## StrataRossLAPEm Resource

From: Moore, Johari

**Sent:** Friday, January 06, 2012 3:25 PM

To: 'Ben Schiffer'

Cc: StrataRossLA Resource

**Subject:** FW: Ross Project SEIS Scoping Comment Summary Report **Attachments:** Ross Project SEIS Scoping Comment Summary Report.docx

Hi Ben,

I put all the comments together. I thought you might find this useful.

Johari

----Original Message----

From: Moore, Johari

Sent: Thursday, January 05, 2012 3:03 PM

To: Waldron, Ashley; Hsueh, Kevin; Barkman Marsh, Molly; Saxton, John; Safford, Carrie; Doris

Minor; james bashor@blm.gov; Bjornsen, Alan

Cc: Swain, Patricia; Davis (FSME), Jennifer; Yilma, Haimanot Subject: Ross Project SEIS Scoping Comment Summary Report

Please find the subject document attached.

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From: Moore, Johari

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## **Ross Project SEIS Scoping Comments**

- 1. In the future, the NRC should publish notices in all three county papers in order to better serve the public.
- 2. Do the right thing and prevent Strata Energy from utilizing the proposed site.
- 3. The NEPA analysis should occur concurrently with the license review, not after the fact.
- 4. NRC needs to take a hard look at the adequacy of its existing regulations for uranium recovery and consider new enforceable regulations that will prevent or mitigate environmental impacts.
- 5. NRC is currently engaged in a rulemaking initiative that would clarify the requirements for groundwater protection at ISR facilities. This rulemaking has the potential to significantly impact how NRC will regulate the Ross Project. The SEIS should fully discuss this rulemaking and explain how the rulemaking is or is not considered by NRC in its NEPA analysis.
- 6. Do not simplify the review by referring to the Generic EIS when analyzing impacts of Strata's project. The GEIS dramatically underestimates environmental impacts of ISR projects and is not easily applied at the site-specific level. The Ross Project area is unique. Also, the Black Hills are unique and hydrogeologically complex.
- 7. NRC should conduct a new EIS for the Ross Project instead of an SEIS.
- 8. The purpose and need for the Ross Project SEIS should not follow what was provided for the first 3 SEISs. NRC received detailed comments outlining why the purpose and need statements for the first 3 SEISs did not comply with NEPA mandates.
- 9. NEPA mandates consideration of both short- and long-term effects. Environmental impacts are not reduced below the significance threshold merely because of the fact that the effects are temporary.
- 10. Develop a reasonable set of alternatives, including a range of reasonable wastewater disposal alternatives (i.e. deep well injection, solar evaporation ponds, land application, and surface water discharge). The alternatives cannot be limited to (1) no action, (2) permit as planned, and (3) mining options that are not technically feasible and not even analyzed in detail as has been done in past NRC documents and in Strata's ER.
- 11. Consider that the proposed project area has over 5,000 abandoned drill holes, due to past uranium exploration, oil exploration, and seismic testing in the 1960's and 1970's. Some of these wells were likely improperly plugged and abandoned. The companies' version of plugging a hole was to place a wedged wooden 5X6 into the hole. Several of these ran water for years, subsequently caving in and the water no longer reaches the surface. This occurred all over this area. Therefore, the improperly plugged wells can connect the aquifers and may cause cross contamination to aquifers, consequently contaminating aquifers that provide water for drinking and livestock, with deeper aquifers. If the in-situ uranium leaching happens in this area, the possibility of

- contamination is immense. This process is too risky to our drinking water, which is already in short supply. Water is first medicine. The SEIS should detail whether casing and capping requirements are sufficient to prevent migration of fluids.
- 12. Consider the track record of spills, excursions, and pond leaks at previous uranium mines in Wyoming, Nebraska, and Texas.
- 13. When discussing impacts to water resources, the SEIS should include detailed information from the WDEQ UIC permit, including discharge zones, well locations, groundwater classifications, monitoring requirements, and plugging and abandonment procedures.
- 14. The SEIS should disclose the proposed injection formation and a description of any USDWs that may occur above or below the proposed Class I or Class V injection zones.
- 15. The SEIS should include any relevant information on existing aquifer exemptions in the vicinity of the proposed Ross Project that have been approved by the permitting agency.
- 16. The SEIS should include a discussion of the process by which UIC permits are issued and the environmental and safety factors that are considered in their approval in order to clearly explain the mitigation measures/design features that help to prevent potential adverse impacts.
- 17. The SEIS should provide a thorough characterization and disclosure of potential impacts to all nearby surface water resources, including ephemeral streams and nearby Oshoto Reservoir and identification and description of the connectivity of any spring and groundwater to surface water. This characterization may include maps and descriptions of surface water resources, including acreages and channel lengths, habitat types, values and functions of these waters. The analysis should identify any agricultural, domestic, and public water supply wells or intakes near the Ross Project.
- 18. The SEIS should evaluate construction, design, and operation practices (such as the permit requirements in an NPDES stormwater permit) that will be used to minimize erosion and to control stormwater runoff from the site.
- 19. The SEIS should address Strata's need to submit a construction approval application to EPA for storage ponds. EPA would like to collaborate with NRC in reviewing the information required by 40 CFR 192.32(a) Subpart W for the wastewater storage ponds at the Ross Project.
- 20. Consider that the proposed ISR process has an extremely high consumptive use of water, which has the potential to draw down the aquifers that provide drinking water and water for livestock. The pre-mining drawdown of the Fox Hills aquifer, since 1980, due to the presence of the oil field water supply wells and other usage is already at a 200' drop in level, according to Strata Energy sources. Several landowners in the area have had to re-drill to deeper depths or move their wells entirely. To add the high water consumption of an ISR processing site to these current conditions and problems will have an extreme negative impact on our area, and should be carefully researched and reviewed. NRC should consider alternatives and mitigation measures to reduce the significance of these impacts.

- 21. To date, not a single uranium project has fully restored an aquifer to pre-mining water quality. Elevated levels of arsenic, molybdenum, selenium, vanadium, and uranium are often present at higher levels than baseline even after groundwater restoration. Additionally because of the mining solution, elevated levels of sodium, carbonate, or sulfate are present. Mining may also increase total dissolved solids and change pH levels. Some have been unable to stop the oxidation process at all, even after the aquifer has been considered "restored". Strata Energy does not propose any new methods for restoration, so the impact from this issue will be extreme with the Ross Project. Please fully discuss reclamation standards and how those standards will be monitored and enforced.
- 22. Minimize light pollution and other industrial impacts to landowners in the Oshoto area.
- 23. Minimize light pollution and other industrial impacts to Devil's Tower National Monument. The SEIS should fully address all impacts to Devils Tower and its environs, including its visual or aesthetic resources. The land area to be disturbed is a part of the sacred landscape of Mahto Tipila (Devils Tower/Bear Lodge). Many irreplaceable archaeological, historic, and cultural treasures will be destroyed if this project is allowed to proceed.
- 24. Legal land ownership of all the land in northeastern Wyoming, which includes the land for this project must be resolved before any kinds of mining or drilling projects can begin, as the land is within the confines of the Fort Laramie Treaty of 1868 which is supported by Article VI of the Constitution of the United States, and the March 3rd Act of 1871 which states: "... That nothing herein contained shall be construed to invalidate or impair the obligation of any treaty heretofore lawfully made and ratified with any such Indian nation or tribe..."
- 25. Consider the potential for loss of use of public lands for other uses such as livestock grazing, hunting, and other recreational uses. Minimize these impacts.
- 26. Minimize impacts from truck traffic (including damage to county roads), dust, and noise. Strata's plan to provide help with county road maintenance should be scrutinized heavily and they should be held by legal document to provide assistance in repair, maintenance, and especially dust control.
- 27. Consider the cumulative impacts (e.g. to water use and traffic) of the various past, present, and future industries in the area [e.g. past uranium exploration and activity (e.g. Nubeth test project), oil and gas operations, other mineral and non-mineral activity in the area, other proposed UR projects in the Lance District, Crook County, and the Powder River Basin].
- 28. The SEIS should disclose the background radiation levels as well as the potential impacts to human health from exposure to radiation from the Ross Project. ANL's MILDOS-AREA should be used to predict the radiological dose exposure received by individuals within an 80-km radius of the Ross Project. The cumulative impact analysis to public health from radiation exposure should consider the situation where cattle and game that feed on vegetation or watersheds contaminated with dust containing radionuclides are ingested by humans.

- 29. Existing air quality conditions should be presented and National Ambient Air Quality Standards, Prevention of Significant Deterioration standards, and air quality related values (AQRVs), including visibility impairment, should be addressed.
- 30. The amount of stationary, mobile and non-road source emission activities, including hazardous air pollutants from construction, operation and decommissioning phases, are typically quantified and disclosed.
- 31. The emissions inventory should make use of commonly accepted emission factors from reliable publicly available sources, such as EPA's AP-42, EPA's NONROAD mobile source program and manufacturer supplied data.
- 32. If emissions are substantial, the SEIS should evaluate and disclose air quality impacts and, if necessary, detail mitigation steps that will be taken to minimize associated adverse impacts.
- 33. The SEIS should include a discussion of global climate change and greenhouse gas emissions from the project. Potential greenhouse gas mitigation measures should be discussed in the SEIS.
- 34. EPA recommends an inter-agency air quality workgroup be formed for projects that may have substantial pollutant emissions to discuss the approach to air quality analysis, the results of the analysis, and appropriate mitigation measures. An air quality workgroup might include members from the EPA, the applicable State(s), and any other Federal or Tribal agency with management responsibilities in the area (i.e., the National Park Service, the U.S. Forest Service, the U.S. Fish and Wildlife Service). One of the primary purposes of an air quality workgroup is to provide feedback to the lead agency at the earliest stages of SEIS development, which can reduce costly delays. EPA Region 8 recommends the approach to analyze and predict air quality impacts be documented in an Air Quality Modeling Protocol and be fully vetted with the air quality workgroup. An Air Quality Modeling Protocol provides a "roadmap" for how the air analysis will be conducted and the results presented. It describes the model that will be used for analysis, including model settings, modeling boundaries, and important model inputs such as meteorology, background data, and emission inventories. The Protocol generally presents the standards and thresholds to which the air impact results will be compared.
- 35. The extent of wetland areas near the project area should be mapped and described in the SEIS, including a formal wetland delineation to identify any jurisdictional wetlands or waters of the U.S. that are present on the project area. If any wetland areas should be disturbed by the proposed facility, the SEIS should include a mitigation plan for wetland losses. The SEIS should describe how NRC will show compliance with Executive Order 11990, Protection of Wetlands--which directs federal agencies to provide leadership and take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in carrying out agency's responsibilities--including how wetlands will be identified and avoided, and how impacts will be mitigated.
- 36. NRC should consult with the U.S. Army Corps of Engineers to determine the applicability to waters in the project area of Clean Water Act (administered jointly by EPA and

- USACE to regulate discharge of dredged or fill material into waters of the US) Section 404 permit requirements.
- 37. The SEIS should address potential socio-economic and environmental justice impacts to communities, e.g. within Crook and Campbell Counties, in the SEIS. The assessment should include data from census surveys and local and regional sources on population, employment and income, housing, community services and facilities, fiscal conditions, recreation, and cultural aspects. An analysis of the cumulative impacts on those communities already overburdened by impacts from booming oil and gas and coal development, resulting in overtaxed county services for roads, police, crime, drug abuse, emergency response, affordable housing, and labor shortages should be provided. The EJ analysis should consider impacts to minority, low-income, or tribal communities in the area as well as determine whether impacts may be disproportionately high and adverse. Mitigation strategies, monitoring, and preferences expressed by the affected community should be considered.
- 38. Careful studies need to be made concerning the nesting areas that are presently used at the Oshoto Reservoir by many waterfowl that migrate through and also remain throughout the summer, and how this will affect the breeding and future of waterfowl populations.
- 39. Careful consideration should be made concerning the proposed location for the storage ponds holding contaminated water, as the currently proposed site is directly next to the current Oshoto reservoir. Careful consideration should be taken as to how Strata will be able to keep the migrating waterfowl from using the contaminated ponds rather than the reservoirs.
- 40. The SEIS should include a summary of the status and trends of analysis area ESA-listed species (e.g. Black-Footed Ferret and Greater Sage Grouse) and potential suitable habitat, disclosure of potential impacts to these resources, and the results of USFWS coordination, including any recommended design criteria, monitoring, and mitigation requirements.
- 41. Cooperative agreements between WGFD, Wyoming Dept. of Agriculture, USFWS, Wyoming State Grazing Board, the oil and gas industry, and BLM have identified significant threats to sage grouse and associated conservation measures have been developed and are being reviewed by USFWS. These initiatives should be consulted to determine sage grouse lek survey requirements.
- 42. The surrounding project area should be surveyed to determine if prairie dogs, black footed ferrets, burrowing owls, nesting raptors, special-status plant species, and other high-interest species are present and mapped according to the USFWS guidelines.
- 43. NRC should consult with USFWS and WGFD to determine if any additional surveys for crucial big game ranges are needed to understand the project impacts.
- 44. The SEIS should include an analysis of habitat fragmentation impacts and impacts to sage grouse, deer, antelope, raptors, migratory birds, and other species of concern from proposed uranium operations. Impacts to wildlife resources result from new roads and power lines in the area, increased traffic, noise, and other human activities, and by

- waste disposal methods such as evaporations ponds, land application of waste or discharge of wastes into ephemeral streams.
- 45. Foreign ownership and foreign control of nuclear materials is a concern. NRC should consider the likelihood that uranium from this project will be exported and how this export will impact energy or national security interests, particularly in the context of the purpose and need of this project as well as financial assurance and oversight.
- 46. NRC regulations prevent the agency from giving a license if the corporation "is owned, controlled, or dominated by an alien, a foreign corporation, or foreign government." How do these rules apply to companies like Strata? What financial documents are considered for financial assurance? In order to protect the public, financial assurance must only be satisfied by cash-equivalents held in FDIC insured U.S. banks.
- 47. The SEIS should include an assessment of the financial assurance requirements for the Ross Project and how those financial assurance requirements will or will not cover the likely foreseeable costs of reclamation and groundwater cleanup. Environmental and socio-economic impacts of a company default should be considered in the SEIS.
- 48. The General Mining Law of 1872 does not allow the federal government to collect royalties for the development of federal minerals. The NRC should consider this loss of revenue and resulting socio-economic impacts during its NEPA review or any cost-benefit analysis for the Ross Project.
- 49. The SEIS should include a disclosure and analysis of how uranium leases are acquired and the specific rights of surface landowners where uranium mining has taken place and is proposed.
- 50. The SEIS should disclose plausible 11e2 byproduct material disposal locations and analyze impacts related to disposal at those locations during decommissioning. Additionally, the SEIS should address impacts that could result from the failure to have a disposal facility available for Ross Project decommissioning.
- 51. The NRC's EIS must meet the requirements of CEQ regulations, especially if BLM is a cooperating agency. In most cases, including consideration of alternatives, mitigation measures, and cumulative impacts, NRC's regulations are not a sufficient substitute for CEQ regulations.
- 52. NRC does not have a field office in Wyoming—the nearest field office is in Texas. Inspectors in the Texas field office are mostly focused on health and safety related to radiation releases. The individuals who have the necessary qualifications to monitor and inspect ISR facilities related to water contamination are located at NRC headquarters. This situation is unacceptable and results in a situation where industry is self-enforcing its own violations. The SEIS should fully discuss NRC personnel that would be available for inspection and enforcement duties at the Ross Project and whether environmental impacts will result from NRC's lack of inspection and enforcement.
- 53. Consider what would happen with one major earthquake and all the so-called safety measures.