July 31, 1980

UNITED STATES NUCLEAR REGULATORY COMMISSION Office of Inspection & Enforcement, Region IV 611 Ryan Plaza Drive, Suite 1000 Arlington, TX 76011

Dear Sirs:

RE: Effluent Monitoring Report License No. SUA-1228 Docket No. 40-8380

Pursuant to 10CFR 40.65, the semi-annual effluent monitoring report is being submitted for the Nine Mile Lake In-Situ Test Facility.

The Nine Mile Lake Test Facility was granted a license renewal during February of 1980, good for the next four years. Operations there began in November of 1976, with a sulfuric acid leach. Pattern I was leached through August of 1977, at which time restoration was initiated using a groundwater sweep. Pattern II, also an acid leach, was placed into operation in September of 1977, and leached through September of 1978. Pattern II restoration involved using a combination of a chemical treatment circuit and a groundwater sweep. A third acid leach pattern was started during August of 1979, and operated until late March of 1980. Currently, restorative efforts are underway on Pattern III using a chemical treatment circuit.

A fourth well pattern was placed into operation during June of 1980, utilizing carbonate as a leaching agent. Results to date are insufficient as to the effectiveness of carbonate when compared to acid. The Pattern IV leaching and restoration program will continue through 1980, at which time a decision will be made as to the optimal operating conditions for the commercial project.

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Environmental sampling programs have provided sufficient data to support the conclusion that the Nine Mile Lake Project has not caused a negative impact on the environment on or near the restricted area boundary. Attached are tables summarizing the January through June effluent monitoring.

Very truly yours,

Patrick Spieles Environmental Supervisor ISL Operations

PS/ph/L

cc:

USGRC, C/O Deciment Management Apancil

USNRC, Director of Inspection & Enforcement
Mr. Jack E. Rothfleisch
Russ Hynes
Mike Neumann
Kent Loest
Rick Iwanicki
Debra Murphy