

Miller, Debra

From: Yu, Irene - FSME
Sent: Monday, December 08, 2008 9:09 AM
To: Paul_Beels@blm.gov
Cc: Shroff, Behram
Subject: Proposed TOC for EAs for Nichols Ranch and Moore Ranch
Attachments: Nichols and Moore EA_Outline.doc

Paul,

Per our conversation last week, attached is the proposed table of contents for the environmental assessments (unless our analysis shows that an EIS is warranted) for Nichols Ranch and Moore Ranch. Please let me or Behram know if you have any questions. Thanks.

Irene

NICHOLS RANCH AND MOORE RANCH ISL EA OUTLINE

1. Chapter 1: Introduction
 - 1.1. Purpose
2. Chapter 2: In-Situ Leach Uranium Recovery and Alternatives
 - 2.1. Overview of ISL Uranium Recovery
3. Chapter 3: Description of the Affected Environment
 - 3.1. Introduction
 - 3.2. Land Use
 - 3.3. Transportation
 - 3.4. Geology and Soils
 - 3.5. Water
 - 3.5.1. Surface Waters
 - 3.5.2. Wetlands and Waters of the US
 - 3.5.3. Groundwater
 - 3.5.3.1. Uranium-Bearing Aquifers
 - 3.5.3.2. Surrounding Aquifers
 - 3.6. Ecology
 - 3.6.1. Terrestrial
 - 3.6.2. Aquatic
 - 3.6.3. Threatened and Endangered Species
 - 3.7. Noise and Air Quality
 - 3.7.1. Meteorology and Climatology
 - 3.7.2. Air Quality
 - 3.8. Historical and Cultural Resources
 - 3.8.1. Cultural Resources Overview
 - 3.8.2. Historic Properties Listed in the National And State Registers
 - 3.8.3. Tribal Consultation
 - 3.8.4. Places of Cultural Significance
 - 3.9. Visual/Scenic Resources
 - 3.10. Socioeconomic
 - 3.10.1. Demographics
 - 3.10.2. Income
 - 3.10.3. Housing
 - 3.10.4. Employment Structure
 - 3.10.4.1. State Data
 - 3.10.4.2. County Data
 - 3.10.5. Local Finance
 - 3.10.6. Education
 - 3.10.7. Health and Social Services
 - 3.11. Public and Occupational Health
 - 3.11.1. Background Radiological Conditions

- 3.11.2. Public Health and Safety
- 3.11.3. Occupational Health and Safety
- 3.12. References

- 4. Chapter 4: Environmental Impacts of Construction, Operation, Aquifer Restoration, and Decommissioning Activities
 - 4.1. Introduction
 - 4.2. Land Use Impacts
 - 4.2.1. Construction Impacts to Land Use
 - 4.2.2. Operation Impacts to Land Use
 - 4.2.3. Aquifer Restoration Impacts to Land Use
 - 4.2.4. Decommissioning Impacts to Land Use
 - 4.3. Transportation Impacts
 - 4.3.1. Construction Impacts to Transportation
 - 4.3.2. Operation Impacts to Transportation
 - 4.3.3. Aquifer Restoration Impacts to Transportation
 - 4.3.4. Decommissioning Impacts to Transportation
 - 4.4. Geology and Soils Impacts
 - 4.4.1. Construction Impacts to Geology and Soils
 - 4.4.2. Operation Impacts to Geology and Soils
 - 4.4.3. Aquifer Restoration Impacts to Geology and Soils
 - 4.4.4. Decommissioning Impacts to Geology and Soils
 - 4.5. Water Resources Impacts
 - 4.5.1. Surface Water Impacts
 - 4.5.1.1. Construction Impacts to Surface Water
 - 4.5.1.2. Operation Impacts to Surface Water
 - 4.5.1.3. Aquifer Restoration Impacts to Surface Water
 - 4.5.1.4. Decommissioning Impacts to Surface Water
 - 4.5.1.5. Groundwater Impacts
 - 4.5.1.5.1. Construction Impacts to Groundwater
 - 4.5.1.5.2. Operation Impacts to Groundwater
 - 4.5.1.5.2.1. Operation Impacts to Shallow (Near-Surface) Aquifers
 - 4.5.1.5.2.2. Operation Impacts to Production and Surrounding Aquifers
 - 4.5.1.5.2.3. Operation Impacts to Deep Aquifers Below the Production Aquifers
 - 4.5.1.5.3. Aquifer Restoration Impacts to Groundwater
 - 4.5.1.5.4. Decommissioning Impacts to Groundwater
 - 4.6. Ecological Resources Impacts
 - 4.6.1. Construction Impacts to Ecological Resources
 - 4.6.2. Operation Impacts to Ecological Resources
 - 4.6.3. Aquifer Restoration Impacts to Ecological Resources
 - 4.6.4. Decommissioning Impacts to Ecological Resources
 - 4.7. Air Quality Impacts
 - 4.7.1. Construction Impacts to Air Quality
 - 4.7.2. Operation Impacts to Air Quality

- 4.7.3. Aquifer Restoration Impacts to Air Quality
- 4.7.4. Decommissioning Impacts to Air Quality
- 4.8. Noise Impacts
 - 4.8.1. Construction Impacts to Noise
 - 4.8.2. Operation Impacts to Noise
 - 4.8.3. Aquifer Restoration Impacts to Noise
 - 4.8.4. Decommissioning Impacts to Noise
- 4.9. Historical and Cultural Resources Impacts
 - 4.9.1. Construction Impacts to Historical and Cultural Resources
 - 4.9.2. Operation Impacts to Historical and Cultural Resources
 - 4.9.3. Aquifer Restoration Impacts to Historical and Cultural Resources
 - 4.9.4. Decommissioning Impacts to Historical and Cultural Resources
- 4.10. Visual/Scenic Resources Impacts
 - 4.10.1. Construction Impacts to Visual/Scenic Resources
 - 4.10.2. Operation Impacts to Visual/Scenic Resources
 - 4.10.3. Aquifer Restoration Impacts to Visual/Scenic Resources
 - 4.10.4. Decommissioning Impacts to Visual/Scenic Resources
- 4.11. Socioeconomic Impacts
 - 4.11.1. Construction Impacts to Socioeconomics
 - 4.11.2. Operation Impacts to Socioeconomics
 - 4.11.3. Aquifer Restoration Impacts to Socioeconomics
 - 4.11.4. Decommissioning Impacts to Socioeconomics
- 4.12. Environmental Justice
- 4.13. Public and Occupational Health and Safety Impacts
 - 4.13.1. Construction Impacts to Public and Occupational Health and Safety
 - 4.13.2. Operation Impacts to Public and Occupational Health and Safety
 - 4.13.2.1. Radiological Impacts to Public and Occupational Health and Safety From Normal Operations
 - 4.13.2.2. Radiological Impacts to Public and Occupational Health and Safety From Accidents
 - 4.13.2.3. Non-radiological Impacts on Public and Occupational Health and Safety From Normal Operations
 - 4.13.2.4. Non-radiological Impacts on Public and Occupational Health and Safety From Accidents
 - 4.13.3. Aquifer Restoration Impacts to Public and Occupational Health and Safety
 - 4.13.4. Decommissioning Impacts to Public and Occupational Health and Safety
- 4.14. Waste Management Impacts
 - 4.14.1. Construction Impacts to Waste Management
 - 4.14.2. Operations Impacts to Waste Management
 - 4.14.3. Aquifer Restoration Impacts to Waste Management
 - 4.14.4. Decommissioning Impacts to Waste Management
- 4.15. References

5. Chapter 5: Cumulative Effects

- 5.1. Introduction
 - 5.1.1. Other Past, Present, and Reasonably Foreseeable Future Actions
 - 5.1.2. Concurrent Actions
- 5.2. Site-Specific Cumulative Effects Analysis
- 5.3. References

- 6. Chapter 6: Best Management Practices, Mitigation Measures, and Management Actions to Mitigate Adverse Environmental Impacts
 - 6.1. Introduction
 - 6.1.1. Best Management Practices
 - 6.1.2. Management Actions
 - 6.2. Planned Best Management Practices, Management Actions, and Mitigation Measures
 - 6.3. References

- 7. Chapter 7: Environmental Monitoring Activities
 - 7.1. Introduction
 - 7.2. Radiological Monitoring
 - 7.2.1. Airborne Radiation Monitoring Program
 - 7.2.2. Soils and Sediments Monitoring
 - 7.2.3. Vegetation, Food, and Fish Monitoring
 - 7.2.4. Surface Water Monitoring
 - 7.2.5. Groundwater Monitoring
 - 7.3. Physiochemical Monitoring
 - 7.3.1. Groundwater Monitoring
 - 7.3.1.1. Pre-Operational Groundwater Sampling
 - 7.3.1.2. Groundwater Quality Monitoring
 - 7.3.2. Well Field and Pipeline Flow and pressure Monitoring
 - 7.4. Ecological Monitoring
 - 7.5. References

- 8. Chapter 8: Consultations

- 9. Chapter 9: Summary of Environmental Consequences

- 10. List of Preparers