

**TWIN MINING CORPORATION**

**Abandonment and Reclamation Plan for Water License**  
**NWB2JACO203 - to accompany 2004 renewal application**

**Jackson Inlet Project**  
**Brodeur Peninsula, Baffin Island, Nunavut**

Twin Mining Corporation  
155 University Avenue  
SUITE 1250  
Toronto, ON M5H 3B7

Prepared by: Dallas Davis

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## Preamble

This Abandonment and Reclamation (or Restoration) Plan has been developed in respect of Water License NWB2JACO203 for the Jackson Inlet Project operated by Twin Mining Corporation and, as of April 2004, in part by Kennecott Canada Exploration Inc.

DIAND Land Use permit # N2001C0028 covers Crown land activities. Twin Mining has applied for renewal beyond the expiry date of July 22, 2004.

This plan for the Jackson Inlet Project applies to the Twin Mining Camp located 10 km west of Kennecott's St. Josephs Camp and the same distance east of tidewater on Jackson Inlet.

The project is at an intermediate exploration stage and this document has been constructed on the basis of the consequently incomplete findings to date.

Twin Mining Corporation intends to continue with exploration for the 2004 and 2005 field season as evidenced by an April 2004 undertaking between Twin Mining and Kennecott covering 269,433 acres of Twin Mining's 1,254,029.3 acres of mineral claim holdings on the Brodeur Peninsula. Kennecott will conduct all drilling and other exploration in the 269,433 acres. During 2004, Twin Mining will conduct soil sampling, geological and geophysical surveys over the remaining 984,596 acres. Targets identified by these surveys are anticipated to warrant drilling in 2005. Thereafter, a decision will be made regarding continuation. See attachment "JI\_TwinCI\_Ind Min\_Kenn\_04. ppt".

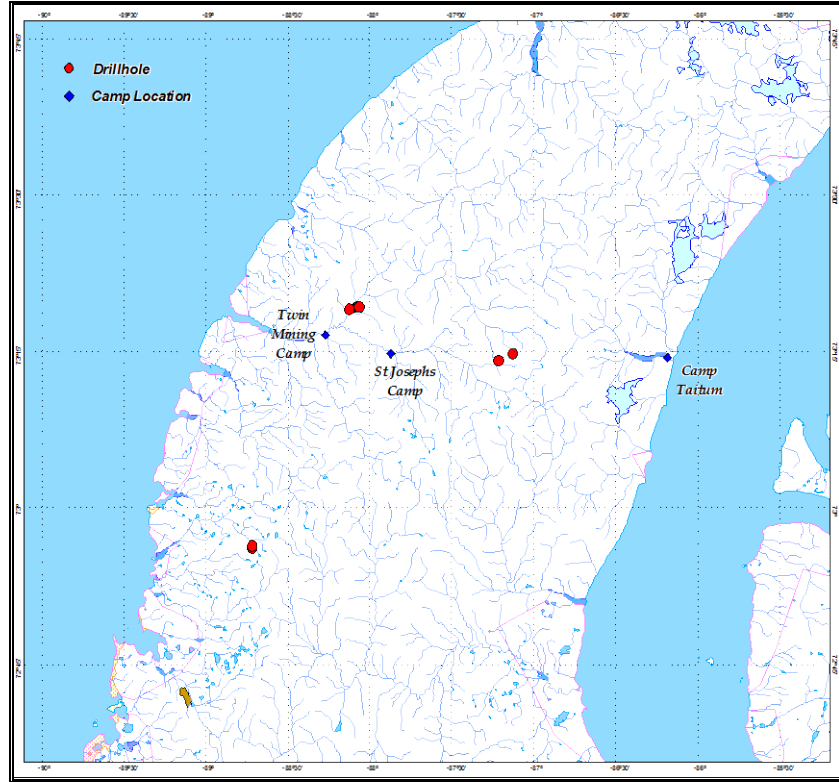


Figure 1: Location of Twin Mining camp in relation to Kennecott camps and to Kennecott drill

holes. For Twin Mining previous drill holes and planned or anticipated drill sites (identified by “stars”) of Kennecott on Twin Mining mineral claims, see attachment to Twin Mining Water Licence renewal application of April 2004 “Twin\_Topo,Camp,Fuel&Drill.ppt”.

## **History and Camp Location**

In 2001, an eight-tent camp (figure 2) was constructed. The location is at north latitude  $73^{\circ}16'36.2''$  and west longitude  $88^{\circ}16'15.5''$  on National Topographic System Map 58 D/8. The Jackson River canyon or gorge and the topographic setting can be seen behind the tents in Figure 2, a photo looking toward the northeast. Tidewater at the head of Jackson Inlet is 10 km west of the camp, that is, to the left of the photo.

Figure 2: Jackson Inlet Twin Mining Campsite.

This campsite will continue to service the needs of the exploration for the 2004 field season. Following the exploration effort on the Brodeur Peninsula the following steps will be taken to ensure a thorough reclamation of the effected sites.

## **Schedule**

The abandonment and restoration of the campsite should take 5 – 7 days to complete and will take place after all exploration activities have ceased. If exploration activities dictate the finalization of the exploration project, it will be conducted between the 10th and 15th of September 2005 and no later than October 31st. The plan will be applied with the help of the project personnel under the supervision of the field supervisor.

## **Infrastructure onsite**

### **Twin Mining camp**

- 1) 8 wood frame tents
- 2) 1 Generator
- 3) 1 pliable water bladder/reservoir
- 4) 1 wood frame plastic covered sample examination and sample storage shed
- 5) 1 wooden outhouse

## **Final Abandonment and Restoration Plan**

### **Buildings and Content**

All the reusable equipment like tents, stoves, mattresses, kitchen stove, refrigerator, other kitchen appliances and equipment, showers, hot water tank, etc...will be packaged and flown to Nanisivik airport and thence by ship to Montreal or to an alternative campsite. Some equipment may be donated or sold to either the Resolute or Arctic Bay communities.

Unless exploration results warrant moving the camp to another site on the Brodeur Peninsula, wood in frames, flooring and sheathing of tents, outhouse, dry, floors, bunk beds, doors and tables will be dismantled and incinerated on site. Nails, screws, anchors and other non-combustible parts will be recovered, packaged and flow out to an approved municipal discharge.

### **Water System**

Pump, tanks and hoses will be drained, dismantled, packaged and flown to Ottawa or an alternative campsite. Any wooden shed built to protect the pump will be incinerated as for the other wood structures.

### **Electrical System**

The generator footings area soil and rock will be inspected for evidence of hazardous waste (oil, grease) and the generator drained of its fuel. Remaining waste fuel and oil will be collected in the appropriately labeled containers, and transported to Nanisivik airport and thence by ship to Montreal for disposal in an approved site. The generator and all electrical wiring, sockets, etc. will be flown to Nanisivik airport and either sold to a local party or transported by ship to Montreal or flown to an alternative campsite.

### **Fuel and Chemical Storage Facilities**

The fuel belonging to Twin Mining will be segregated at Kennecott's fuel storage area and, in turn, will consist of segregated groups of drums with empties kept apart from full drums. At the end of the field

season, an inventory of remaining fuel will be made and full drums will be inspected. Full and empty drums as well as propane cylinders will be flown to Nanisivik airport for transport by ship to Montreal, except for full drums which may be transported to an alternative campsite or donated or sold at the Arctic Bay community.

Remaining waste fuel and any such chemicals are and will be stored in properly labeled drums. These drums will be flown and, thence, if necessary, shipped by boat and truck to a fuel outlet or discharge that accepts this type of fuel. Chemicals stored on site will consist of oil, grease, household cleaners and, possibly, drill additives not purchased from Twin Mining by Kennecott for their drilling program. All drill additives will be stored in or by Kennecott's drill foreman shed.

Upon camp closure, any unused drilling additive, oil, grease and household cleaners will be flown to Nanisivik and, except for empty containers acceptable for disposal at the Arctic Bay municipal waste site, all will be packed in a container suitable for ship transport to Montreal and thence trucked to an approved disposal facility. Full containers will be returned to the supplier, sold to another exploration company or kept by Twin mining for another project.

### **Waste Facility and Incinerator**

Once the camp is entirely dismantled, all remaining combustible waste stored at this site will be burned. The incinerator will be dismantled, reusable parts will be returned to Yellowknife and the barrel will be discarded in an approved municipal discharge.

### **Greywater Sump**

The kitchen-dry greywater sumps will be filled back and leveled.

### **Blackwater Sump**

The outhouse pit contents are and will be removed on a weekly basis, or more frequently, to a separate pit or sump that is and will be covered with soil and back filled. At the end of the season the remaining pit will be back filled and leveled.

### **Helicopter pad**

The helicopter pad consists of a well-worn gravel patch. This area will be inspected for contamination.

### **Campsite**

The campsite will have a final inspection. Areas showing too much wearing evidences will be leveled. No plant life present exists at the campsite so no requirement is needed to promote any natural growth of flora. It is not anticipated that any drill core will be left on site, but, if so, it will be properly stored and secured.

### **Drilling areas restoration**

A Boart Longyear drill which was on contract by Twin Mining during the 2001-2 period of drilling remains at the Cargo 1 drill site approximately 4 km east of the Twin Mining camp. It is expected that it will be sold or leased by Boart Longyear to Kennecott for use on Kennecott's 2004-5 program. Dismantling and disposition of this drill and related equipment will be as described by Kennecott in their Abandonment and Reclamation Plan.

All drill sites abandoned by Twin Mining during their 2001-2 drilling campaigns will be re-inspected for contamination. Any previously overlooked waste will be taken to camp to be burned if possible or to be flown out to an approved municipal discharge. Greywater and sludge sumps were filled and leveled at the time of drill hole completion in 2001 or 2002.

### **Documentation and Inspection**

Photos have been taken of the camp during the seasonal occupancy since 2001. Photos will be taken of the drill sites abandoned in 2001-2 and of the surrounding terrain to demonstrate how effectively the restoration has returned the sites to their original state. No drilling is planned by Twin Mining in 2004.

No soil contaminated by hydrocarbons is present at drill sites abandoned in 2001-2.

Twin Mining will organize a final site inspection visit with community representatives, Land Use Inspectors and in collaboration with Nunavut Water Board staff, if requested.

## **Seasonal Shutdown and Restoration Plan**

### **Buildings and Content**

All tent structures will be secured for the winter. All the equipment like stoves, mattresses, kitchen stove, refrigerator, other kitchen appliances and equipment, showers, hot water tank, etc...will be left on site. The camp will be secured. No food (including tinned food) will be left onsite. All remaining food will be donated to the Arctic Bay community.

### **Water System**

Pump, tanks and hoses will be drained and dismantled. Hoses will be rolled and stored in the equipment tent.

### **Electrical System**

The generator shed will be inspected for remaining hazardous waste (oil, grease) and will be drained of its fuel. Remaining waste fuel and oil will be collected in the containers labeled for that usage and used through the summer. The generator will be secured for winter in the equipment tent. The soil will be inspected for contamination. Electrical wires, plugs and sockets will remain in their installed locations.

### **Fuel and Chemical Storage Facilities**

An inventory of remaining fuel will be made and full drums will be inspected and secured for the winter. Empty drums and propane tanks will be flown out and transported by ship to source. Chemicals stored on site will consist of oil, grease and household cleaners. All drill additives not sold to Kennecott will be stored under a tarp secured for the winter. Empty containers will be disposed with regular garbage. The soil of the areas will be inspected for contamination.

### **Waste Facility and Incinerator**

Once the camp is shutdown and buildings secured, all remaining combustible waste stored at this site will be burned. The incinerator will be dismantled and stored in the tent with other equipment. The soil will be inspected for contamination.

### **Greywater Sump**

The greywater sump will be covered and secured for the winter.

### **Blackwater Sump**

The outhouse pit contents will be removed, disposed in a pit or sump, covered with soil, and, the pit back filled. The outhouse door will be secured for the winter.

### **Helicopter pad**

The helicopter pad consists of a well-worn gravel patch. This area will be inspected for contamination.

### **Camp site**

Areas contaminated by hydrocarbons and unnoticed before abandonment will be treated as per the spill contingency plan. No drill core will be at the Twin Mining camp site.

### **Drilling areas restoration**

Twin Mining's 2004 program does not include any drilling. All drill sites of previous years have been restored.

### **Documentation**

Equipment and buildings left on site will be inventoried. Monitoring will be done during occupancy and photos taken. Once the site is secured for the winter, it will again be documented with photos.