with approved material; and
- clean up, grade and leave site in an orderly manner.

Special Items

- Potential for confined spaces
- Elevated levels of arsenic dust
- Chemical lime & lime residue
- Asbestos Type I
- Hydrocarbons
- Possible PCBs
- Possible mercury

Health & Safety Issues

- keep workers out of confined spaces;
- no worker shall enter a confined space without being properly trained, properly equipped, properly supervised and properly authorized;
- workers to wear proper levels of PPE to suit the environment;
- enforce safe handling practices for hydrocarbons, chemicals, PCBs, mercury and Asbestos; and
- enforce safe work practices for demolition type projects.

**"C" SHAFT
BUILDING #117
NEW REFRACTORY BUILDING**



Looking Southeast



Looking North



Perimeter Fence & Utilitdor



Propane Tank



Typical Interior



Typical Interior



Debris Outside the Building



South View of Propane Tank & Fuel Tank



Typical Interior

Use

- was used for gold recovery & sampling

Construction

- steel Butler Type building; steel frame; steel roof & steel siding; double walled; screws on interior of steel; insulated with fiberglass; concrete slab foundation; wood & steel partitions; electrical equipment; furnaces and other apparatus; propane tank; fuel tank; service utilidor; and perimeter chain link fence.

Size

- 15.4 m x 7.3 m x 3.7 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the building;
- owner may remove any items or equipment deemed salvageable and transport to designated site within mine property;
- owner has first right at reclaiming any building material, equipment, dust, item, or ore residue that may contain elements of gold;
- propane tank to be removed by others;
- check electrical equipment for ballast and capacitors that might contain PCBs;
- completely drain fuel tank into proper containers and ship contents off site as directed;
- check building for any stored amounts of chemicals or hydrocarbons;
- if identified, then remove, place in proper containers and ship off site;

- dismantle and dispose of perimeter chain link fence in designated landfill;
- dismantle interior steel siding & ceiling (optional);
- remove insulation; place in containers and dispose of same in designated landfill (optional);
- dismantle steel roofing & siding (optional);
- dismantle steel frame (optional);
- demolish remains of building and equipment and place all the materials resulting from the demolition in designated landfill;
- fuel tank must be cut up to accommodate placement in designated landfill;
- demolish concrete slab and dispose of material in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Possible PCBs
- Chemicals
- Hydrocarbons

Health & safety Issues

- all workers to wear Class “D” as minimum protection; and
- enforce safe work practices for demolition type projects.

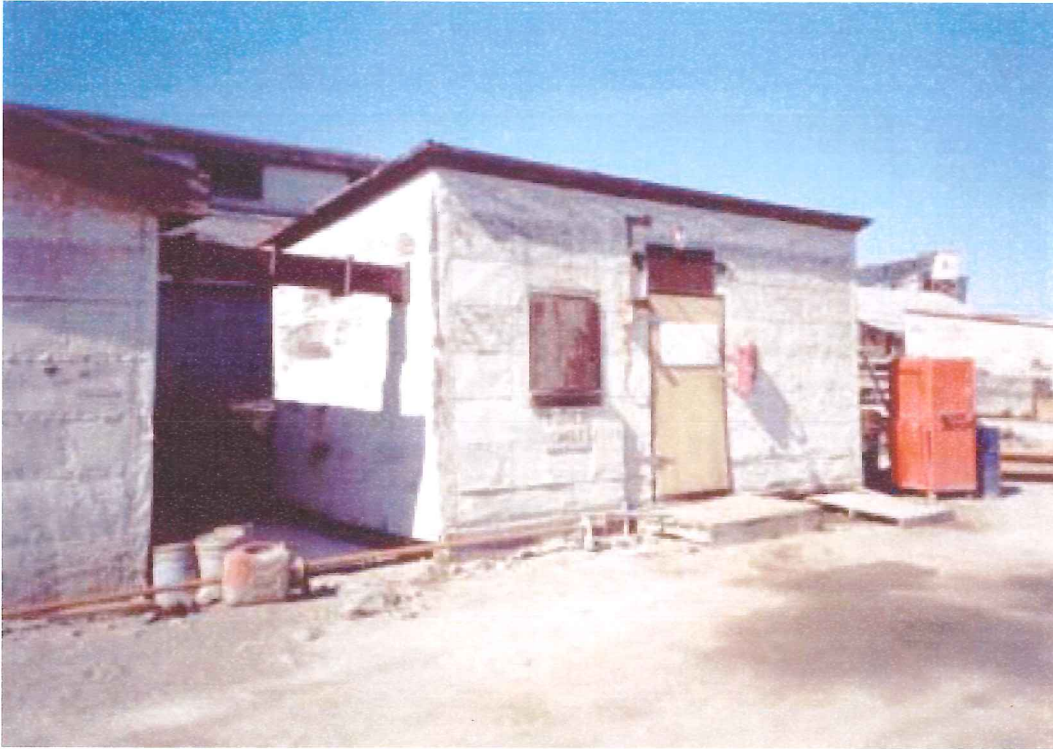
**"C" SHAFT
OUTBUILDINGS @ MACHINE SHOP**



Trailer



Cable Shed



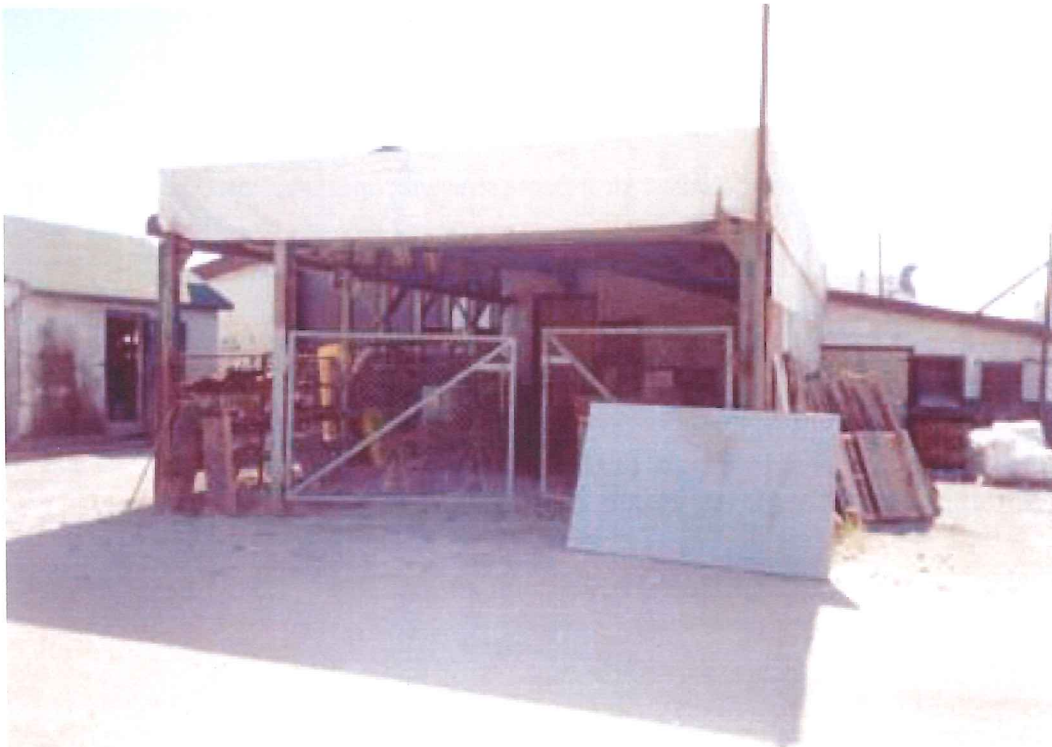
Tool Shed



Storage Shed



Storage Shed



Flat Steel Storage Shed



Flat Steel Storage Shed

Use

- various storage

Construction

- 1 portable trailer; 4 wood sheds; 1 steel frame structure; and Asbestos Type 1 panelling.

Size

- 7.3 m x 3.7 m x 2.4 m H (Trailer)
- 5.5 m x 3.0 m x 3.0 m H (Cable Shed)
- 8.5 m x 4.9 m x 2.4 m H (Tool Shed)
- 4.9 m x 3.7 m x 2.4 m H (Storage Shed)
- 2.4 m x 2.4 m x 2.4 m H (Storage shed)
- 9.7 m x 6.7 m x 3.7 m H (Flat Steel storage Shed)

Work Plan

- owner shall locate and de-energize all utilities attached to the structures;
- owner may remove any items, materials or equipment deemed salvagable and transport to designated site within mine property;
- remove any stored hydrocarbons, place in proper containers and ship off site;
- remove all Asbestos Type 1 panelling, place in proper containers and dispose of in designated landfill;
- demolish all structures using mechanical means and dispose of all material in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Asbestos Type 1

Health & Safety Issues

- all workers to wear Class "C" complete with dust particle respirators as minimum protection;
- enforce safe handling practices for asbestos and hydrocarbons;
- Enforce safe work practices for demolition type projects.

**"C" SHAFT
PUMP SHACK**



Use

- provides water for the mine

Construction

- prefabricated building; over cistern; concrete foundation and foam insulation.

Size

- 8.5 m x 3.7 m x 2.4 m H

Work plan

- owner shall locate and de-energize all utilities attached to building;
- owner may remove any items, materials, or equipment deemed salvageable and transport to a designated site within the mine property;
- check for hydrocarbons and, if identified, properly contain and ship off site;
- demolish structure using mechanical means and dispose of all materials in designated landfill;
- demolish all concrete foundations and dispose of all materials in designated landfill;
- backfill any pits or excavations caused by the demolition with approved material; and
- clean up, grade site and leave in an orderly manner.

Special Items

- No known hazards

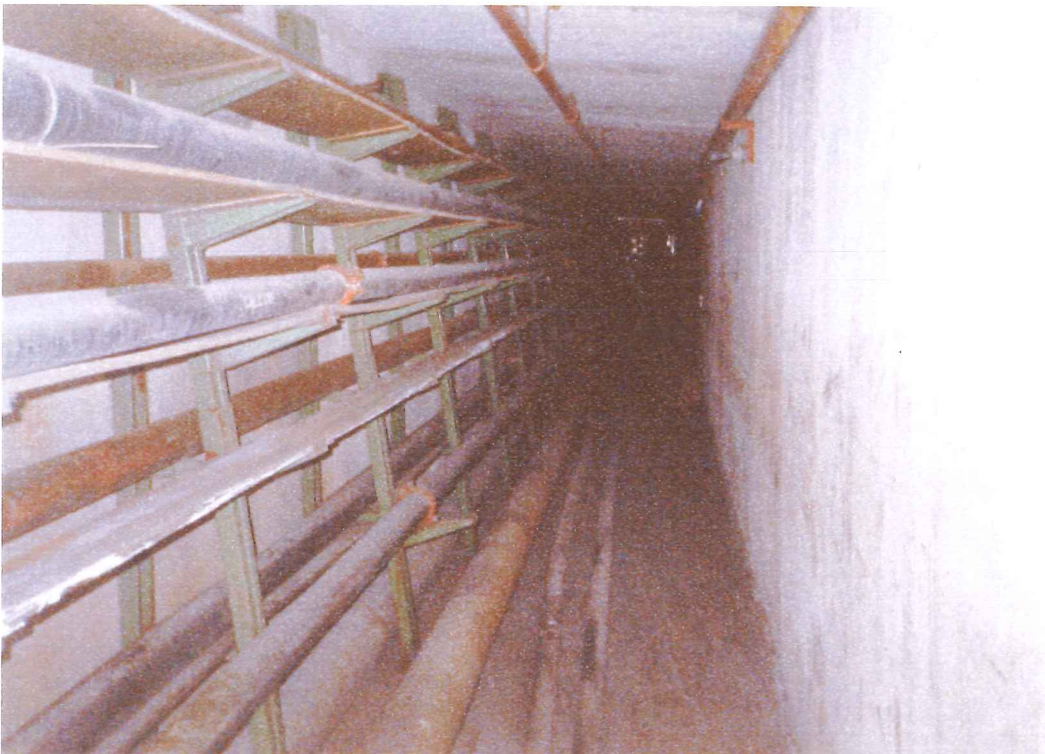
Health & Safety Issues

- workers to wear Class "D" as minimum protection.

**"C" SHAFT
SERVICE CORRIDOR
OLD MILL AND ROASTER**



Typical Exterior



Typical Interior



Typical Interior

Use

- abandoned utility corridor

Construction

- wood structure; steel racks and piping; and wood foundation.

Size

- 91.5 m x 1.8 m x 2.7 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the structure;
- owner may remove any items, equipment or materials deemed salvageable and transport to designated area within mine site;
- demolish structure using mechanical means and dispose of all materials in designated landfill;
- clean up, grade site and leave in an orderly manner.

Special Items

- No known hazards

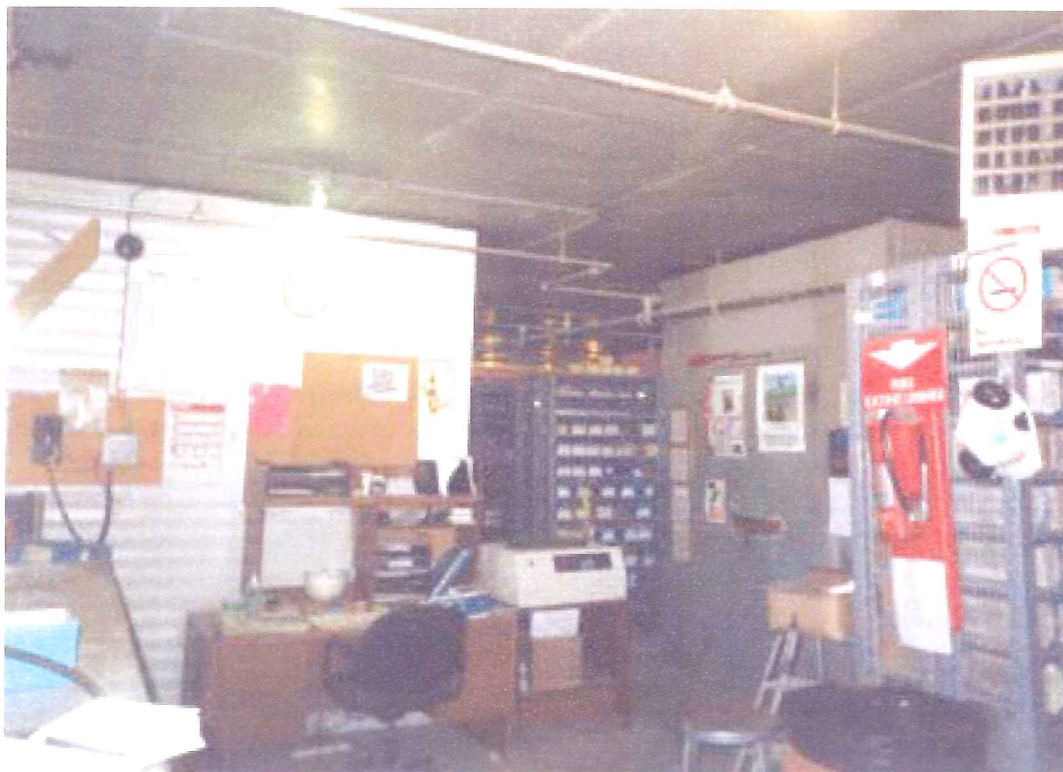
Health & Safety Issues

- workers to wear Class "D" as minimum protection; and
- enforce safe work practices for demolition type projects.

**"C" SHAFT
BUILDING #133
WAREHOUSE #3**



Northwest View



Interior Showing Asbestos Type 1 Panelling - Storage Items and Elevator



Typical Exterior

Use

- storage of small supplies for mining operation.

Construction:

- wood structure; steel roof & siding; concrete floor and partial concrete foundation; full basement; insulated; Asbestos Type 1 on walls and ceilings; some steel plating on floor; and contains elevator.

Size

- 30.8 m x 12.5 m x 7.3 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the building;
- owner may remove any items deemed salvageable and transport to designated area within mine property;
- remove all Asbestos Type 1 from interior, store in proper containers and dispose of same in designated landfill;
- demolish building using mechanical means and dispose of all material in designated landfill;
- demolish all concrete footings and foundations, disposing of all materials in designated landfill;
- backfill excavation resulting from demolition with approved material; and
- clean up, grade site and leave in an orderly manner.

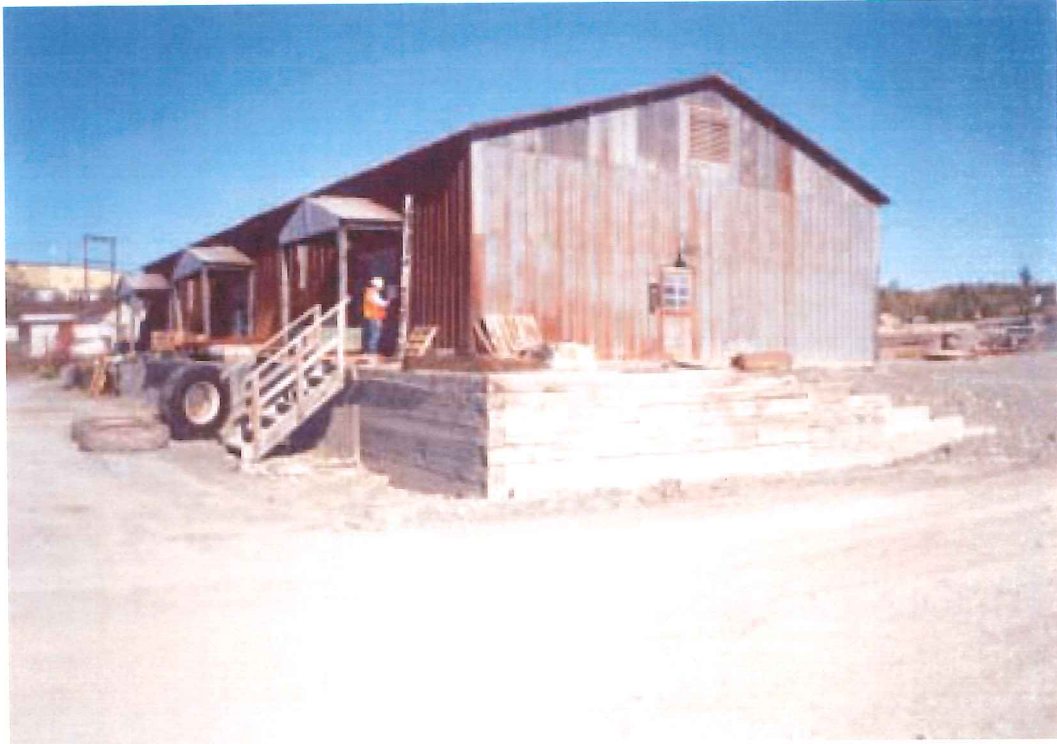
Special Items

- Asbestos Type 1

Health & Safety Issues

- all workers to wear Class “C” complete with dust particle respirators as minimum protection; and
- enforce safe work practices for demolition type projects.

**"C" SHAFT
BUILDING #146
WAREHOUSE #4**



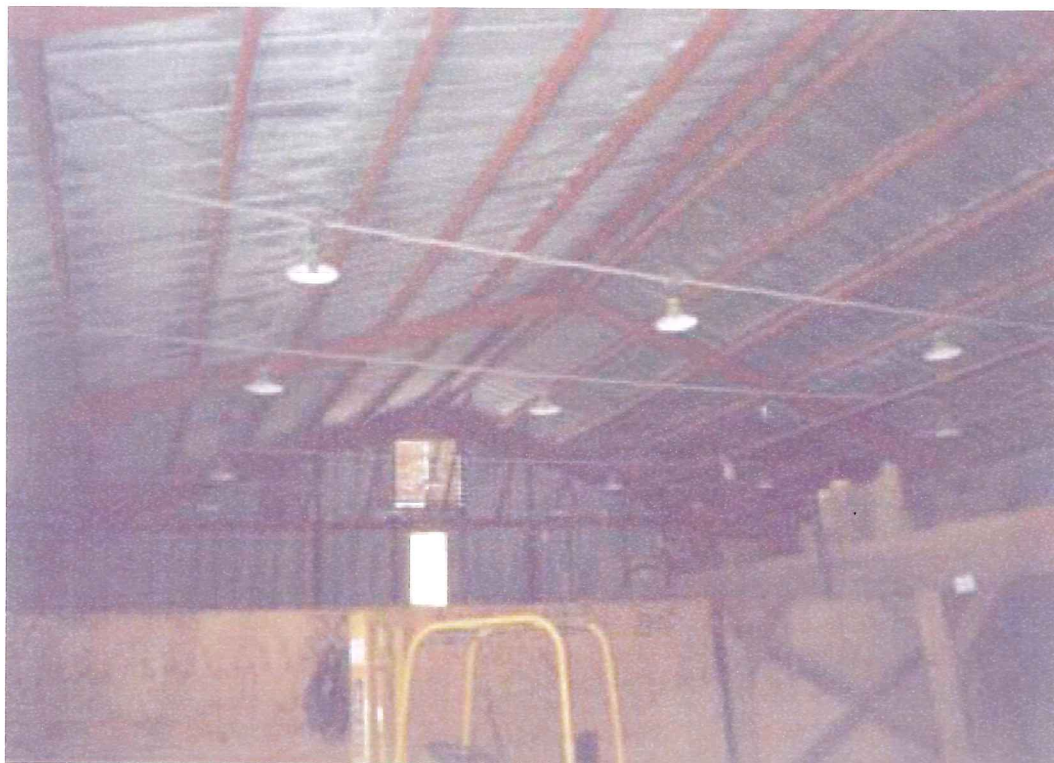
Northwest View



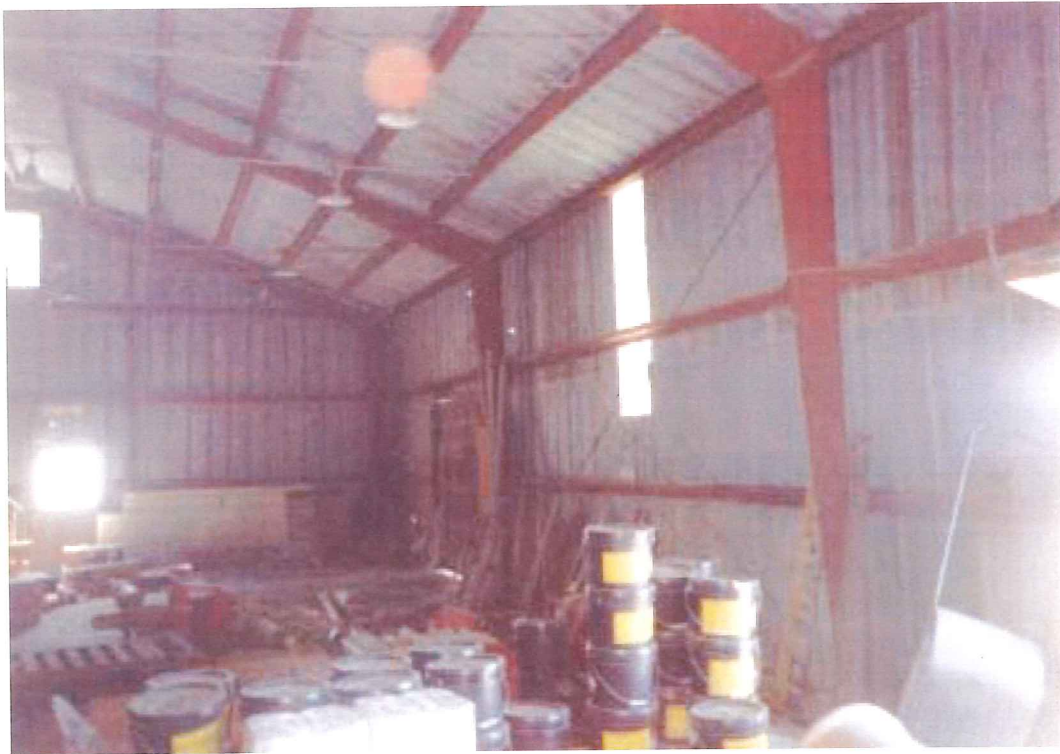
Northwest View



Interior



Interior Structure



Interior



Wood Mezzanine

Use

- storage

Construction

- Butler Type building; steel frame; steel roof & siding; wood sill foundation; interior wood mezzanine; and wood crib loading dock.

Size

- 30.5 m x 12.2 m x 5.3 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the building;
- owner may remove any items or materials deemed salvageable and transport to designated site within mine property;
- dismantle steel exterior (optional);
- dismantle steel frame (optional);
- demolish remainder of structure using mechanical means and dispose of all materials resulting from demolition in designated landfill; and
- clean up, grade and leave site in an orderly manner.

Special Items

- No known hazards

Health & Safety Issues

- all workers to wear Class "C" complete with dust particle respirators as minimum protection; and
- enforce safe work practices for demolition type projects.

EFFLUENT WATER TREATMENT PLANT



Plant Showing Lay Down Area



Typical Interior



Lay Down Area Interior



Tank Farm



Electrical Room



Lime Silo



Interior Lime Silo

GAIA Contractors



Chemical Tanks



Electrical Sub Station

Use

- treatment of mine water

Construction

- Robertson Type building; steel frame ; steel roof & siding; double walled; fiberglass insulation; multiple level structure; concrete block partitions; concrete foundations, footings & pedestals; structural steel; steel tank farm; chemical tanks; lime silo; electrical equipment; machinery; and transformer sub station.

Size

- Main Building: 23.7 m x 12 m x 7.3 m H
- Structural Laydown Area: 30.5 m x 7.6 m x 7.6 m H
- Tank Farm (6 Tanks): 9.1 m dia. x 4.9 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the structures;
- owner may remove any item, equipment, machinery or material deemed salvageable and transport to a designated area within the mine property;
- take fluid samples from transformers and send to lab for analysis for possible PCBs;
- completely drain all equipment, transformer and machinery of hydrocarbons, properly contain and ship off site;
- neutralize all chemical tanks collecting all chemical liquids and disposing of same in tailings area;
- dismantle building;
- remove heavy equipment and machinery;
- dismantle tank farm complex;
- demolish remnants of structures and all concrete foundations, footings and pedestals;
- dismantle sub station and remove transformers;
- dispose of all materials resulting from demolition in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Potential for working in confined spaces
- Chemicals

Health & Safety Issues

- no one is to work in confined spaces without being properly trained, properly equipped and properly authorized; and
- workers are to wear the proper protection level of PPE for the job.

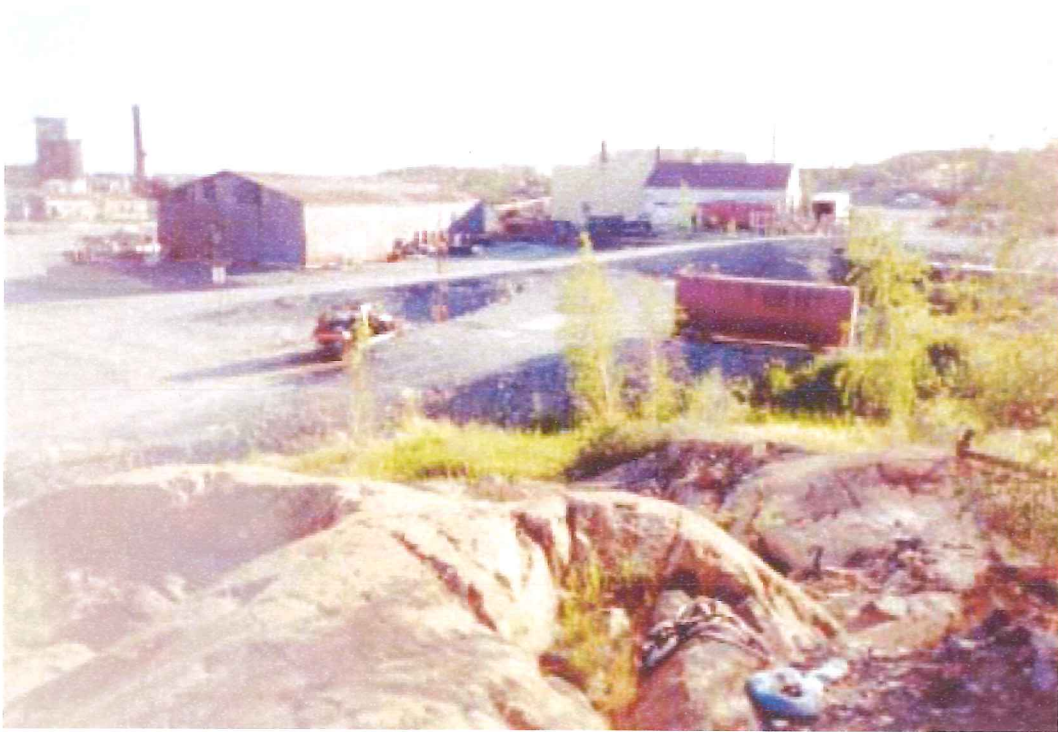
**GENERAL SITE
CLEAN UP**



"C" Shaft Area Parking Lot



Mobile Equipment Yard



Upper "C" Shaft Area



Typical "C" Shaft Area



Typical "C" Shaft Area



Typical "C" Shaft Area



Typical "C" Shaft Area



Typical "C" Shaft Area



Typical "C" Shaft Area



Outside Breaker "C" Shaft



Portal & Vent or Escape Raise



Typical "B" Pit Area



Typical "B" Pit Area

Use

- all miscellaneous support structures; and
- equipment, infrastructure, garbage, storage and scrap metal.

Construction

- parking lots; perimeter fencing; bone yards; garbage; light standards; buildings; structures; tanks not under scope of work; roadways; scrap metals; all H.D.P.E. piping, etc.; construction of 2 concrete closure caps for portal and vent portal.

Size

- Portal Opening: 3.6 m x 3.05 m H
- Vent Or Escape: 3.05 m x 2.4 m H

Work Plan

- owner shall locate and de-energize all utilities attached to items;
- remove all scrap metals including tanks and dispose of them in designated landfill;
- demolish all structures and dispose of them in designated landfill;
- clean up all garbage and dispose of same in designated landfill;
- collect up all H.D.P.E. piping and dispose as per directed;
- reclaim all roadways, parking lots and access;
- pour-in-place concrete portal plugs as per Regulation Standards.

Special Items

- Collection of H.D.P.E. Pipe complete with fittings

Health & Safety Issues

- workers to wear Class “D” as minimum protection.

**HYDRO LINES DECOMMISSIONING
"A" SHAFT, "B" SHAFT AND "C" SHAFT**



Typical "A" Shaft Area



Typical "A" Shaft Area



Typical "A" Shaft Area



Typical T.R.P. Area

Use

- hydro power for the mine

Construction

- pole lines; electrical cables; cribbing & supports; and auxiliary items.

Size

- approximately 5,000 m in length

Work Plan

- all parties are to confirm that power lines are de-energized before starting construction;
- dismantle in an orderly fashion and dispose of all materials resulting from demolition in designated landfill; and
- clean up, grade sites and leave in an orderly manner.

Special Items

- Accessibility is difficult

Health & Safety Issues

- workers to wear Class "D" as minimum protection.

**MISCELLANEOUS
TANKS AND EQUIPMENT**



Tanks in B-3 Pit



Tanks Above Curling Rink
"A" Shaft Area

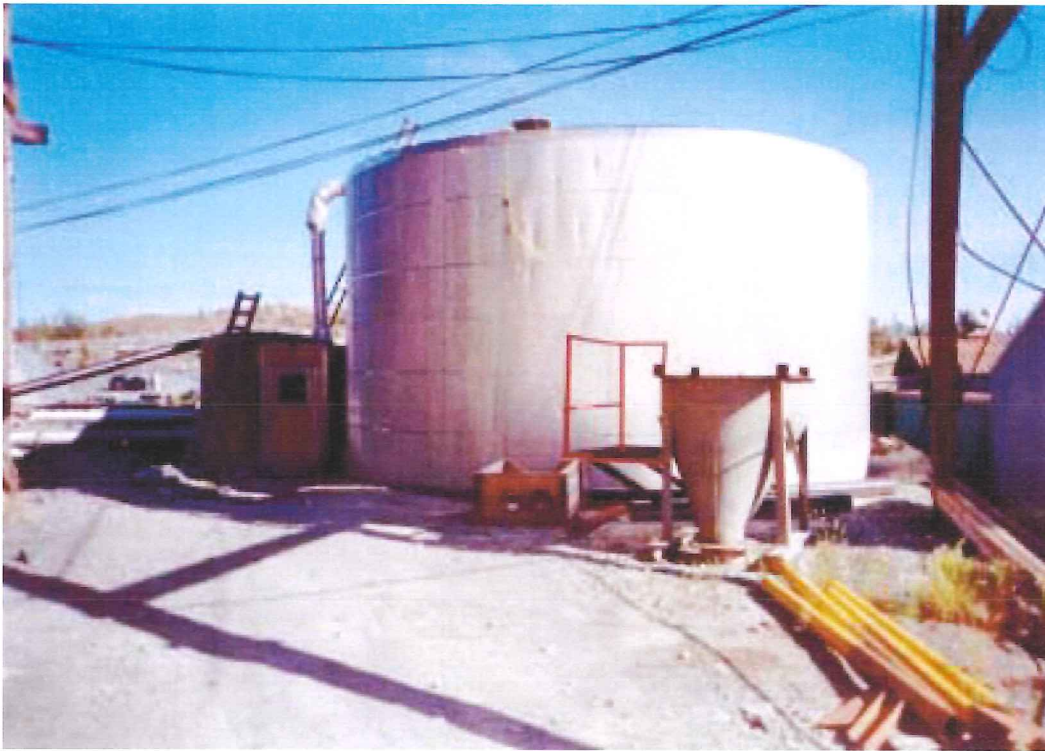


Tanks Above Curling Rink
“A” Shaft Area



Water Tank at Mill
“C” Shaft

GAIA Contractors



Water Tank at Mill
"C" Shaft



Tank Above B-3 Pit

Use

- abandoned

Construction

- wood structure water tank at mill; solid steel; modular steel; steel tops; steel floors; and piping.

Size

- various

Work Plan

- owner shall locate and de-energize all attached utilities;
- classify all tanks as confined spaces;
- tanks are to be sterilized of all hydrocarbon residue;
- residue to be properly collected, properly contained and shipped off site;
- dismantle all tanks into pieces that will accommodate placement in designated landfill;
- dispose of all materials in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Working in confined spaces

Health & Safety Issues

- no worker shall enter a confined space without being properly trained, properly equipped, properly supervised and properly authorized; and
- workers to wear proper levels of PPE to suit the environment.

OIL TANKS "A" SHAFT TANK FARM



Use

- abandoned

Construction

- modular steel; steel tops; steel floors; and piping.

Size

- 4 @ 9.1 m dia. x 7.3 m H

Work Plan

- owner shall locate and de-energize all attached utilities;
- classify all tanks as confined spaces;
- tanks are to be sterilized of all hydrocarbon residue;
- residue to be properly collected, properly contained and shipped off site;
- dismantle all tanks into pieces that will accommodate placement in designated landfill;
- dispose of all materials in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Working in confined spaces

Health & Safety Issues

- no worker shall enter a confined space without being properly trained, properly equipped, properly supervised and properly authorized; and
- workers to wear proper levels of PPE to suit the environment.

**OIL TANKS
TANK FARM ABOVE "C" DRY**





Use

- abandoned

Construction

- modular steel; steel tops; steel floors; and piping.

Size

- 3 @ 7.6 m dia. x 7.3 m H

Work Plan

- owner shall locate and de-energize all attached utilities;
- classify all tanks as confined spaces;
- tanks are to be sterilized of all hydrocarbon residue;
- residue to be properly collected, properly contained and shipped off site;
- dismantle all tanks into pieces that will accommodate placement in designated landfill;
- dispose of all materials in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

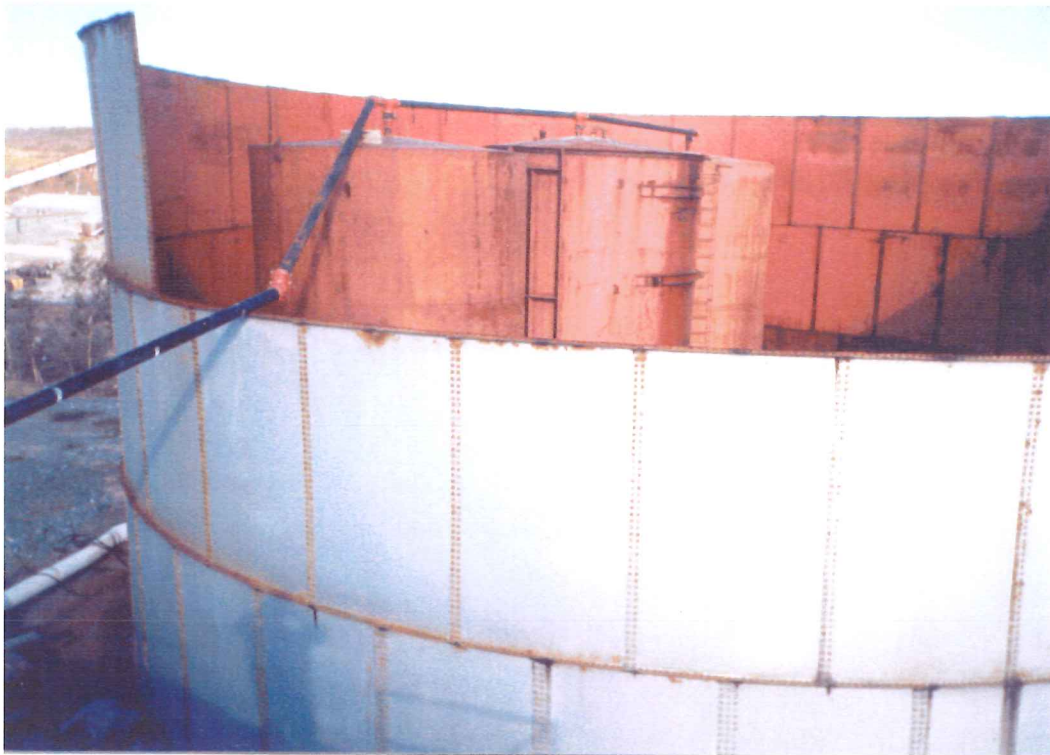
- Working in confined spaces

Health & Safety Issues

- no worker shall enter a confined space without being properly trained, properly equipped, properly supervised, and properly authorized; and
- workers to wear proper levels of PPE to suit the environment.

**OIL TANKS
TANK FARM ABOVE
MOBILE REPAIR SHOP**



**Use**

- abandoned

Construction

- solid steel; modular steel; steel tops; steel floors; and piping.

Size

- 3 @ 16.5 m dia. x 7.3 m H (Modular)
- 3 @ 3.7 m dia. x 6.1 m H

Work Plan

- owner shall locate and de-energize all attached utilities;
- classify all tanks as confined spaces;
- tanks are to be sterilized of all hydrocarbon residue;
- residue to be properly collected, properly contained and shipped off site;
- dismantle all tanks into pieces that will accommodate placement in designated landfill;
- dispose of all materials in designated landfill; and
- clean up, grade site, and leave in an orderly manner.

Special Items

- Working in confined spaces

Health & Safety Issues

- no worker shall enter a confined space without being properly trained, properly equipped, properly supervised and shall enter only with proper authority; and
- workers to wear proper levels of PPE to suit the environment.

**SERVICE CORRIDORS
“A” SHAFT AREA, TOWNSITE AREA,
“C” SHAFT AREA AND TAILINGS LINES**



Typical Townsite Area



“A” Shaft Area



Typical Townsite Area



Typical "A" Shaft Area



Typical Between Townsite and "C" Area



Typical Between Townsite and "C" Area



Typical "C" Area



"C" Area to Townsite



"C" Area to Townsite



Typical "C" Area



Typical "C" Area



Typical "C" Area



Typical "C" Area



Typical "C" Area



Typical "C" Area



Mobile Repair Shop



Typical "C" Area



Typical "C" Area



Typical "C" Area



Typical "C" Area



Typical "C" Area



Typical "C" Area



Tailings Line



Tailings Line



Tailings Line



Typical Townsite Area

Use

- provide utilities to the mine

Construction

- wood frame; insulated; electrical wiring; and piping.

Size

- approximately 7,000 m in length

Work Plan

- owner shall locate sources for and de-energize all utilities servicing corridors;
- dismantle outside covering;
- remove insulation, place in proper containers;
- drain all pipes;
- collect hydrocarbons, properly contain and ship off site;
- collect all grey water and dispose of same in Tailings Area above Effluent Treatment Plant;
- cut piping into manageable lengths;
- demolish and remove all trestles and supports;
- dispose of all materials resulting from demolition in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- No known hazards

Health & Safety Issues

- workers to wear Class "D" as minimum protection.

**T.R.P. SITE
CARBON REACTIVATOR BUILDING
CHEMICAL ADDITION**

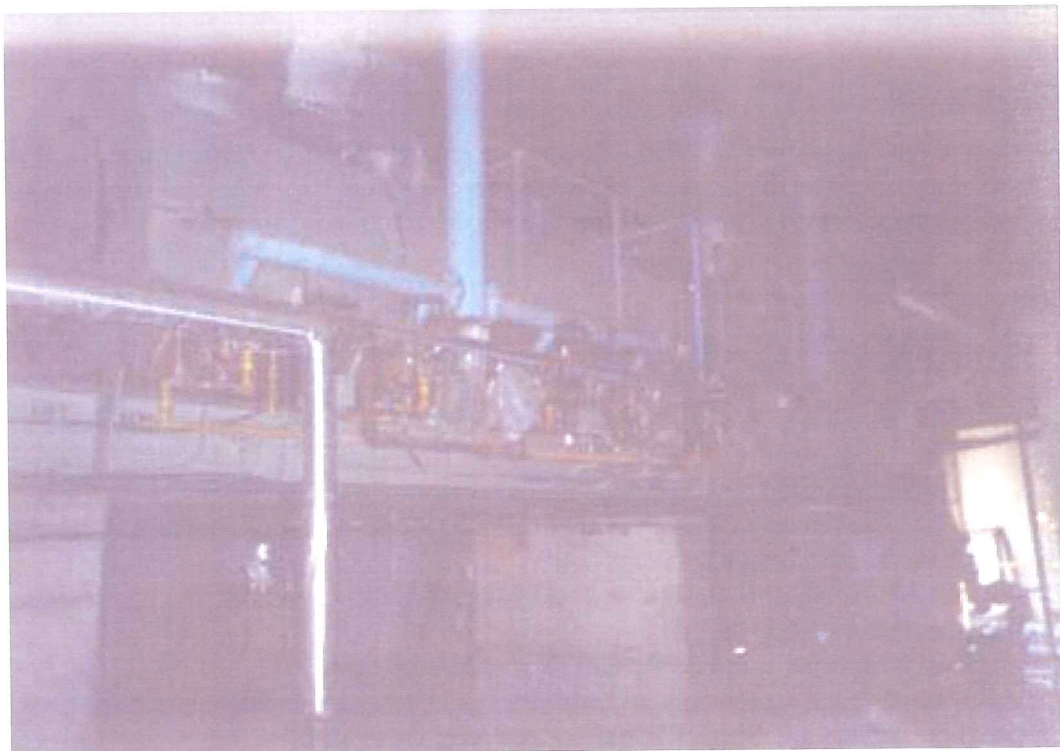


Looking South

GAIA Contractors



Looking Southwest



Kiln Placement



Typical Electrical Equipment

Use

- abandoned

Construction

- steel frame; steel roof & siding double walled; insulated; concrete floor, foundation & pedestals; concrete block wall partitions; steel mezzanines; electrical equipment; heavy machinery; chemical tanks; transformers; and perimeter chain link fence.

Size

- 45.7 m x 15.2 m x 12.2 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the building;
- owner may remove any items, material or equipment deemed salvageable and transport to an a designated area within the mine property;
- owner has first right to reclaim any building materials, equipment, tailings or residue that might contain elements of gold;
- this must be done so as not to impede the demolition process;
- check all electrical equipment for light ballast and capacitors that might contain PCBs and for mercury switches and lights that may contain mercury vapour;
- take samples from transformer fluid and send to lab for testing;

- drain all transformers, equipment, machinery and tanks of hydrocarbons, properly contain and ship off site;
- identify any stored chemicals, remove and properly contain and dispose of as directed;
- dismantle building;
- remove heavy machinery and equipment;
- demolish remnants of structure and dispose of all materials resulting from demolition in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Hydrocarbons
- Chemicals
- Possible PCBs
- Possible mercury vapours
- Heavy machinery

Health & Safety Issues

- workers to wear Class "D" as minimum protection;
- enforce safe handling practices for chemicals, hydrocarbons, mercury and PCBs; and
- enforce safe work practices for demolition type projects.

**T.R.P. SITE
COLD STORAGE BUILDING**



Typical Exterior



Interior

Use

- storage

Construction

- modular steel frame structure on timber foundations; and insulated.

Size

- 30.5 m x 11 m x 3.7 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the building;
- owner may remove any items, materials or equipment deemed salvageable and transport to a designated area within the mine property;
- dismantle building and dispose of all material in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- No known hazards

Health & Safety Issues

- workers are to wear Class "D" as minimum protection; and
- enforce safe work practices for demolition type projects.

**T.R.P. SITE
GENERAL SITE PREPARATION
ORIGINAL INFRASTRUCTURE**



Process Equipment, Pipelines and Debris
Steel Tank and Debris



Steel Tank and Debris



Process Equipment

GAIA Contractors



Process Equipment



Storage Shed and Electrical Trailer



Process Equipment

Use

- original tailings recovery site

Construction

- miscellaneous structural steel components; yard piping; electrical trailer; steel surge tanks; ore load out structure; concrete foundations & footings; and scrap metals.

Work Plan

- owner shall locate and de-energize all utilities associated with the area;
- owner may remove any item, material, machinery, or equipment deemed salvageable and transport to a designated area within the mine property;
- check electrical equipment for capacitors that might contain PCBs;
- if identified, then remove, properly contain and ship off site;
- dismantle or demolish or scrap all structures in area;
- demolish all concrete footings, foundations and pedestals;
- clean up all electrical cables, piping and scrap metal and dispose of all materials resulting from the demolition in the designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Possible PCBs

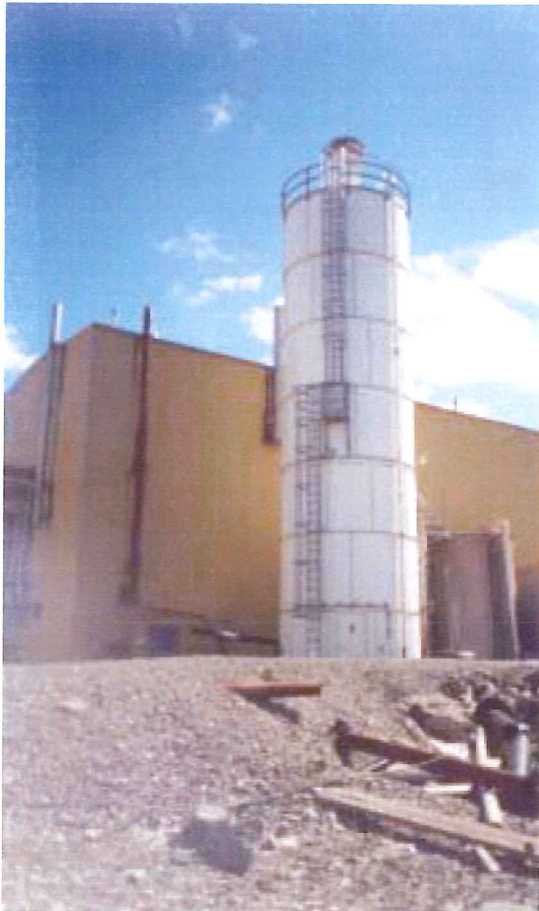
Health & Safety Issues

- workers to wear Class “D” as minimum protection;
- enforce safe handling of PCBs; and
- enforce safe work practices for demolition type projects.

**T.R.P. SITE
LIME SILO AND TANKS**



Typical Tanks



Use

- abandoned reagent tanks

Construction

- silo is prefabricated steel; tanks are steel; concrete foundations; and assorted piping.

Size

- silo: 4.9 m dia. x 17.1 m H
- acid tank: 3.7 m dia. x 7.3 m H
- cyanide tank: 3.7 m dia. x 7.3 m H
- water tank: 9.1 m dia. x 4.9 m H
- agitator tanks (x2): 9.1 m dia. x 4.9 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the structures;
- neutralize all tanks if not already done; collect all residues in proper containers and dispose of as directed;
- dismantle all tanks, silo and auxiliary piping;
- demolish all concrete and dispose of all materials from demolition in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Potential for confined spaces
- Chemical residues

Health & Safety Issues

- workers are not to enter confined spaces without proper training, equipment or authorization;
- when neutralizing, workers are to wear Class "B" complete with chemical vapour respirators unless work is in a confined space; then higher levels of PPE are required;
- when doing actual demolition work, then Class "D" as minimum protection is required
- enforce safe handling of chemicals; and
- enforce safe work practices for demolition type projects.

T.R.P. SITE OFFICE TRAILERS



Use

- abandoned
- storage

Construction

- modular mobile office trailer complex on timber supports.

Size

- 2 units @ 14.6 m x 3.7 m
- 3 units @ 14.6 m x 3.1 m

Work Plan

- owner shall locate and de-energize all utilities attached to structures;
- owner may remove any items, materials or equipment deemed salvageable and transport to an area designated within the mine property;
- dismantle and remove or demolish buildings using mechanical means and dispose of all material in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- No known hazards

Health & Safety Issues

- workers to wear Class "D" as minimum protection; and
- enforce safe work practices for demolition type projects.

**T.R.P. SITE
OUTSIDE THICKENER AND CIRCUIT TANKS**



Typical Thickener Steel Construction





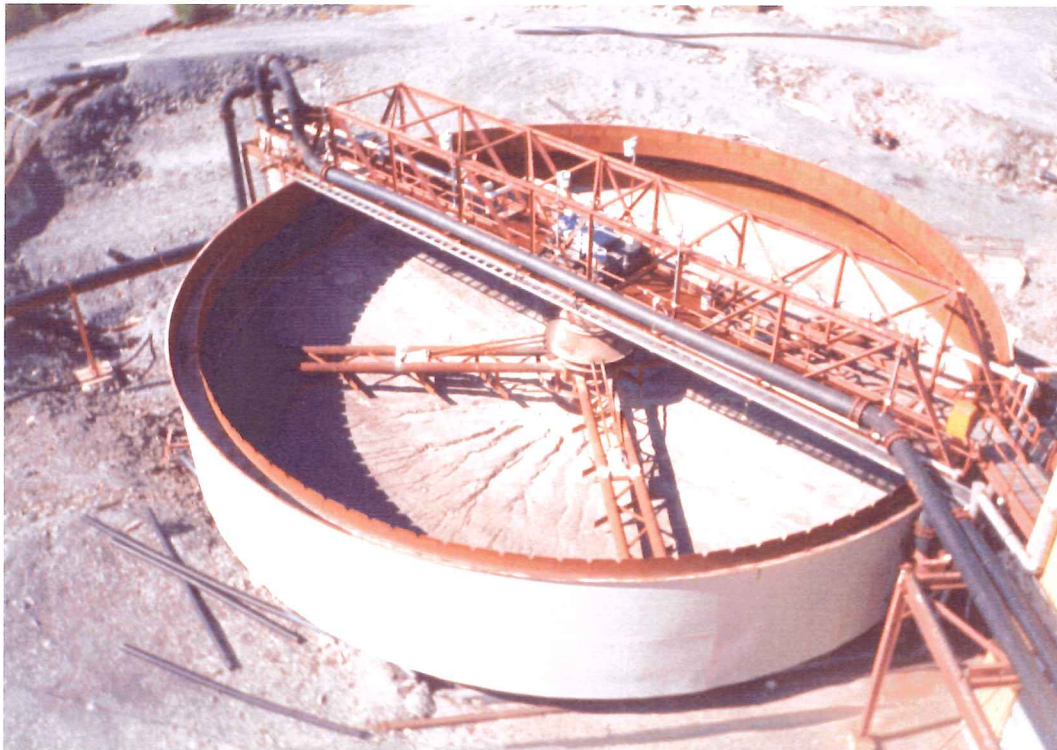
Typical Thickener Support Steel



Overflow Tank



Structural Support Steel



Thickener Complete With Rakes



Typical Piping

Use

- abandoned

Construction/Size

- steel structure, enviro-clear thickener (CD6901) complete / 24.4 m dia. x 3.7 m H
- overflow tank, steel structure / 3.05 m dia. x 3.7 m H
- circuit tank, steel structure / 3.05 m dia. x 3.05 m H
- circuit tank, steel structure / 3.7 m dia. x 3.05 m H
- structural steel; all piping and accessories; and concrete footings & foundations.

Work Plan

- owner shall locate and de-energize all utilities attached to structures;
- owner may remove any item, material, machinery or equipment deemed salvageable and transport to a designated area within the mine property;
- dismantle or demolish all steel works, auxiliary piping and equipment;
- demolish all concrete footings, foundations and pedestals and dispose of all materials resulting from the demolition in designated landfill; and
- clean up, grade site and leave in an orderly manner.

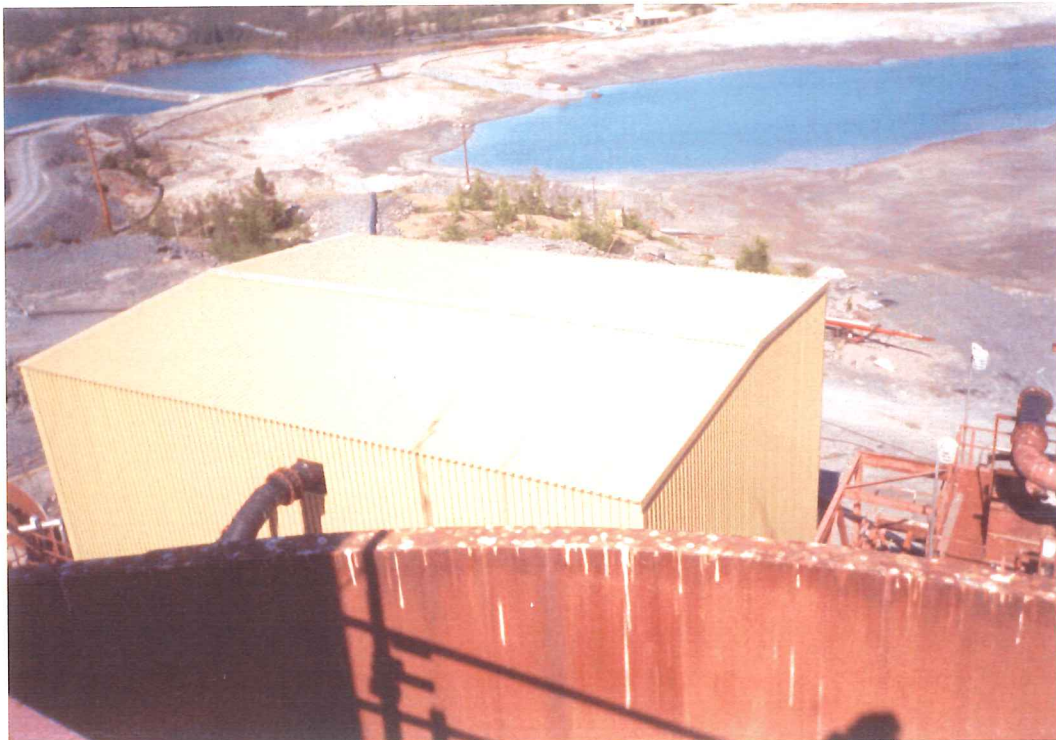
Special Items

- no known hazards

Health & Safety Issues

- workers to wear Class “D” as minimum protection.

**T.R.P. SITE
SCREEN HOUSE**



Use

- abandoned

Construction

- Robertson Type structure; steel frame; steel roof & siding; steel floor 2nd Level; concrete floor, foundations & pedestals; mercury vapour lights; and exterior structural steel & piping.

Size

- 15.3 m x 12.2 m x 12 m H

Work Plan

- owner shall locate and de-energize all utilities attached to the building;
- owner may remove any item, equipment, machinery, or material deemed salvageable and transport to a designated area within the mine property;
- remove lights containing mercury vapours, properly contain and ship off site;
- dismantle building and structural steel;
- demolish all concrete foundations, footings and pedestals and dispose of all materials resulting from demolition in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- Mercury vapour lights

Health & Safety Issues

- workers to wear Class “D” as minimum protection;
- enforce safe handling practices for mercury vapour lights; and
- enforce safe work practices for demolition type projects.

**T.R.P. SITE
STEEL TRESTLE**



**Use**

- pipe support

Construction

- structural steel; piping; and concrete foundations.

Size

- 15.3 m x 1.8 m x 9.1 m H

Work Plan

- owner shall locate and de-energize all utilities in location of trestle;
- dismantle trestle, piping and electrical, etc.;
- demolish all concrete footings and foundations and dispose of all materials resulting from the demolition in designated landfill; and
- clean up, grade site and leave in an orderly manner.

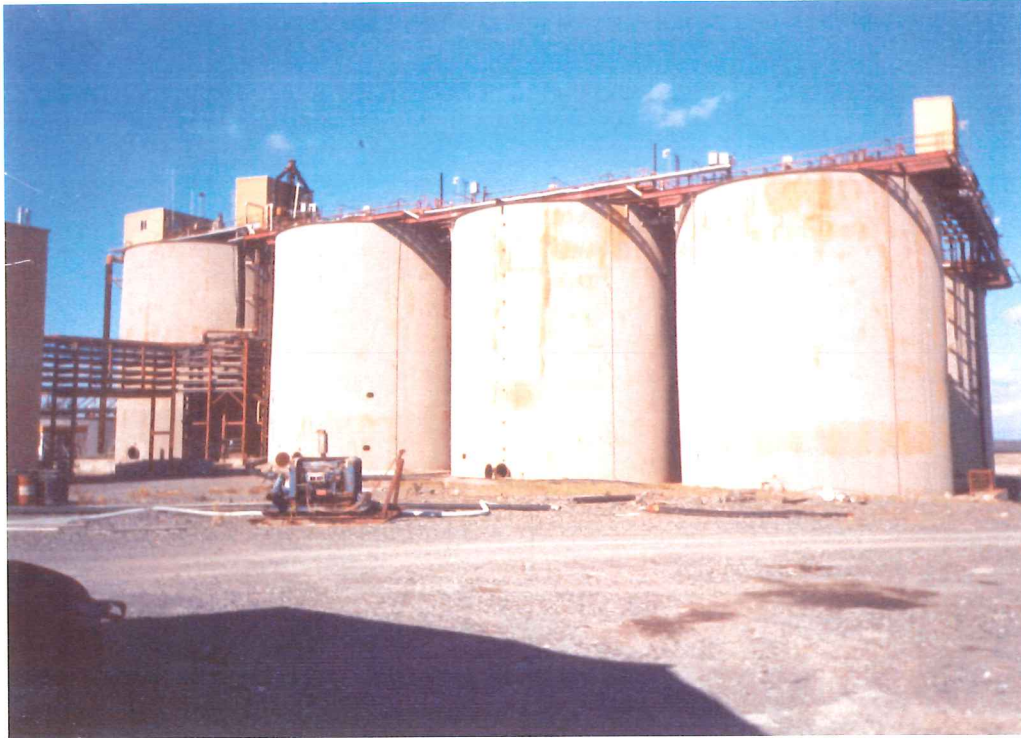
Special Items

- No known hazards

Health & Safety Issues

- workers to wear Class "D" as minimum protection.

**T.R.P. SITE
TANK FARM AND AGITATORS**



Steel Structural Above Tanks



Typical Steel Structural Above Tanks



Steel Structural Outside Screen House



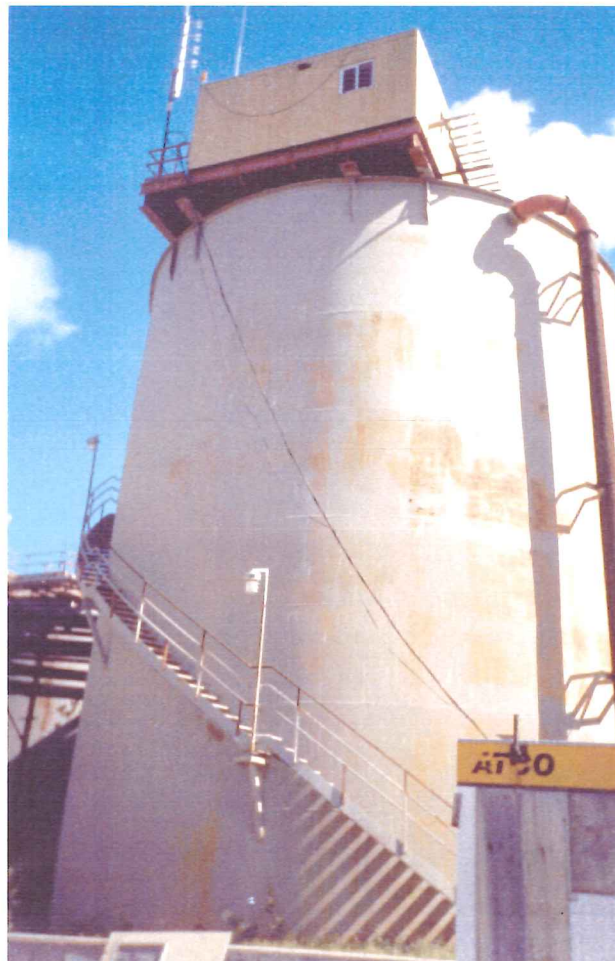
Typical Concrete Foundations



Typical Concrete Works



Typical Interior of Tanks



Typical Tank



Operator Shack

Use

- abandoned

Construction

- 7 tanks complete with agitators; concrete foundations; and structural steel & piping.

Size

- 7 x (14.0 m dia. X 15.2 m H)

Work Plan

- owner shall locate and de-energize all utilities attached to the structures;
- owner may remove any item, material, machinery or equipment deemed salvageable and transport to a designated area within the mine property;
- remove all machinery and equipment;
- dismantle all structural steel;
- scrap steel tanks;
- demolish all concrete footings, foundations and pedestals and dispose of all materials resulting from demolition in designated landfill; and
- clean up, grade site and leave in an orderly manner.

Special Items

- No known hazards

Health & Safety Issues

- workers to wear Class “D” as minimum protection.