

007504

FARO TAILINGS ABANDONMENT PLAN

DEVELOPMENT PROGRAM

1987 PROGRESS REPORT

Curragh Resources Inc.  
April, 1988

placement of high density polyethylene liners in each pit. Liners were installed by Nilex Geotechnical Products Inc. during the period August 11-29.

- Instrumentation installation commenced September 21 and was completed September 30. R. McLenehan, G. Pratt and J. Demchuk of Curragh tested and installed all instrument sensors. The instruments were tied to a vertical nylon meshing suspended from aviation cable.
- The 840 m tailings pipe line was completed by October 3.
- Tailings were placed in daily lifts in each test plot during the period October 10-30. Typical tailings from the mill is discharged in a composition ratio of approximately 30 % solids to 70 % water. During tailings placement, the decant water was pumped off the tailings solids at a location exterior to the instrumentation tanks. When tailings placement commenced, the window seals began leaking at a high volume flow rate.
- During tailings placement, a regular tailings sampling schedule was followed.
- After tailings placement was complete, attempts were made to remove tailings which had seeped into the tanks. These attempts were only partially successful and up to 20 m<sup>3</sup> must be removed from three of the six tanks in the spring of 1988.

#### 4. PLANS FOR 1988

The Abandonment Development Program is on schedule. Work in 1988 will continue, as outlined in SRK Report 60604, on development of the Test Facilities and on related investigations into characterization of the tailings and foundation soils and surface water and groundwater.

Curragh Resources Inc. is a member of the Reactive Acid Tailings Program (RATS), a joint government-industry program created to co-ordinate research into acid mine drainage from tailings and waste rock. Curragh is currently seeking financial and technical assistance through its membership in RATS for extensions to the Faro Abandonment Development Program.

## 1. SUMMARY

The first year of the Faro Tailings Abandonment Plan Development Program is complete and the objectives for this year have been achieved. The test pits were excavated and the instrumentation tanks and liners were installed. This work was followed by installation of the instrument sensors and the placement of new tailings in each of the six test plots. The only major deviation from the implementation schedule as outlined in the plan (Steffen Robertson and Kirsten (SRK) report 60604, June, 1987) resulted from tailings leakage through the window seals and into the instrumentation tanks. Removal of this material in the spring of 1988 will result in added expenditure to the project but should have a negligible effect on the function and operation schedule of the tailings cover test facility.

## 2. PRE-CONSTRUCTION ACTIVITIES

- In February, 1987, Curragh Resources made a commitment to the Yukon Territory Water Board to develop and implement a tailings abandonment plan development program.
- In April, 1987, Curragh Resources retained Robert McLenehan in the capacity of Project Manager for the program.
- During April and May of 1987, details of the construction of the tailings cover test facility were finalized. Complete drawings and construction specifications for the original test facility design as described in SRK Report 60602 (January, 1987) were completed May 14, under the direction of Dr. A. MacG. Robertson and Dr. Adrian Smith, both of SRK.

## 3. CONSTRUCTION OF THE TAILINGS COVER TEST FACILITY

- The facility consists of six test pits, of which one is a control and five are to be treated with the cover types under evaluation. Instrumentation access is through 3 m diameter, 5 m high tanks placed in each test plot. A test area containing tailings deposited over 10 years ago is also part of the test facility. Tests within this area are designed to evaluate the effects of an extended period of oxidation within the tailings.
- The site selected for the Tailings Cover Test Facility is located at 583 150 mE 6913 100 mN.
- Construction of the test facility, including instrument tank placement and berm finishing, took place between July 15 and August 7, 1987.
- The next phase of the test facility construction involved the