# Twin Mining Corporation Jackson Inlet Project

Nunavut, Canada

## Oil Spill Contingency Plan

### **Preamble:**

The current Contingency Plan applies to the 2004 Exploration program to be conducted on the property between the months of July and September 2001. The Jackson Inlet Property is located on the Brodeur Peninsula, 125 kilometres west of the town of Arctic Bay, Baffin Island, Nunavut. Breakwater Resources' Nanisivik Mine is located 21 kilometres from the town-site.

This plan will be sent to the Water Board and DIAND. In addition, the Company's Head Office in Toronto will receive a copy of this plan. Additional copies of this plan may be obtained by writing to

**Twin Mining Corporation**Suite 1250, 155 University Ave.
Toronto, Ontario
M5H 3B7

#### Introduction:

The purpose of this contingency plan is to provide a plan of action for every foreseeable spill event at the Jackson Inlet Project. It defines the responsibilities of key response personnel and outlines the procedures for responding to a spill.

The map (Twin\_Topo,Camp,Fuel&Drill.ppt) shows the main areas within the Jackson Inlet Project. The Fuel Depot site is an elevated area of gravel at the estuary of Jackson River which is utilized as an airstrip for the Twin Otter aircraft as well as for storage of fuel, oil and drilling supplies. At the camp, less than 20 drums of fuel will be kept on site. At the Fuel Depot, approximately 200 barrels of Jet fuel and 100 barrels of diesel will be stored. Other fuel drums will

also be kept at the Nanisivik Airport and transported to the site later in the summer when the provision decreases. In total, approximately 400 barrels of Jet fuel and diesel will be used. All drums will be marked with the name Twin Mining. All full fuel container outlets except those outlet currently in use will be sealed. Drums will be opened only when needed.

Transportation will be via a Twin Otter from the Nanisivik Airport to the landing site at the Fuel Depot and then by helicopter to the Drill Sites.

The Licensee shall have one extra fuel storage container at any site where fuel is utilized equal to, or greater than, the size of the largest fuel container.

## **Response Organization:**

The cook/camp manager will be responsible for a daily tour of the fuel drums at the camp in order to ensure that none are leaking. Being a dry area, the person will watch for dark (humid) dirt around the drums. All potential spill detected will immediately be reported to the Project Manager on site. In addition, Twin Mining shall examine regularly all fuel and chemical storage containers for leaks, all leaks should be repaired immediately.

#### **Initial Action and Action Plan:**

In the event of a spill, the safety of the personnel is to be considered first. Once ensured that no injuries are possible, the source of the spill is to be clearly identified, along with an estimated leak rate if possible. The Project Manager is immediately informed.

In the event of a minor spill, the humid oil containing dirt can be cleaned with an absorbent sheeting. Remaining contaminated soil is shovelled and put in plastic pails. The leaking drum is immediately be pumped either directly in the helicopter fuel tank or in another safe empty drum. The contaminated dirt is brought out of the area and disposed of either through the Nanisivik Mine's facilities or brought back south at the end of the program.

In the unlikely event of a more significant leak, the drum(s) are positioned on an impermeable lining while they are transferred to another drum. Such a lining is available at the kitchen. Additional linings are also available on the individual dorm tents and can be used in the case of an emergency.

## **Reporting Procedure:**

Any oil or fuel spill will be reported as follows:

From Richard Roy to:

- 1 SPILL REPORT form to be completed immediately
- 2 Report immediately to the 24-hour spill report line **403-920-8130**
- 3 Report to the head office **416-777-0013** and ensure that an appropriate liason person can be reached at all times.

# A COPY OF THIS PROCEDURE WILL BE AVAILABLE IN THE MAIN KITCHEN ON SITE

## **Resource Inventory:**

Other than Richard Roy who is the Program Manager, other responsible persons can be asked to participate in any Action Plan including the Helicopter pilot and flight engineer, mining technicians, geologists, and diamond drillers.

In addition, Dallas Davis, Exploration Consultant to Twin Mining Corporation (506-450-7005) and Hermann Derbuch President Twin Mining at the Toronto office (416-777-0013) are to be kept informed of all procedures.

Equipment available that can be used is considerable and will undoubtedly reduce any potential impact risk. Among this is a diamond drill, a helicopter and a Twin Otter aircraft on call out of Resolute Bay.

# **Training and Excercise:**

Once all personnel is on site, a training program will be held involving all personnel. In this program the Contingency plan will be discussed in detail. In addition, Richard Roy and the Cook/Camp Manager will make the following exercise:

### **Material Information:**

The Fuel includes Jet Fuel and Diesel Fuel. Commercial jet fuels for helicopter use are known as Jet-A or -B. Jet A is pure kerosene and has a flashpoint of 120 degrees Fahrenheit (49 degrees Celsius). It is a high-quality fuel, however, it also is sold to ground-based users with less demanding requirements, like railroad engines. Diesel fuel is used for operating the core drill and for heating tents at the project camp. Properties of Jet and Diesel fuels are quite similar, with respective density (g/cm³) of 0.795 and 0.850, and, net heating value (Btu/lb) of 18,420 and 18,330.

Richard Roy NordQuest