PDR 40-8745

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WYOMING OUTDOOR COUNCIL
P.O. Box 1184 2003 Central Cheyenne, WY 82001

August 7, 1980

U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Director, Division of Waste Management

Dear Director,

The Wyoming Outdoor Council having reviewed the draft Environmental Statement on the Ogle Petroleum, Inc. Bison Basin In-Situ Uranium Project (Docket No. 40-3745) offers the following comments.

Although the NRC impact assessments have improved somewhat, an important attitude change is still required. The NRC should explicitly recognized in its assessments that uranium operations cause isolated, cumulative, and/or synergistic environmental impacts. This attitude change would replace apologist verbage with serious, insightful analyses.

Exemplifying the need for this attitude change is the lengthy (pages 2-11 to 2-13) contrast/comparison of environmental impacts of conventional uranium mining and milling with in-situ processing. This generic comparison is better suited for an appendix. Perceived cost effectiveness is the only reason that uranium is being extracted at all in Bison Basin. Comparing the environmental impacts of the production processes does not alter the absolute environmental impacts of in-situ uranium recovery at Bison Basin. Rather, a comparison develops a perceived lessening of the real impacts that the proposal could have.

Throughout the draft ES cumulative and/or synergistic effects are not even mentioned. Serious, thorough evaluation of these impacts is crucial. Bison Basin is evaluated as an isolated uranium project. It is not. It contributes degradation increments to air quality, water quality, range productivity and wildlife habitat. Degradation increments may be short lived or be irrevocable. As the licensing agency charged with environmental review it is incumbent upon the NRC to evaluate these aspects in this uranium mining region in specific ways.

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Any analysis of demand for uranium (pages 2-1 to 2-10) should be in an appendix. The Wyoming Outdoor Council questions the precision of the analysis. The projections used do not fit data where time frame overlap occurs. Indeed, the projections do not even relfect revised projections from many electrical utilities. How does NRC expect to see 103 nuclear power plants built in 9 years when in the past 20 years have witnessed the construction of 72 plants?

Comparing OPI's 5 year production of $1x10^6$ pounds of yellowcake to the national demand is inappropriate (section 2-1). Although not mentioned in the draft ES, the project is a joint venture with Western Fuel, a fuel products division of Duke Power, North Carolina. Since Duke Power demands yellowcake for the operation of its nuclear power plants, it would be far more appropriate to address Duke Power's projected demands for the yellowcake it is producing from Bison Basin. The final ES should reflect this analysis.

Additionally, the economics of production at the site are not solely dependent upon market economics. One would assume contract agreements between OPI and Western Fuel(Duke) have considerable bearing upon Bison Basin uranium production. The final ES should include this information in its economic analysis.

Specific Comments

section	page	
1.3	1-2	Refering to the Wyoming In-Situ Mining Act and regulations as having real jurisdictional import in the regulation of this project belies the fact that Wyoming authority may be superceded in whole or part by the UMTRCA as amended, other NRC authorizations, regulations and staff objectives. The very real jurisdictional problems could severely effect actual site operations by OPI and environmental protection requirements. How does the NRC staff propose to address this problem in general and specifically with OPI while not impinging upon important state statutes, regulations and perfomance standards?
2.1	2-1	The public interest which would not be served by the no action alternative should be more precisely defined. The "public" in this case is the service area of Duke Power of North Carolina (or which ever utility is purchasin; the uranium oxide). Does the locale need the yellowcake or is the utility demanding it?
2.2	2-1 to 2-9	This entire section is inappropriate, as stated previously. It should be an appendix if it's in the document at all.
2.3.6	2-17	Althought the Wyoming Outdoor Council views proliferation of waste disposal sites as having serious environmental consequences, it cautions that the NRC carefully choose the site for waste transferral and containment. The quantity of wastes is small, but it is extremely concentrated. The closest active mill tailings site to Bison Basin is operated by Western Nuclear Inc. at Jeffrey City. Disposal of WNI tailings has already caused considerable groundwater contamination at the site. WOC has a Petition for Leave to Intervene on the WNI source materials license under consideration by an Atomic

Licensing Appeals Board due to our objections to the tailings pond location, design and operation. It would be totally unacceptable for any of the Bison Basin waste to be disposed of at the existing WNI tailings pond. A state-of-the-art handling system must be utilized.

WOC questions whether the operation should even be permitted prior to the arrangement of an agreement for waste handling. The waste handling problems at OPI is analogous to the high level waste disposal problem. Production of hazardous wastes without having devised reliable permanent isolation modes has wrought serious problems. Procrastination is not a means for waste isolation except as far as being a decision by default.

Until an existing state-of-the-art has been contracted with, the source materials license should not be granted.

section	page	
2.3.10.1	2-26	The monitoring system of only 15 upper aquifer wells is inadequate. Monitoring wells should be placed in the "D" unit. If injection pressures exceed extraction rates, excursion from the production zone could result and be detected under the current monitoring program. According to section 2.3.2.2 the host sandstone and aquifer "is part of a larger system of sandstone channels that coalesce a few kilometers east of the projects area". If this channel slopes down to the southeast, as does the topography than gravitational forces could increase flow rates of contaminants down slope along the aquifer. The fact that an aquitard lies between the production zone and the next aquifer is not sufficient reason for not monitoring the lower aquifer. What is the mudstone permability? Is it fractured? The constant rhetorical apology for in-situ mining is that it is a 'new technology'. New technologies should be carefully monitored to ensure that any false assumptions, projections and techniques are uncovered before groundwater contamination takes place.
2.3.10.2	2-32	How many slurry shipments per unit time are to take place in the next five years from Bison Basin?
2.3.10.3 & 4.3.1	2-32 4-3	The verbage in these sections has not explicitly stated the NRC restoration goal for the production zone/aquifer. According to the NRC, the State of Wyoming and OPI have reached an agreement on restoration (Table 3.22). Does the NRC concur with this table?
2.3.10.4	2-34 to 2-36	What are the quality control measures for proper installation of the seepage control measures(ie; installation of the chlorinated polyethylene liner and the drain pipe network)? What are the operational quality control measures? None of the radioactive waters should be disposed of in mud pits. All radioactive materials withdrawn during well construction should be placed in the waste pond. Indeed, on page 2-38 it is stated that "all radioactive materials will be removed off-site".

section	page	
2.3.10.5	2-38	When will the de ommissioning plan be submitted? Saying reclamation of affected lands will take place on paper doesn't mean it will in the soil. What is the status of reclamation at the R & D site? What is the status of test plot reclamation? Is the NRC going to require such work?
2.3.11	2-38	Section2.2 does not demonstrate the need for increased uranium production. Rather, and this is not a semantical difference, it demonstrates the NRC's projected demand for uranium production. The Outdoor Council calls to the staff attention the fine comments submitted by the National Wildlife Federation, prepared by Luke Danielson. The NWF demand analysis questions and review are incisive. If NRC is to continue to utilize demand and economic evaluation in environmental statements, it would do well to do a better job of it. The staff conclusion that adequate mitigative measures are planned is in error. Monitoring of the host aquifer and the aquifer below does not exist. Monitoring for fracturing of the host aquifer does not exist.
3.2	3-4	The absence of air quality monitoring at this project site is a gross oversight by the NRC and applicant. Why didn't the NRC require monitoring under the source materials license during research and development? The fact thatthe R & D would have proven the infeasibility of commercialization is not a pertinent rationale. The NRC liscenses several operations throughout Wyoming. Gathering baseline air and water quality data from any and all licenses would be beneficail. Few weaterh service monitoring stations are located near known uranium deposits or operations. Requiring baseline data collection at <u>all</u> license areas would be an important step.
3.4.3	3-9	The final Environmental Statement should reflect the fact that the drop in yellowcake price to $31.50 / lb (June 1980) has caused Fremont County uranium companies to fire 260 uranium miners. The soft uranium market has been declining for over a year. This has occurred for a variety of reasons: Post TMI investor 'disillusionment', availability of foreign high grade ores and conservation of energy. Most interesting of the three in terms of real energy projections is energy conservation. The Tennessee VAlley Authority has deffered som 13 nuclear power plants. Energy demand projections for its service are about 3%. This 4% lower than demand projections which brought upon the proposed consturction of the 13 plants. TVA's United Nuclear's Morton Ranch venture has been dropped from production to maintenance status. In doing so, 125 workers were fired. Uranium employment may have increased in the past few years, but the trend is not holding at this ti . What are NRC's revised projections?

section	page	
3.4.4.1 & Table 3.9	3-10	It is good to see the listing of "Major Nuclear Facilities withing 80 km (50 mile) radius of the proposed Bison Basin Project". Now that they have all been located, what are their sumulative and synergistic effects on the environment and public health of the area?
3.4.4.1	3-10	The fact that the number of farms and ranches in Fremont County has been declining, but increasing in size means little in terms of agricultural production. NRC should address out put. Agribusiness is the monopolization of ranches. It should not be confused with high agricultural output or sustained output from smaller operations.
3.4.4.4	3-14	The final ES should reflect further consultation as to the adequacy of the Lander sewage system. It is under improvement ment due to recent failures, possibility stemming from approaching capacity. Although the employment influx from this project will not push the sewage systems over the edge, NRC should fully recognize that projects it licenses cause population influx ito areas and stress communities's capabilities.
3.6.2.1	3-17	It is uncertain whether the applicant or the NRC know what the groundwater system is in Bison Basin. If a fourteen year old study by Welder and McGreevy is the only source of observations which are "thought to be applicable...in the Bison Basin area", how can such assurances in section 2.3.10.1 (page 2-26) be made? What is the rate of movement of subsurface water and from which units were the measurments made?
3.6.2.3	3-22 to 3-24	What depths do the faults reach? How do they relate to the host aquifer, the "D" sands? What of downward migration along the faults into unmonitored sandstones or other permeable formations? Geologic cross sections depicting the faults should be provided. Define "timely detection". Will monitor wells be placed so as to detect downward migration? If it proves hazardous to operate the leaching process in the fault acreas, leaching should not be allowed near them.
3.6.2.6	3-36	The air distance to the nearest public water supply is quite irrelevant. What is relevant is the synergistic and cumulative effects of uranium activities in this region on current and potential drinking water supplies? What incremental change does the Bison Basin project cause?
4.4.1.1	4-6	The NRC staff states that the "baseline for each parameter for each mine unit will be established as the highest value that is obtained from three rounds of sampling from any restoration wells in the mine unit." What is the rationale for this? What if the highest value is an an anomaly? Low values, which may be more representative of the site would be outstripped by an exceedingly high value. This means of determining baseline is unacceptable.

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4.4.2.2	4-7	Since the applicant must meet federal and state air quality standards, why is it that in section 4.5.1 (page 4-12) the NRC staff is allowing two air quality standards to be exceeded by the operation? Standards are set for health, safety and environmental protection. If the standard is incorrect, it should be changed, not blatantly broken. The Wyoming Outdoor Council stands firmly on air quality protection in Wyoming. Since 99% (page 4-12) of the NO_2 releases will be from solution mining equipment, control devices must be installed. The cumulative and synergistic effects of NO_2 and SO_2 pollution should be included in the final ES. The source materials license must not be issued without control devices on the solution mining equipment or an appropriate means of bringing the applicant under compliance.
4.4.2.5	4-9	What is the contingency plan for corrective actions at this site? Transmittal of records (page 4-11) to the Wyoming DEQ is an important provision.
4.5.3.1	4-14	What are the contingency plans for operational leaks and spills (of varying magnitude)? What are the cumulative impacts on the Sweetwater River (4-16) (real and potential) in this uranium region?
4.6.2.1	4-26	How is a site to be decontaminated? Again, saying it doesn't make it so. What emergency on-site measures exist to control industrial explosions or fire? Are area emergency personnel trained in controlling such accidents? Jeffrey City and Lander volunteer fire personnel are some distance away.
4.6.2.1	4-28	Since the yellowcake is being shipped in slurry form, discussion of dry yellowcake transport and accident rate is not thorough. The risk associated with slurry accidents may be less than with dry yellowcake, but they are different. The final ES should relfect a thorough analysis of slurry transport accidents. Surely the Department of Transportation has slurry experiences to draw from.
4.6.5	4-30	The nicely worded paragraph regarding "Possible conflicts between the proposed action and the objectives of Federal, State, and local plans and ploicies", skirts serious issues. Federal and Wyoming standards and implementation of protective measures for the environment and healthand safety are not always the same. Rectifying the differences has been an arduous process. The Wyoming Outdoor Council supports stringent environmental controls at uranium facilities regardless of the enforcement agency. This section in the final ES should report the status of efforts to address the interagency (NRC-DEQ) differences.

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4.8.1	4-31	How can the unavoidable air quality impacts be minimal? The NRC is allowing the OPI to exceed NO_2 and SO_2 standards. The final ES should describe how the operationis to be brought under compliance of state and federal standards.
4.11.3	4-34	Where are the NRC cost/benefit figures or descriptions for evaluating this project? How does the NRC staff arrive at its cost/benefit conclusions?

The Wyoming Outdoor Council looks forward to the responses from the NRC staff on its concerns related to the Bison Basin Project.

Sincerely,

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cc: Robert Sundin, Director Wyoming DEQ
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