OGLE PETROLEUM INC.

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September 4, 1980

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PLEASE DIRECT AEPLY TO: 150 North Nichols Avenue Casper, Wyoming 82601 (307) 266-6456

Mr. J. E. Rothfleisch Uranium Recovery Licensing Branch Division of Waste Management U.S. Nuclear Regulatory Commission Washington, D.C. 20555

> RE: Commercial Source Material License Application, Docket No. 40-8745

SUBJECT: U.S.E.P.A. Draft Comments (Telecopied)

Dear Mr. Rothfleisch:

Enclosed please find Ogle Petroleum Inc.'s (OPI) responses to the draft comments contained in the telecopy from the U.S.E.P.A. received by the NRC on August 8, 1980. Five complete sets of responses are enclosed. Responses were not provided for those comments that dealt with NRC policy issues or which referred to sections of the DES prepared by the NRC or Oak Ridge National Laboratory independent of information provided by OPI.

OPI wishes to point out that no NRC responses to the subject comments are required since they were received after the 45 day comment period specified in the Federal Register. OPI is not aware of any official request for extension of the comment period pursuant to 10 CFR 51.25 nor are we aware of the NRC granting an extension.

Sincerely,

OGLE PETROLEUM INC.

Glenn J. Catchpole

Project Manager

GJC: jm

Enclosure

CC: Dr. M. Kelly, ORNL, w/Enclosure (5 copies)
Document Management Branch w/Enclosure (1 copy)

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RESPONSES TO U.S.E.P.A. DRAFT COMMENTS TELECOPIED TO THE NRC ON AUGUST 8, 1980

1. COMMENT: Page 1-4.

RESPONSE:

It is currently planned that the uranium produced at the Bison Basin Mine will be used in the U.S.

2. COMMENT: Page 2-23.

RESPONSE:

The comment does not ask for a response.

3. COMMENT: Page 2-34.

RESPONSE:

The NRC concurs that more monitor wells will provide more protection; however, it is felt that the network of perforated pipe below the ponds and the shallow monitor wells will provide adequate and timely warning of pond leakage. The evaporation pond system consists of four cells (including the R & D pond) that will be constructed and operated in such a manner that it will be possible to transf the liquid in one pond to another pond(s) in order to repair a leak. The subject of pond freeboard is being re-evaluated by the NRC staff, and any change in the two-foot requirement will be reflected in the Final Environmental Statement.

4. <u>COMMENT</u>: Page 2-37 (material underlying pit - permeability).

RESPONSE:

No direct response provided. Ogle Petroleum Inc. (the Applicant) will provide the information discussed in the comment if the NRC recognizes that on-site disposal is a viable procedure.

5. COMMENT: Page 2-37 (off-site waste disposal).

RESPONSE:

The comment does not ask for a response.

6. COMMENT: Page 2-38 (decommissioning plan).

RESPONSE:

No direct response provided. The Applicant has submitted detailed decommissioning and reclamation plans to both the NRC and the Wyoming DEO.

7. COMMENT: Page 2-38 (bonds).

RESPONSE:

No direct response provided since the comment does not ask for a response. As a matter of law, the Wyoming DEQ must annually review (and update if necessary) the restoration/reclamation performance bond.

8. COMMENT: Page 3-35 (restoration values).

RESPONSE:

The selection of 5.0 mg/l as the uranium restoration value is based not only on the domestic criteria for uranium but also on the fact that leaving up to 5.0 mg/l of uranium will not significantly impact the baseline production zone water quality which has an average radium value of 76.63 pCi/l and an average thorium level of 3.68 pCi/l. Additionally, the environmental consequences (greatly increased pond area, surface waste disposal, fuel consumption, etc.) that would result from returning uranium to its low baseline levels (0.0018 mg/l average) would be greater than if the criteria remains at 5 mg/l.

9. <u>COMMENT</u>: Page 3-37 (fracture pressure).

RESPONSE:

A conservative value of fracture pressure for the type of geologic formation in the Bison Basin area down to and including the production zone is 0.63 psi per foot of depth below the land surface. The Applicant has stated and the NRC will require that injection pressure not exceed 0.40 psi/foot.

10. <u>COMMENT</u>: Page 4-7 (evaporation ponds).

RESPONSE:

- (1) As stated in the response to comment number 3, the evaporation ponds will be constructed and operated in such a manner that the liquid in one pond can be transferred to another pond(s) if a leak occurs.
- (2) The under layment pipe is designed to drain to a common point (sump) for each cell in order to detect leaks.

- (3) The NRC concurs that 100 feet may be excessive; and as such, the Applicant will be required to place the monitor wells within 75 feet of the ponds. The requirement for multi-level monitoring in this shallow aquifer does not appear to be warranted due to its small vertical saturated thickness.
- 11. <u>COMMENT</u>: Page 4-10 (monitoring underlying aquifer). RESPONSE:

The NRC is now requiring the monitoring of underlying aquifers. This requirement will be stated in the Final Environmental Statement.

12. COMMENT: Page 4-12 (air quality).
 RESPONSE:

The comment does not ask for a response.

13. <u>COMMENT</u>: Page 4-14 (oil and grease spills).

RESPONSE:

The Applicant will be required to berm the area under construction and all fuel storage tanks.

14. <u>COMMENT</u>: Page 4-16 (restoration).

RESPONSE:

The mine and restoration plan proposed by the Applicant will provide a means of timely assessment of restoration capabilities. Even though complete aquifer restoration on a production scale remains unproven, the results of the Applicant's R & D restoration were such that it is reasonable to assume that commercial restoration is achievable.

15. COMMENT: Page 4-25 (pipeline breaks).

RESPONSE:

"Significant" in the context of reporting pipeline breaks means losses of fluids that exceed 5,000 gallons.

16. COMMENT: Page 4-27 (tornadoes).

RESPONSE:

No direct response provided. The Applicant did not write the paragraph that is under discussion.

- 17. <u>COMMENT</u>: Monitoring Program (page 4 of the draft comments).

 RESPONSE:
- (1) The NRC has not required sediment sampling of Grassy Lake and West Alkali Creek because of the low probability of spills occurring and reaching Grassy Lake and West Alkali Creek. In the unlikely event of a spill reaching these locations, the NRC will use the baseline radiation levels that have been measured in soil samples collected within the project area as a basis for evaluating the effectiveness of cleanup operations.
- (2) The baseline monitoring program has been revised. A minimum of three rounds of samples will be collected from each monitor and restoration well and analyzed for the parameters shown on the long list of Table 4-1 which includes trace metals. A fourth round of samples will be collected and analyzed if there is significant variation in the results of the first three rounds.

The three-year frequency of soils and vegetation sampling is based on the nature of in-situ uranium mining operations wherein no tailings are produced, no ore is crushed, and no ore is stockpiled. Additionally, the Applicant will not be drying the final product, thus greatly reducing the likelihood of airborne transport of yellowcake. The NRC staff feels the sampling frequency is adequate for the Bison Basin Project and is consistent with requirements for other similar in-situ uranium mining operations.

In reference to sediment samples at two locations to establish trend analysis, the NRC staff does not feel that such a sampling program is necessary for the Bison Basin Project. The basis for this position is presented in number (1) above.

Baseline data for Grassy Lake and West Alkali Creek have been collected; and unless there is considerable leakage from ponds, pipelines, or tanks, there is no reason to believe that the water quality will change. The NRC is, therefore, only requiring monitoring of Grassy Lake and West Alkali Creek if there is a spill. It would not be possible to collect a water sample from Grassy Lake in the fall since it is normally dry during that part of the year.

As shown in Figure 2.4 of the Draft Environmental Statement, the first mining unit will have a total of three upper aquifer monitor wells. The remaining mining units will have two to three upper aquifer monitor wells per acre of wellfield. The NRC staff and the Wyoming DEQ staff consider this spacing adequate for the Bison Basin Project.

In reference to the comment on the last page of the E.P.A. draft comments, the NRC is rewriting the section in question to remove the inconsistency. The post-mining monitoring requirement is being eliminated since there will be a post-restoration monitoring program that will accomplish the same objectives as the post-mining monitoring program.