PROCESSED KIMBERLITE CONTAINMENT AREA MANAGEMENT PLAN
JERICHO DIAMOND MINE, NUNAVUT

EXECUTIVE SUMMARY

Introduction
The Processed Kimberlite Containment Area (PKCA) Management Plan has been prepared as a management tool for use by Shear Diamonds Ltd. (Shear) and its designated contractors to ensure that appropriate management procedures for the PKCA are followed. The plan has been prepared and submitted in accordance with water licence 2AM-JER0410.

Facility Description
The PKCA is located within the Long Lake Basin, located at the south end of the project site, and will ultimately be divided into three cells: Cell A, Cell B and Cell C.

Fine Processed Kimberlite Disposal Management
A coagulant and flocculant polymer treatment in conjunction with a thickener is used to allow water to be recycled in the plant and to thicken the fine processed kimberlite (FPK) to a solid prior to discharge to the PKCA.

FPK was, and will continue to be deposited when production operations resume, into Cell A, between the East and Southeast Dams and Divider Dyke A. Once Cell A is full, and Divider Dyke B has been constructed, FPK will be deposited in Cell B. No FPK will be deposited in Cell C.

Operational Water Management
Water sources into the PKCA are:

- direct precipitation;
- runoff from the watershed of each cell;
- water released from deposited FPK into Cell A or Cell B only; and,
- runoff water collected from the pit sump, collection ponds, East Sump and sewage effluent.

The water level in the PKCA is controlled by the discharge of compliant water over the West Dam located at the west end of the PKCA.

Dam and Dyke Designs
As outlined in the original mine plan of March 2004, the PKCA facility will require the construction of additional dams and dykes to control the water level and discharge of FPK. A detailed description of each of these is provided within this report, along with a proposed construction schedule for infrastructure not yet built.

Monitoring

Monitoring of the PKCA includes:

- visual inspections;
- ground temperature measurements;
- annual geotechnical inspections;
- dam settlement;
- thermosyphons;
- topographic surveys;
- water balance;
- freeboard;
- seepage;
- discharges; and,
- water quality.

The annual geotechnical inspection report will be submitted to the Nunavut Water Board and the Inspector within sixty (60) days of the inspection in accordance with Part G, Item 2 (g) of the water licence.