4 WATER CONSERVATION PLAN

The objective of Twin Pines Saunders Mine Water Conservation Plan is to minimize water use and maximize water recycling and recirculation. The Water Conservation Plan will be utilized to set site operating policies and procedures.

4.1 Water Conservation Policy

Potable, drinking water, and other water sources, like other natural resources, are limited and must be conserved. Twin Pines is committed to conserving water at its operations and will also conserve water in its Charlton County mining operation. The Saunders Mine operation will be essentially a closed-loop system. The proposed mining operation is designed to be water-efficient by recycling and re-circulating water to minimize the amount of make-up water required from the Upper Floridan Aquifer.

The proposed Water Conservation Plan at the Twin Pines Saunders Mine will be to minimize the amount of make-up water (MUW) by recycling and reusing water. Water losses will be to evaporation and infiltration of water in the tailings/reclamation cut, with minor amounts of water retained in the final product.

Pipelines transporting water at the PCPs will be inspected on a regular basis as part of the daily operations and maintenance program. Pipelines will be above ground, expediting leak detection. Leaks will be immediately repaired in an effort to conserve water. Meters will be installed at various points in the process loop in order to manage mineral production and water use. Meters will be maintained, calibrated, and tested according to manufacturer's recommendations.

4.2 Water Flow Throughout Operation

The Process Water Pond will be utilized as the primary water supply to extract and process the ore, tailings, and final heavy mineral product. The MUW use will be based on the amounts of water lost to evaporation and infiltration from the tailings/reclamation cell into the surficial aquifer. Attachment A illustrates the normal operating conditions mine water balance, the process flow and water use for the proposed mining and mineral extraction operations.

Twin Pines will install a well into the Upper Floridan Aquifer at each of the Pre-Concentration Plant locations for the Saunders Mine to provide for a source of MUW for mining activities.

Twin Pines will apply for a Groundwater Use permit, requesting a maximum daily permitted amount from the UFA of 1.44 million gallons per day (mgd), per well for a total of 4.32 mgd at the Saunders Mine. This daily permitted amount from the production wells in the UFA is for an estimated 1000 gallons per minute (gpm) for 24 hours a day to provide make-up water under worst case scenario conditions. Under normal operating conditions Twin Pines estimates pumping approximately 500 gpm to maintain the optimal water volume in the process water pond.

4.3 Estimate of Upper Floridian Aquifer Quantity

The PCP plant is designed for optimum water conservation when compared to the typical "wet mining" process. The PCP plants will be centrally located within the Saunders Mine area. The proposed groundwater use, from the production wells in the UFA, is needed for the operation of the closed-loop