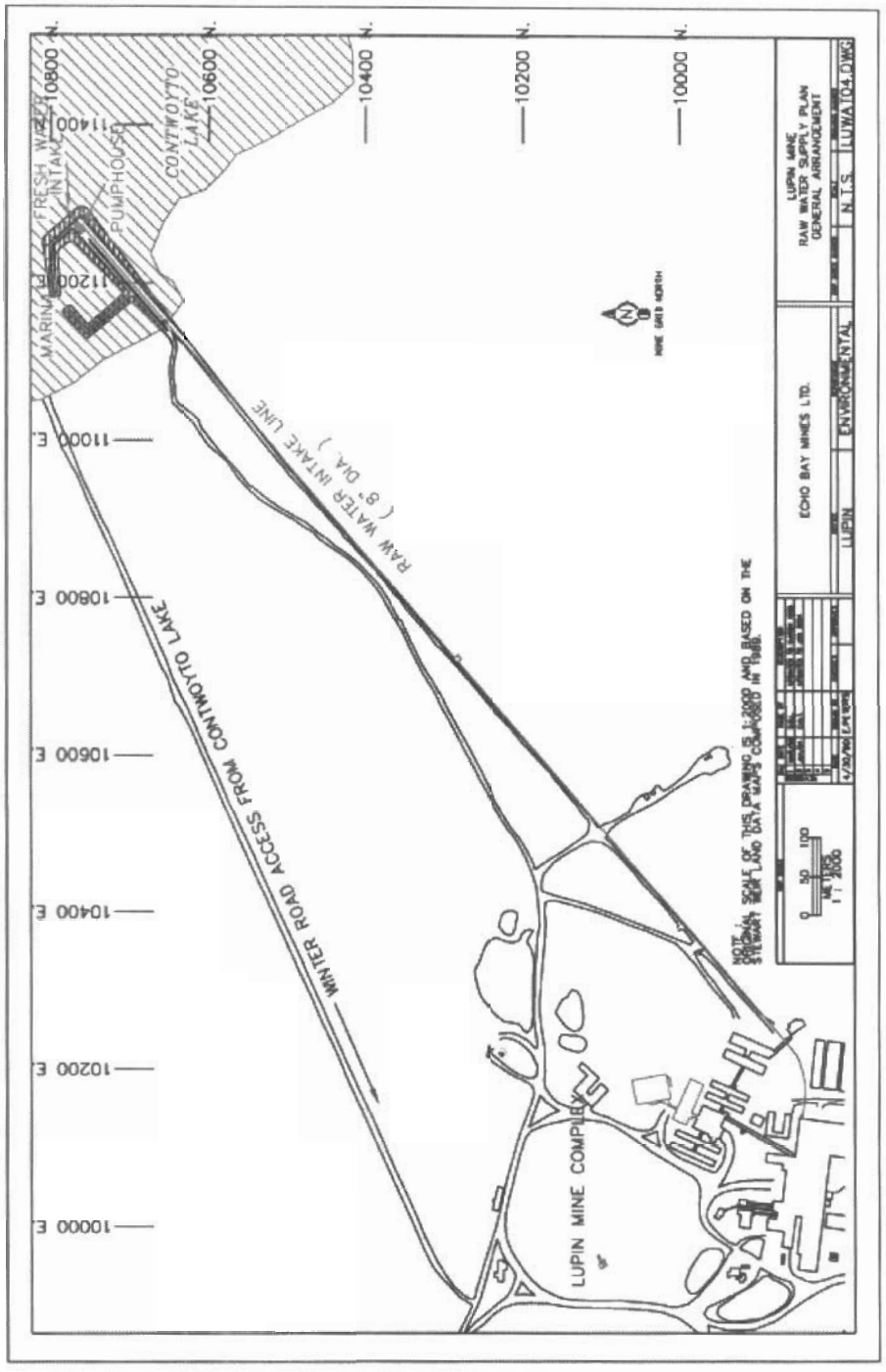
FIGURE 6 - WATER SUPPLY



3.4 RECEIVING ENVIRONMENT

The Lupin mine is located in the barren land tundra of Nunavut. Typical surrounding terrain is that of glacial till overburden and a thin organic layer with a generous amount of low-lying vegetation. Bedrock outcrops and areas of frost shattering exist along with boulder fields. Due to the isolated location of the mine and air access only (with the exception of the winter road haul season), the potential impacts to public access areas are minimal.

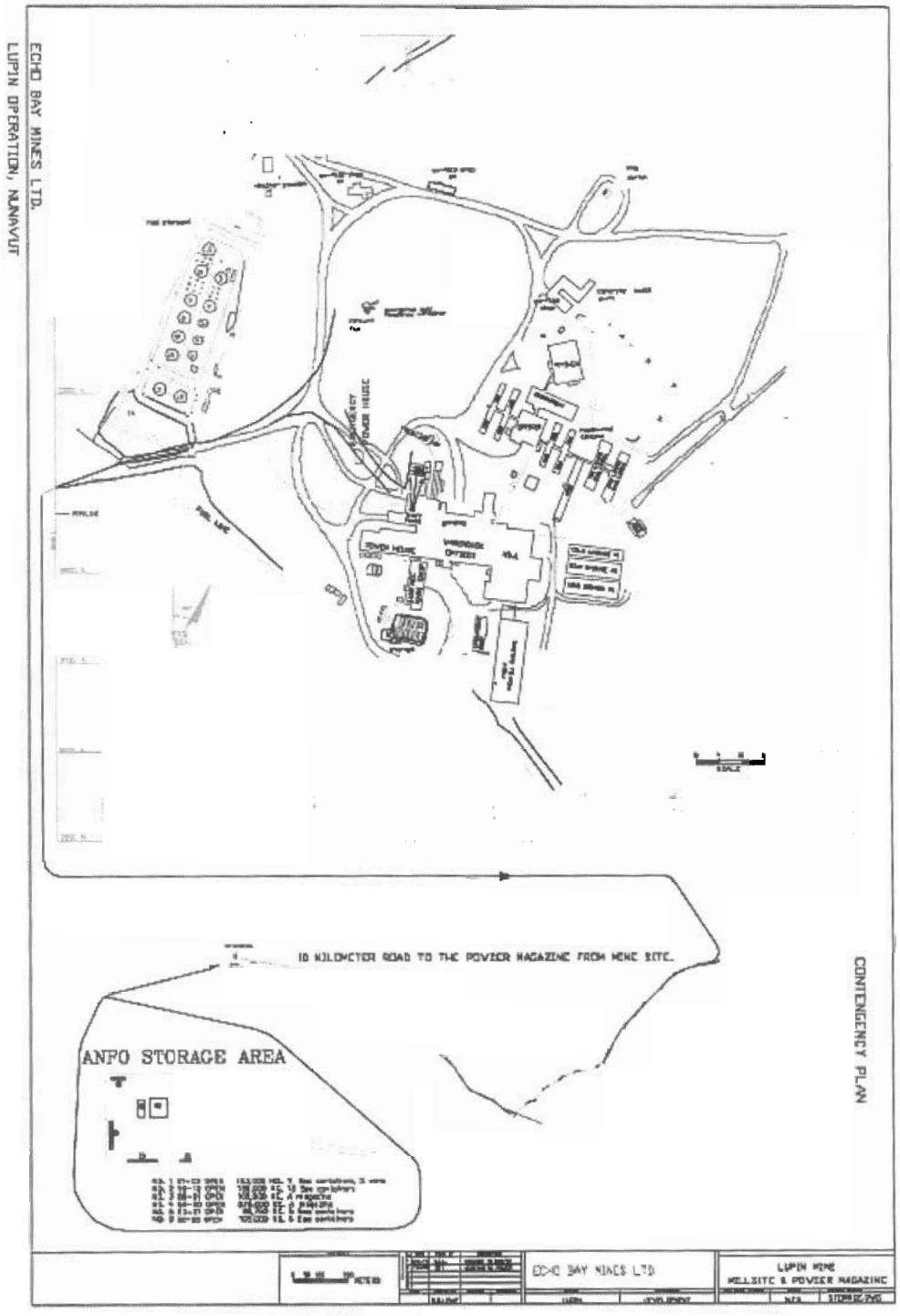
Environmentally sensitive areas, in addition to the surrounding tundra include; the limited extent of the west shore of Contwoyto Lake where the mine is located, the potential for runoff from the site to the lake, drainage from the sewage lakes system which will enter Contwoyto Lake, the six-kilometre tailings line route and accompanying tundra and the tailings containment area which, in the event of an unplanned release, will discharge to either the west or south drainage basins of Contwoyto Lake.

Most of the larger lakes in the Lupin area are regarded as having fish habitat to some extent. Contwoyto Lake is the largest body of water in the area, containing the greatest water and fisheries resource. Possible sources of contamination of this area include general runoff from the site facilities (chemical and petroleum storage areas, winter road access). The tailings line, mine water, backfill and sewage disposal pipelines are all located on the south end of the complex, which would have resulted in any spills reporting to the sewage lakes drainage basin. Boot Lake, located N.E. of the site was the original water supply during construction and is known to be a seasonal fisheries habitat. This area has a potential to be affected in the event of a major petroleum spill from the fuel tank farm.

Along the tailings line route several smaller lakes exist with only one larger lake having a known fish habitat. Punkin Lake, located approx. 1.5 km from the site is situated in a gentle sloping terrain receiving runoff from an approx. 4-5 km^2 area which includes the location of the No.2 Dump station and the tailings line to the north and south (approx. 2km).

There are several small lakes in the immediate vicinity of the TCA that could have been affected by potential spills from the impoundment. These include Norma Lake, Lori Lake, Long Lake and Boomerang Lake, all of which are considered to be valuable fisheries habitat. These areas would have been directly related to the potential for spills to occur at the following dam locations; dam 6, 5, 4 and 3 respectfully. Dam 3 is currently considered as being inactive as contained tailings have been covered with esker material and there are no actual tailings line deposition points in this area.

Figure 7 GENERAL SITE PLAN - LUPIN MINE STORAGE FACILITIES



4.0 OPERATIONS SYSTEM - COMPONENT MALFUNCTION PREVENTION

As a regular daily inspection during operation, the following checks are carried out by the Mill Department under the supervision of the Mill Superintendent:

Tailings Line

- Visual inspection of the tailings line;
- Inspection of the emergency dump station buildings including piping, valves, doors, heaters (when in use) and lights.
- Inspection of the vacuum breaker stations including piping, valves, doors, heaters (when in use) and lights.
- Inspection of the discharge point for ice build up.

Sewage Line

- Visual inspection of the pipeline and heat trace checks at locations along the pipeline.

Freshwater Pumphouse

- Building heater check; ambient room temperature.
- Inline heater check; discharge water temperature.
- Pump temperature.
- Doors and general condition.

Engineered Facilities

On a weekly basis, during operation or the summer months, the engineered facilities at the tailings containment area are checked for general condition, erosion and existence of any seepage. The divider dam at the sewage facility is checked for water elevation.

Any immediate concerns from the inspections are brought to the attention of the Mill Superintendent, Maintenance Superintendent, Superintendent, Loss Control, Reclamation Manager or other designated personnel for timely action. Records of the daily and weekly inspections are retained on file and are available for review upon the request of the Inspector.

An annual inspection of the TCA is carried out during ice free, open water conditions by a registered geotechnical engineer. The annual report is to be forwarded under a separate cover to the Nunavut Water Board within 60 days of the inspection.

5.0 SYSTEM MALFUNCTION - RESPONSE INFORMATION

The tailings line and main deposition areas are of utmost concern when discussing failures and system malfunctions.

5.1 TAILINGS LINE

Two types of release from the tailings line may occur when operating: (1) A controlled release occurs as a result of an intentional dump of the tailings line into permanent dump stations along the line, i.e. during mill shutdown or power loss. The concern here is the unexpected overfilling of these holding stations after repeated use. (2) An uncontrolled release may occur as a result of freezing, material failure or erosion and line blockage or any combination, which may result in an unauthorized discharge to the environment.

5.1.1 CONTROLLED RELEASE

There are two (2) emergency dump stations located at strategic points along the length of the tailings line (see Figure 8). These are designed to contain tailings that have drained from the line in the event of a shut-down or loss in line pressure. Dump pond No. 1 and No. 2 have a holding capacity of approximately 12,000 and 22,000 cubic meters respectively. The tailings line volume that would flow to each dump pond (on each occurrence) is approximately 440 and 534 cubic meters respectively. The liquid of both ponds is pumped out once a year, usually in July and August and directed back into the tails line for deposition into the tailings impoundment area.

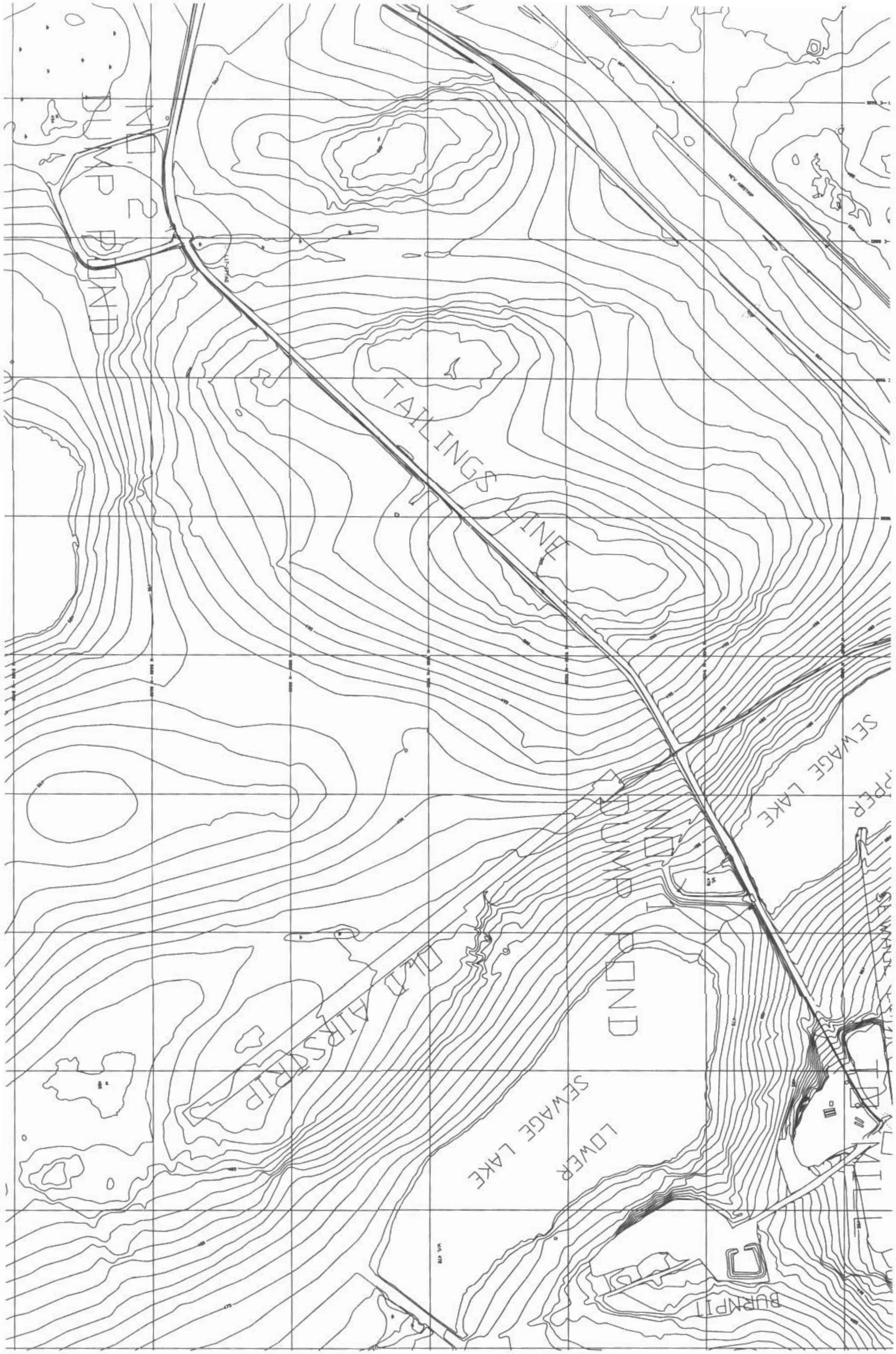
Solids accumulating within the ponds are removed if required during the summer and transported to the active tailings cell.

5.1.2 UNCONTROLLED RELEASE

In the event of a line break or malfunction along the tailings line system, a loss in line pressure would result in the Mill Superintendent (or designate) initiating the process shut-down and appropriate Reporting/Response team action employed.

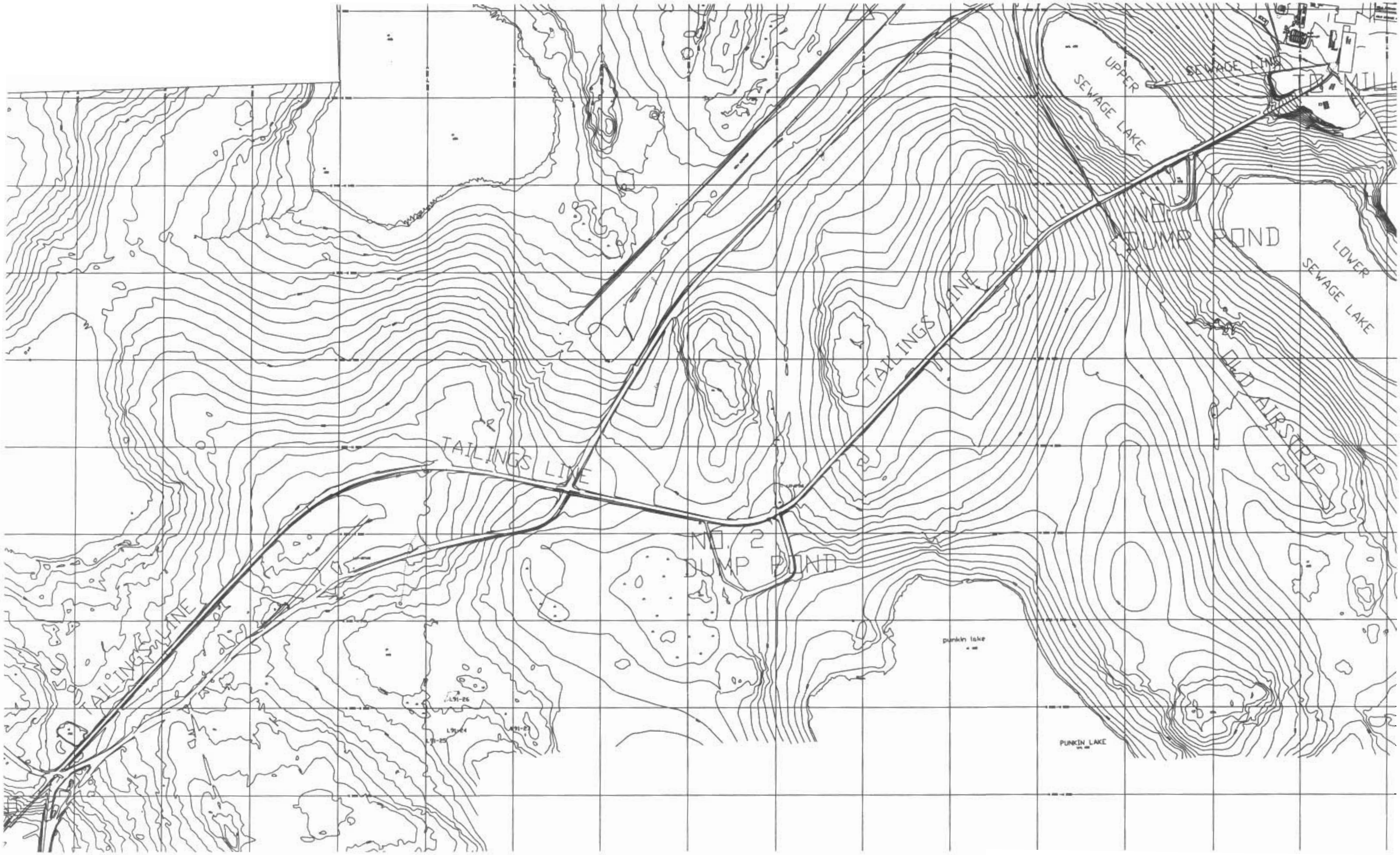
Remaining contents within the tailings line would report to the emergency dump stations, however, in the case of a line break, some amount of tailings may be deposited in the area of the break. Figure 9 shows the route of the tailings line from the mill to the TCA. Immediate action to reduce and minimize impacts to water resources in the area are required. Containment and prevention of material migrating from the original area of spill area are priority.

FIGURE 8
TAILINGS LINE DUMP STATIONS



NO 2
DUMP POND
TAILINGS LINE
OLD AIRSTRIP
DUMP POND
LOWER
SEWAGE LAKE
SEWAGE LAKE
BURNPIT

FIGURE 9
TAILINGS LINE ROUTE


TAILINGS LINE
TAILINGS LINE
TAILINGS LINE
NO 1
DUMP POND
NO 2
DUMP POND
UPPER
SEWAGE LAKE
LOWER
SEWAGE LAKE
SEWAGE LINE
OLD AIRSTRIP
punkin lake
PUNKIN LAKE

Ground Contamination - Any tailings material that has escaped from the pipeline and deposited on the surrounding ground would be removed and disposed of at the Tailings Containment. Esker material and/or crushed waste rock would be used to re-contour the area to original ground elevation.

Water Contamination - Any tailings material that has escaped from the system to a water body would be left in place and the local authority contacted for further advice on the cleanup. Further environmental damage may result as a consequence of recovery operations.

5.2 TAILINGS IMPOUNDMENT

5.2.1 POND No.2

In the TCAthe perimeter dams are of main concern. Because of the low water level presently maintained in the two main ponds, only two (2) of the dams (Dam1a and Dam2) of Pond No. 2 have water against their upstream surfaces.
Operation of the system should remain the same in the near future, so this situation would not change.

Water contained in Pond No. 2 is of discharge quality. However, if seepage or a dam breach should occur, the water shall be contained where possible by construction of catchment basins and the liquid returned to the tailings pond. Timely action will minimize potential impacts to surrounding water quality. Repairs to the structure will conform to a standard acceptable to management and engineering practice (Figure 10 shows the location of the external and internal TCA Dams).

5.2.2 POND No.1

Water contained in Pond No.1 is of a quality generally requiring treatment of some form (arsenic removal or pH adjustment) prior to discharge. With the current configuration of the Pond, the dividing J-DAM is the structure of concern. In the event of a failure of this structure, water would report to Pond No.2 and be contained. Treatment of Pond No.2 would then be considered prior to eventual discharge.

If seepage or a dam breach were to occur, repairs to the structure will take place to an engineering standard acceptable to management.

5.2.3 SOLIDS CONTAINMENT CELLS

Water contained in the Solids Cells No. 2, 3, 4 and 5 is unsuitable for discharge and is of tailings line quality. In the event of a failure or seepage, the release shall be contained where possible to minimize potential impacts on receiving water bodies. This is accomplished by the construction of catchment basins and the liquid returned to the tailings pond. Re-routing of the tailings end of pipe discharge point would take place if the affected solids cell is in use. Dams No.4, 5 and 6 are of main concern with regard to

seepage outside of the containment area. Seepage from the other cells (No.'s 1, 2, 5) would report to Pond No.1 or 2. Solids that have escaped and are contained within the catchment area would be removed and disposed of within another tailings cell. Repairs to the structure will take place to an engineering standard acceptable by management.

5.3 SEWAGE SYSTEM

The sewage system is contained by two (2) low dams and natural relief. The system is closed from October to June. Camp discharge enters the upper lake.

Any seepage from the upper lake would report to the lower lake and be addressed to prevent any structural damage to the dam itself. Seepage from the lower lake would be contained by construction of a catchment basin and if water quality did not meet license limits, the solution would be pumped back into the lower lake.

If a failure should result along the heat traced six (6) inch pipeline between the camp and the upper lake, an alternate disposal location would be initiated. Two options are readily available with minor modifications to the systems. They are:

- re-route the sewage line within the mill complex to discharge into the tailings box and be pumped to the tailings impoundment; and
- for the short term, re-route the sewage line within the mill complex to connect up with the old mine water discharge line and pump to the second (lower) sewage lake.

Appropriate response team action would have repairs completed to the satisfaction of management and the system returned to the upper lake within a reasonable time frame.

5.4 PASTE BACKFILL

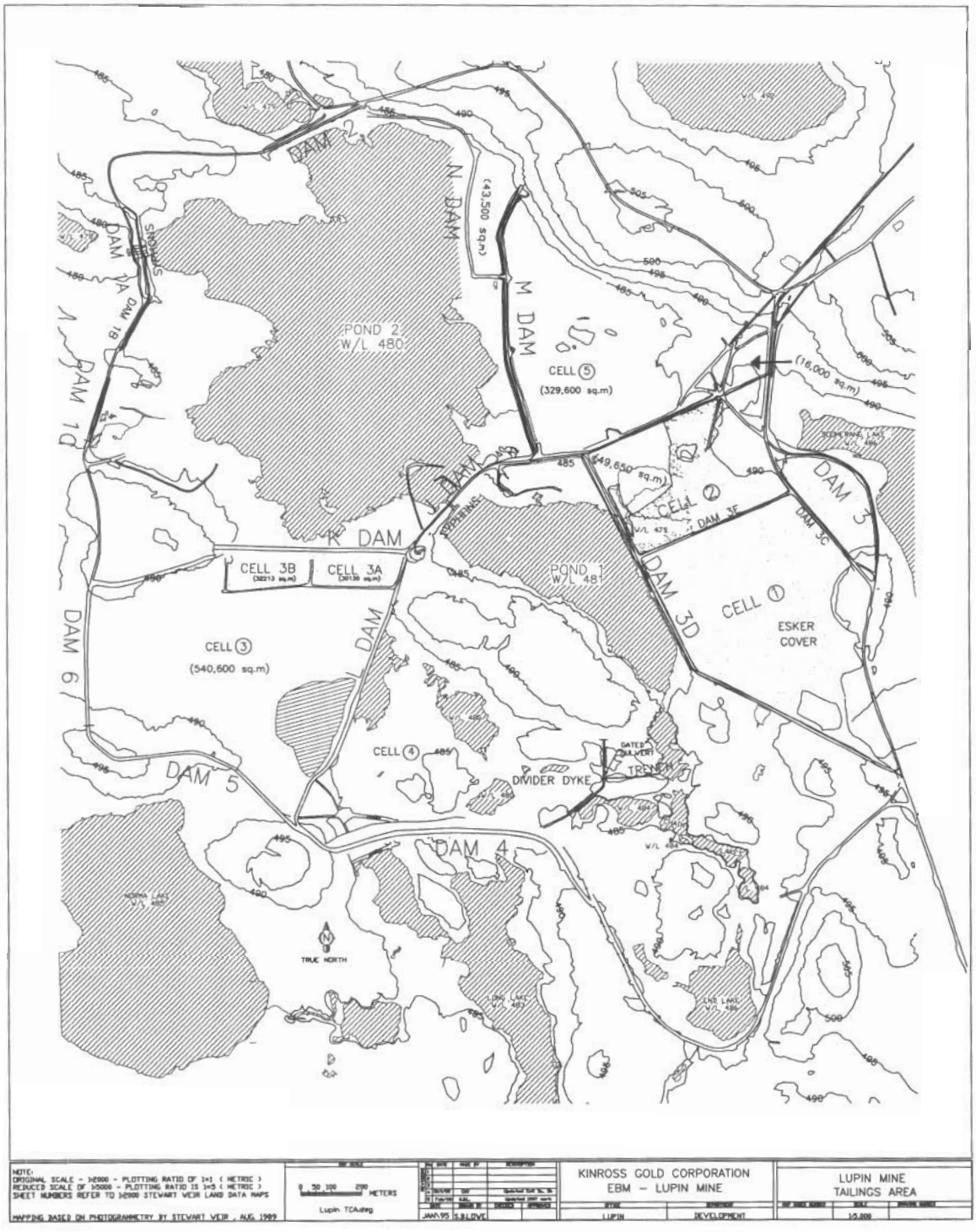
The Paste Backfill high pressure pipeline that services the underground operations is routed through the mill complex where possible. There is however a portion of the line that exists outside the buildings. The operators are responsible for a daily check of the line when operating.

In the event of a failure with this line when operating, a drop in line pressure would signal an emergency, the operator would initiate the shutdown of the system and the appropriate reporting and response team action would be employed.

The faulty component(s) would be identified and repaired/replaced where necessary. Any spilled material would be cleaned up and disposed of at the TCA. If the incident occurred outside of the buildings the ground would be replaced with esker or crushed waste rock and re-graded.

FIGURE 10
DAM LOCATIONS – TAILINGS CONTAINMENT AREA

FIGURE 10 – LUPIN TAILINGS CONTAINMENT AREA



5.5 MINE WATER

The mine is dewatered on an intermittent basis from the 250 metre level sump via a six inch line and fed into the mill tailings disposal line. Failure of the mill tailings disposal line has been discussed in Section 5.1.

For most of 2003, all mine water was discharged via a separate mine water pipeline into the sewage ponds. This practice has now been changed so that all mine water is fed into the mill tailings discharge line. Mine water is no longer discharged into the sewage ponds. All mine water discharge lines are now fully contained within the mine and mill buildings. If a spill of mine water should occur within the headframe area, the water would flow by gravity back down the shaft. If a mine water leak should occur in the pipeline as it passes through the mill, any spill would drain into the mill sumps.

If a mine water spill should occur, the faulty component(s) would be identified and repaired/replaced where necessary. Any spilled material collecting in the mill sumps would be cleaned up and disposed of at the TCA.

6.0 PETROLEUM AND CHEMICAL PRODUCTS - RESPONSE INFORMATION

6.1 GENERAL

The petroleum and chemical products used at the Lupin Mine that exist in significant amounts to be concerned with in this Plan are summarized in Table 1 located within the appendix. This table indicates the petroleum/chemical product name, storage location and normal storage container packaging or storage volume utilized. Additional chemicals are included in the listing to alert the site personnel to possible combination hazards that may be present during winter road/receiving, storage operations. In addition to the product quantities referred to as stock-on-hand, the quantities of product expected to be on-hand after winter road re-supply are also listed. These would indicate the maximum quantity of a product to be on site at any one time.

There are two standard operational procedures where possible spill scenarios may be encountered. These are during:

1) receiving/offloading procedures during winter road re-supply whereby fuel is pumped from tanker trucks to site storage facilities and chemical supplies are removed from transport trucks to their respective storage locations; and
2) normal daily operations whereby fuel is pumped from the main tank farm to the vehicle refuelling/powerhouse satellite tanks and mill reagents are transported from the cold storage facilities to the reagent mix area within the mill.

During the winter road re-supply period there may be times when Lupin Mine personnel will be called upon to assist in a winter road spill recovery. The Site Supervisor and lead hands are familiar with procedures followed by the Winter Road Transportation and Operations contractor and are available to provide assistance, generally for the upper portion of the winter road on Contwoyto Lake. Material and supplies for these types of spill recovery plans (i.e.: overturned tanker) are available, in the "Emergency Spill Response" sea container for easy transport on the road.

The measures outlined in the response plans intend to minimize the potential impact to water and land following a petroleum/chemical spill. Keeping in mind that the immediate action is to preserve health and limit environmental damage, the plans deal with the procedures/methods of spill containment, termination, remedial measures and clean-up of spills related to those products used at the mine.

6.2 SPILL CONTAINMENT, RECOVERY AND DISPOSAL

The potential exists for spills of petroleum products and various chemicals used at the Lupin Mine. A spill may be in the form of a liquid as in petroleum products, or in the form of a solid as in the ANFO or Cyanide that is used on a regular basis. A liquid chemical spill is likely to occur only in the mill reagent mix area where control measures are in place to reduce the risk of a spill migrating outside of the building. A liquid chemical spill may result if the dry chemical contacts water once the spill has taken place.

The spill of either form may occur in one or a combination of the following areas; on land, snow, ice or in the water. Various proven practical methods of containment and recovery are well documented for use in northern climates and are summarized below. For additional technical information, one should consult the Environment Canada Report EPS 9/SP/2, December 1986.

The first initial response is to prevent any direct health risk to response personnel. Persons not directly associated with the clean-up operations are to be directed to leave the immediate area. The area will be isolated and limited to traffic as directed by the response team personnel.

6.2.1 CONTAINMENT

On Land

The potential for spills to occur on land is the highest of the four areas due to the transferring of materials off the winter road transport as well as movement year-round from storage locations to areas of use. During the winter road re-supply, the greatest amount of material is moved in the least amount of time and therefore the snow and ice factor also plays an important role.

Petroleum products spilling onto frozen snow covered ground may be contained by the construction of **snow dykes**. For fast initial containment of smaller spills the dykes can be built manually with shovels. Larger spills may require the use of heavy equipment such as graders and bulldozers.

The impermeability of dykes may be ensured by lining with a polyethylene plastic liner, plastic tarpaulin or similar synthetic material. Alternatively, in freezing temperatures, water may be sprayed or poured over the dykes to further enhance the barrier to the spilled material. This method assumes that water is available or may be accessed from the spill site. Synthetically lined dykes are more effective than just snow or snow and ice-lined dykes.

During warmer months, containment dykes may be constructed from **sand or gravel** if these materials are available in an unfrozen form. Again, for smaller spills, the dykes can be fashioned manually with shovels where for larger spills, trucks or other heavy

equipment (front-end loaders) will normally be required to transport and handle sand and gravel.

Trenching or ditching can be used as a method for containing and/or intercepting the flow of liquid spills on land. Ice, snow, loose sand, gravel and surface layers of organic material can usually be scraped or dug away until the underlying frozen substrate is reached. This can be effective in re-directing flow or simple containment prior to pumping or absorbing the spilled material. Trenching in solid frozen ground or rocky substrate is normally neither practical nor possible.

The spillage of solid materials on land is much simpler to contain and recover. During the winter months, spilled material is generally self-contained due to its nature. Some precaution with regard to wind-blown dispersion may be required with lighter materials (lime). In these cases, a **layer of snow** placed on top of the spilled material will suffice until removal to appropriate disposal is arranged. In summer months, minor **containment berms** will be required when there is moisture present or precipitation is occurring or is likely to occur.

On Snow

Containment on snow is readily achieved and is very effective due to its absorbent quality. Liquid spills (petroleum) will become immobile within the snow pack and easily removed for transport for recovery or disposal. Use the snow to its advantage in construction of snow dykes/dams. Whenever possible, the snow pack should be left in place to avoid contaminating the underlying substrate.

On Ice

Spills that occur on ice, from either direct spillage or migration to the ice, are greatly affected by the strength of the ice. If the spill does not penetrate the ice, and the ice is safe to work on, then the methods of containment are similar to that on land. Where the spill has penetrated the ice, the situation should be handled similar to that on open water. If, as in petroleum spills, the material floats, then every effort should focus on the recovery of the material using pumping/suction methods, and absorbents.

On Open Water

A spill occurring on or into open water is very difficult to contain and every effort should be made to prevent the material from entering the water. If in the case of petroleum products, the material floats, then immediate deployment of surface booms should take place to control the spread of material. Pumping is the method of choice for removal of contained material.

6.2.2 RECOVERY

Spilled petroleum products contained within a dyked or trenched area should be recovered by pumping into a standby tanker, portable storage tank or drums dependent on volume involved, or use of an independent vacuum truck. Pump and suction hoses should be screened to prevent snow, ice or debris from clogging the line or pump.

Any remaining material may be absorbed by use of a variety of natural and commercially available products. Synthetic products such as 3M Brand, Conweb and others are easier to use and more efficient than natural products.

The availability of shovels, rakes and pitchforks are invaluable in any spill clean-up and recovery operation. The use of heavy equipment for larger spill situations such as front-end loaders and haul trucks, make the removal of material easier. It also ensures that all materials, including absorbent sand, snow etc. have been removed from the site.

6.2.3 DISPOSAL

Petroleum products such as oil that has been recovered by pumping into portable tanks, drums or a standby tanker can often be reclaimed and reused. Water and debris can be separated from the pure fuel by gravimetric means in a tank. In this manner disposal can be minimized and financial losses reduced.

In-situ combustion may be used as a final means of disposal after every effort has been made to remove the spilled fuel/oil etc. Approval for burning of petroleum products must be obtained prior to combustion. Burning should never be carried out on land where combustible organics are present and the oil has migrated into the soil. Removal is the method of choice in this case.

The most efficient means of igniting diesel oil for in-situ combustion is with a large size portable propane torch. Other highly flammable products such as gasoline or alcohol, or combustible products, such as wood may also be used to promote ignition of the spilled product. Spilled oil should be ignited where it has pooled naturally or been contained by dykes, trenches or depressions. Oil which has collected in slots in river ice may also be disposed of by in-situ combustion if sufficient holes are drilled in the ice. Once holes are drilled, the oil which collects in the holes may be ignited.

Liquid oil wastes (which cannot be reclaimed), oil contaminated snow and debris and oil residues left after in-situ combustion will be picked up and disposed of at a land disposal site approved by government authorities. Currently, hydrocarbon contaminated materials are removed to either the incinerator or the burn area of the site landfill for ignition. Disposal at local municipal dumps may be an alternative if required. In this case GNWT would be consulted.

In their technical review of the 2000 Contingency Plan, Environment Canada commented that bioremediation should be considered as an option for the treatment of contaminated

soils. They suggested that a lined pit could be constructed at the landfill and ammonium nitrate already at site could be used as the fertilizer, and the heavy equipment used for mixing and aerating. The problem with this suggestion is that the ammonium nitrate on site is purchased pre-mixed with fuel oil, thereby making the explosive ANFO (ammonium nitrate fuel oil), which is the main blasting agent used at the mine. Lupin does not manufacture this explosive on site, as some other mines do, and so does not have a ready supply of the fertilizer needed for bioremediation.

Spilled chemical products should be recovered and reused wherever possible. Materials unable to be used are currently disposed of at an active cell in the TCA. Contaminated Waste disposal sites previously utilized and located within the Tailings Containment Area (Figure 10) have not been used due to the storage of tailings solids and the cells' being used to capacity.

6.2.4 OTHER CONCERNS

Fire

In the event that the accident/incident is in combination with a fire, extinguishing the fire may be required prior to initiating efforts to stop the spillage.

In order to control the resulting runoff (in cases where water is used), and the subsequent spreading of the spilled material, any indication of slope away from the area of the spill should be dyked for containment.

Petroleum and chemical fires have the potential to generate toxic fumes under poor combustion conditions. Approaching and dealing with any fire from upwind is recommended as well as caution with regard to breathing the vapours generated from the fire. The Lupin Fire Department crews are well trained and have access to the proper Personal Protective Equipment.

In the case where **ANFO** is the material involved the following action should be taken;

1. rope off the area and control entry;
2. evacuate the area and do not attempt to fight the fire;
3. the ANFO, or any resulting solution (fire in winter on snow or ice) must not be allowed access to bodies of water, especially flowing streams/rivers; and
4. fires involving small quantities of ANFO may be fought using water, however if the fire is not a hazard to persons or the surrounding environment, it is generally accepted to allow the material to burn off, then initiate clean-up measures.

Main Fuel Tank Farm

In the event of any emergency at the tank farms relating to fire, flooding, spills, etc; all electrical power shall be shut off as quickly as possible within the tank farm area to minimize further damage. The procedure can be initiated through the powerhouse and electrical departments.

7.0 SPILL RESPONSE RESOURCES

A wide variety of spill control/recovery equipment and materials exists at the site for dealing with emergency spills of petroleum products and chemical reagents. Heavy construction equipment is also available for use on demand.

7.1 RESPONSE EQUIPMENT

All equipment is stored in such a manner as to be readily available on short notice. Surface crews would immediately respond to a reported spill site by moving equipment and material necessary to provide control and clean-up measures at the reported spill. Additional operations personnel are available if the need arose.

The equipment to be used would consist of a Euclid 28t haul trucks, two Komatsu WA250 loader, a CAT140G grader, CAT 14H grader, CAT 966 loader, CAT D-8K dozer, 5 light vehicles and a rubber tired backhoe. A current list of Echo Bay Mines Ltd. equipment at the Lupin Mine is available in the appendix, Table 2. This list will be updated and forwarded to the NWB as required.

Emergency spill containment and recovery materials and supplies are available for immediate mobilization at any time. Table 3 lists the materials inventory for the "Emergency Spill Response" van, available to be located at a spill site. The on-site warehouse maintains a supply of absorbent pads, floor dry absorbent, hoses, couplings and miscellaneous parts for recovery equipment. The van container, centrally located near the fuel receiving area of the tank farm, is indicated on Figure No.7, "General Site Plan - Storage Facilities".

7.2 RESPONSE TEAM

Authorization for deployment of personnel, containment, clean-up and recovery equipment are as per the Fig. 1 "Response Team Flowsheet" organizational chart.

The designate/next-in-line authority shall be contacted if management is off site and unavailable.

A current telephone listing of Lupin contact personnel is included in Appendix I.

7.3 TRAINING AND EXERCISES

All response team staff will maintain familiarity with the continually updated Contingency Plan by scheduling periodic reviews. For the designated personnel this is completed in conjunction with the review of the site's Emergency Procedures Manual.

All personnel dealing with equipment that would be involved in cleaning up any spills related to the Contingency Plan have extensive experience as heavy equipment operators and, therefore, further training in this area is not seen to be applicable. The daily work

routine followed by the surface heavy equipment operators, involves much of the same type of work as would be required when dealing with a dam break or a tailings line spill. Roadway construction (materials hauling, grading) and snow removal/clearing are all part of day to day activities.

Training with regard to hazardous materials handling is carried out in conjunction with annual Transportation of Dangerous Goods Regulations (TDGR) training for all surface department employees (those running equipment and their supervisors) as well as the warehouse employees for handling materials. In addition, the Lupin fire crew is trained to handle the hazardous materials used at the site in relation to potential fires. This crew is currently not directly involved with the response, but is available if the need arises.

Workplace Hazardous Material Information System (WHMIS training is provided to all new employees as well as in the form of annual refresher courses for current employees. Core WHMIS along with job specific training is covered in these programs. Information, through WHMIS, is available at each department for "specifics" of that department. As well, master stations are in place which carry the MSDS's for the entire site.

Environmental Awareness Program sessions are held which deal with employee environmental responsibility and spill reporting. Initial orientation prior to beginning employment at Lupin also includes the importance of environmental awareness.

The question of a simulation exercise should be scrutinized because it is our belief that during a simulated exercise, there could be damage caused to the fragile tundra which may result in extensive long term effects. It is suggested that the annual procedure of cleaning out the tailings line dump ponds be considered as a simulation exercise, as the equipment used is similar to that required for spill response. This will have minimal potential to damage the local environment.

8.0 COMPONENT AND PETROLEUM/CHEMICAL PRODUCT - DETAILED RESPONSE PLANS

The following section contains the Response Plans for the major System Components of the mine site and Petroleum/chemical products stored and used at the Lupin Operation.

System Components

a) Mill Tailings Line
b) Mill Tailings Containment (Retaining Dams)
c) Sewage Disposal Facility
d) Paste Backfill
e) Mine water

Petroleum/Chemical Products

f) Diesel Fuel
g) Gasoline and Aviation Fuel
h) Lubricating and Hydraulic Oils
i) Ethylene Glycol Antifreeze
j) Sodium Cyanide
k) Hydrated Lime
l) ANFO Explosives
m) Lead Nitrate
n) Ferric Sulphate