



United States
Department of
Agriculture

Forest
Service

Black Hills National Forest
Supervisor's Office

www.fs.usda.gov/blackhills

1019 N. 5th Street
Custer SD 57730-8214
Tel. 605/673-9200
FAX 605/673-9350

File Code: 1950 Dewey-Burdock
Date: January 7, 2013

2013 JAN 28 PM 3:21

RULES AND DIRECTIVES
BRANCH
USNRC

RECEIVED

CINDY BLADLEY, CHIEF
RULES, ANNOUNCEMENTS AND DIRECTIVES
OFFICE OF ADMINISTRATION
U.S. NUCLEAR REGULATORY COMMISSION
MAILSTOP TWB-05-B01M
WASHINGTON, DC 20555-0001

11/26/2012

77FR 70486

168

Dear Ms. Bladley:

The Black Hills National Forest has review comments on the Draft Supplemental Environmental Impact Statement (SEIS) for the Dewey-Burdock *In-Situ* Recovery (ISR) Project. The facility and project area are not proposed on National Forest System lands, but are directly adjacent to these lands in southwestern Custer and Fall River counties in South Dakota.

In general, since National Forest System land is upslope from the project, it is generally expected there may be little impact to these lands that border the project area. As with any project, proper implementation, monitoring and oversight by the appropriate regulatory agencies are key to the project's success.

As we consider this project from a ground water perspective, though it is uncertain, it is generally expected that impacts to the aquifers under National Forest System (NFS) lands may be limited. The NFS lands are up gradient from the project and the NFS land surface is the recharge zone for the aquifer. As stated on page 4-57 of the SEIS, "Most of the water withdrawn from the aquifer is returned to the aquifer." Based on disclosure in the SEIS proposed water withdrawal from the aquifer is expected to have limited impact, if any, on the aquifer located under NFS lands.

The SEIS makes note of a meeting (held on December 3, 2009) between the Nuclear Regulatory Commission and Forest Service. During that meeting, the Forest Service expressed concerns about the project's potential for impact on Cascade Springs. Cascade Springs discharges ground water from the Madison and/or Minnelusa aquifers which are also present in the project area. Water from the Madison aquifer will be used in the project as process water and the Minnelusa aquifer has the potential to be used for the disposal of liquid wastes via deep well injection. In section 5.5.2 Ground Water the SEIS discusses the potential impact to Cascade Springs and concludes the proposed project will have a small impact on ground water discharge at the springs. Though there is some uncertainty, while Cascade Springs is 25 miles east-southeast from the proposed project and not down gradient, we generally agree that the project may have little to no impact on the Springs. Would NRC consider monitoring of water quantity and quality at Cascade Springs, and what actions might be taken if changes traceable to the project are detected?

SUNSI Review Complete
Template = ADM - 013
E-RIDS = ADM -03
Add= H. Y... (hxy4)



Attached you will find a map which displays the locations of seven wells located on the Black Hills National Forest and private land near the ISR project area. They are named as follows: Hawthorne Well #2, Dewey Well, Cook Well, Lloyd Well (otherwise known as Fenceline Well), Pass Creek Well, Putnam-Smith Well, and the Bennett Well.

These wells provide water for 696 cow/calf pairs and 122 yearling cattle permitted on the NFS land within the Elk Mountain, Pass Creek, Logan Flats and Driftwood Canyon Grazing Allotments. Livestock on the National Forest will typically utilize water from these wells June 1st until October 25th annually. Impacts to livestock well water quantity and/or quality which may result in the discontinued or decreased use of water from these wells by livestock, could negatively impact livestock grazing rotations on the National Forest System land. These impacts would include decreased livestock distribution resulting in impacts to Forest vegetative resources and/or decreased livestock numbers.

Specific Comments

1. Page 1-16; paragraph starting on line 21. This paragraph mentions Cascade Springs and Keith Springs. There is no spring named Keith. Cascade Springs is located at the J.H. Keith recreation area. The sentence should be reworded to read "USFS staff noted a concern about the cumulative groundwater effects of the project on the USFS-managed J.H. Keith Cascade Springs recreation area where Cascade Springs is located." Page 5-32; paragraph starting on line 29. Same comment as above. Paragraph should be re-written so the reference to Keith Springs is removed.
2. On page 4-55, lines 17-19 state that during construction if the water appropriation permit is denied, it could significantly impact domestic and livestock wells, as the project would then need to take water from the Inyan Kara aquifer where we believe most of our livestock wells draw water from. The document also states that if this were to happen, it would be necessary to identify an alternate source of water or reduce pumping rates to reduce these impacts to water quantity.

In addition, on page 9-7, Table 9-1, Summary of Environmental Impacts of the Proposed Action, Groundwater Section, states that, "vertical and horizontal excursions, will limit the potential for undetected groundwater excursions that could degrade groundwater quality." In the event that groundwater quantity and/or quality would be negatively impacted such that livestock are unable to fully utilize these existing wells during any phase of this project, we would ask that an alternate source of water be made available for those livestock on the National Forest.

3. Page 4-69 4.5.2.1.2.2.1 Shallow (Near-Surface) Aquifers, paragraph starting on line 22. This paragraph discusses the fact that some of the proposed land application plots in the Burdock area are situated over the recharge area for the Fall River aquifer. We recommend that if surface land application is used for disposal of liquid wastes, the plots be re-configured so they are not located over the recharge area for the Fall River aquifer.

4. Page 5-1 Section 5.1.1, Other Past, Present and Reasonably Foreseeable Future Actions – The information in this section appears to be accurate, but we believe two other projects should be included in this analysis. The first is the Southern Black Hills Water System project. A private corporation, the Southern Black Hills Water System Board, has begun construction of a water pipeline to convey potable water from a well north of Hot Springs, South Dakota, to clients living south of Pringle, SD. This area lies to the north and east of Edgemont and the Dewey-Burdock Project Area, in Custer County, South Dakota. The Forest Service decision on this project approved a pipeline crossing of National Forest System lands administered by the Black Hills National Forest at two points. The environmental assessment (EA) included analysis of impacts to groundwater levels from pumping, including a description of aquifers and flow rates. Although this project is upgradient from Dewey-Burdock NRC may wish to consider this information in this analysis. The EA and decision document for this project may be found on-line at <http://www.fs.fed.us/nepa/fs-usda-pop.php/?project=32281>

The second project is the proposed rare earth element mine north of Sundance, Wyoming. The proponent of this project, Rare Element Resources, Inc. (RER), has submitted a draft plan of operations (POO) to the Forest Service for review. It is expected the Forest Service would begin environmental analysis in early 2013. The proposal is expected to include an open pit mine on NFS lands administered by the Black Hills National Forest, and a processing plant located some 40 miles to the south at Upton, Wyoming. It is unclear exactly what effects this proposal could have, but effects to surface and groundwater could be an issue. Also, we understand that if the processing wastes at the Upton hydrometallurgy plant include certain levels of thorium and uranium, these could apparently be subject to regulation by NRC. The Environmental Protection Agency Region 8 office authored a report that may provide more useful information on this proposal. (EPA Document-908R11003, August 2011).

A description of approved projects and proposals under analysis, and analysis documents, may be found on the Forest website at <http://www.fs.usda.gov/projects/blackhills/landmanagement/projects>

5. Page 5-15, Table 5.1-4 – This table should be updated as follows:
The date for the eighth entry, USFS Phase II Amendment, is incorrect and should be changed. The NEPA decision was signed October 31, 2005.

Add the following dates and project decisions:

May 7, 2010 – USFS, Final EIS and Record of Decision, Black Hills National Forest Travel Management Plan, to designate a motorized travel system, Lawrence, Meade, Pennington, Custer and Fall River Counties, South Dakota; and Crook and Weston Counties, Wyoming.

January 27, 2012 – USFS, Final EA and Decision Notice/FONSI, Southern Black Hills Water System Argyle Road Service Area Special Use Permit – approves occupancy of NFS lands by proponent to provide potable water to customers along the Argyle Road, BHNF Custer County, SD.

December 10, 2012 – USFS, Final EIS and Record of Decision, Mountain Pine Beetle Response Project, Black Hills National Forest – to implement multiple resource management actions to reduce the threat to ecosystem components, including forest resources, from the existing insect and disease (mountain pine beetle) epidemic and help protect local communities and resources from large scale, severe wildfire -- Lawrence, Meade, Pennington, Custer and Fall River Counties, South Dakota; and Crook and Weston Counties, Wyoming.

January 2009 – USFS/BLM Dewey Conveyor Project Draft Environmental Impact Statement – whether or not to issue a special use permit for a 6.6 mile conveyor along the Dewey Road and to limestone claims northeast of Dewey – Custer County, South Dakota.

6. Pages 7-9; Section 7.3.1.2 Groundwater Quality Monitoring. This section discusses in part the spacing and number of production zone monitoring wells. However, it does not discuss the actual construction details of the monitoring wells. Long well screen lengths may cause dilution of depth-specific parameters during sampling, and thereby provide inaccurate information about whether an excursion of lixiviant has occurred. Depending on the parameters to be monitored and the thickness of the production zone it may be necessary to construct nested wells at some locations.
7. On page 9-6, Table 9-1, Summary of Environmental Impacts of the Proposed Action, Groundwater Section, states that “The applicant will provide alternative water sources in the event of significant drawdown to private wells adjacent to the proposed project area.” I would ask that in the event of significant well water drawdown, alternative water sources also be provided for those wells located on the National Forest.
8. Page xxviii of the Executive Summary the project purpose and need for the proposed federal action is stated as “to either grant or deny the applicant a license to use ISR technology to recover uranium and produce yellowcake at the proposed projet.” On page 1-3 “The purpose and need for the proposed federal action is to provide an option that allows the applicant to recover uranium and produce yellowcake *slurry* at the proposed project site.” These two statements are slightly different and it is unclear why the difference is presented; are there different impacts with production or transportation of yellowcake slurry versus yellowcake?
9. Page xxxi of the Executive Summary specifically addresses increased traffic on the Dewey Road during construction (a sixteen fold increase) and during project operation (a fivefold increase). In both situations this is identified as a Small to Moderate impact and expressed as such elsewhere in the document. In a relatively remote area such as the Dewey Road which has a gravel surface the articulation of the project impacts need to be clear. The 2009 Dewey Conveyor DEIS also contains traffic and dust considerations on the Dewey Road which crosses National Forest System land with an easement issued to Custer County.

Thank you for the opportunity to comment on the SEIS on the Dewey-Burdock ISR Project adjacent to the Black Hills National Forest.

Sincerely,



CRAIG BOBZIEN
Forest Supervisor

Enclosure: Map: Wells Near Project Area

Wells Associated With National Forest Service Management Near the Proposed Project Area

