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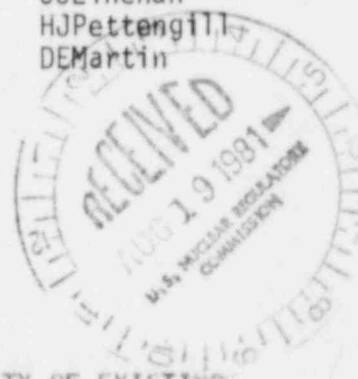
WMUR:TLJ
Docket No. 40-8745

MEMORANDUM FOR: Ross A. Scarano, Chief
Uranium Recovery Licensing Branch

THRU: John J. Linehan, Section Leader
Operating Facilities Section I
Uranium Recovery Licensing Branch

FROM: Terry L. Johnson, Project Manager
Operating Facilities Section I
Uranium Recovery Licensing Branch

SUBJECT: OGLE PETROLEUM, INC. REVIEW OF STABILITY OF EXISTING
EVAPORATION PONDS - LICENSE CONDITION NO. 77



License Condition No. 77 requires that the NRC review the stability of the existing R&D ponds prior to their use for commercial scale operations. This condition is stated below:

77. Prior to use for any commercial solution mining operations, the stability of any existing (R&D) evaporation ponds must be reviewed and approved by the NRC in the form of a license amendment.

We performed an initial review of the information that was submitted by the licensee on May 13, 1981. We concluded that additional information would be required to complete our review. By letter dated July 14, 1981, we requested that two soil borings be drilled through the maximum embankment section to document its stability. By letter dated August 7, 1981, Ogle Petroleum, Inc. (UPI) submitted this information.

Based on the following factors, the existing R&D evaporation pond is considered acceptable with regard to stability requirements:

- 1) The embankments are very small, having a maximum height of only 8 feet.
- 2) Normal loading on the embankments will be at a minimum since the design operating water level is almost entirely below original grade.

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- 3) No phreatic surface will develop in the embankments due to the installation of a synthetic liner and leak detection system.
- 4) A review of the submitted soil boring data has shown the embankment and foundation materials to be medium dense silty sands.
- 5) Existing license requirements for daily embankment inspections will preclude unnoticed erosion development.

We recommend, however, that the leak detection system, freeboard, and embankments should be inspected daily, similar to the requirements outlined in License Condition 65 for the new evaporation ponds. In addition, the existing pond should only be used for a period of about 90 days. This will allow ample time for completion of the new evaporation ponds.

In order to use the existing pond, the requirements of License Condition 65(f), Amendment No. 1, must be waived. This condition requires reserve capacity in other ponds to handle a leak. There will be no reserve capacity until the new ponds are completed.

Based on the above, we recommend that License Condition 77 be modified as follows:

- 77. For use during commercial solution mining operations, the existing R&D evaporation pond shall be inspected daily with regard to freeboard, leak detection system, and embankments. The existing pond shall meet the same criteria outlined in License Condition 65, with regard to freeboard and daily inspection of these specific items. The licensee is exempt from the requirements of License Condition 65(f) until November 1, 1981.

The above license modification was discussed with Mr. G. Catchpole on several occasions. He had no objection to the changes.

Original Signed By:

Terry L. Johnson, Project Manager
 Operating Facilities Section I
 Uranium Recovery Licensing Branch
 Division of Waste Management

Original Signed by:
 J. J. Linehan

Approved by:

J. J. Linehan, Section Leader
 Uranium Recovery Licensing Branch

Case Closed: 04008745A05E

8/12/81 -- VYDEC, Revision No. I

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