

Executive Summary

Overview

This Decision Analysis and Environmental Impact Analysis report documents the department's evaluation of an application submitted by Energy Fuels Resources Corporation (EFR) for the proposed Piñon Ridge Uranium Mill in Montrose County, Colo. This Decision Analysis provides the basis for decisions made by the department in approving the license application. It describes the application, regulatory requirements, environmental and social impacts, the process undertaken to conduct the review (including outreach to stakeholders), and requests for additional information. In addition, the document discusses requirements the department is imposing on EFR for the license.

Project Background

This is the first proposal for a new conventional uranium mill (as distinct from an in-situ leaching operation) in the United States in a generation. The November 2009 license application to the department comprised 15 volumes, and department staff submitted more than 400 technical questions during the technical review. The Montrose County Commissioners submitted comments on the Environmental Report, and public meetings held by Montrose County Commissioners, the applicant and the department yielded literally hundreds of stakeholder comments.

The site is located in the Paradox Valley of western Montrose County, approximately seven miles east of the unincorporated community of Bedrock and 12 miles west of the town of Naturita. The proposed facility includes an administration building, a 17-acre mill, tailing ponds totaling approximately 90 acres, a 40-acre evaporation pond (expansion capacity to 80 acres), an approximately six-acre ore storage pad, and access roads.

Eighty-eight percent of the land within five miles of the site is undeveloped land administered by the BLM and 12 percent is privately owned. Some lands within the vicinity of the site, including the site itself, are currently used to graze livestock. The Cotter JD-7 open pit uranium mine, currently inactive, is adjacent to the mill site on the east. Energy Fuels will obtain the bulk of the ore they process from their mines at Gateway, Colo. and La Sal, Utah.

The climate in the Paradox Valley is arid. The Dolores River crosses the east-west valley from southwest to northeast at Bedrock. The western end of the valley receives surface water runoff and ground water from the mountains to the west that flows east toward the Dolores River and is used extensively for irrigated agriculture. As a result, the west end of the valley contains fields, clusters of trees around ditches and streams, and a few orchards. The eastern end of the valley is stark and dry with desert vegetation. Only a few residences exist east of the Dolores River and no concentration of structures exists.

The Review Process

Colorado is an Agreement State with the U.S. Nuclear Regulatory Commission (NRC) and therefore is the lead agency with authority to regulate uranium milling in Colorado. The department's Radiation Program is responsible for licensing the possession of radioactive materials in Colorado under the Radiation Control Act. In addition to the statutory requirements, the *Colorado Rules and Regulations Pertaining to Radiation Control* (the regulations) implement various provisions of the RCA.

The department regulations require that a preliminary decision to issue a uranium mill license include a written analysis of the basis for the decision. The purpose of this decision analysis serves to satisfy the requirement to document:

- the assessment of the radiological and non-radiological impacts to public health;
- the assessment of any impact on any waterway and ground water;
- consideration of alternatives to the activities to be conducted; and
- consideration of the long-term impacts of the licensed activities.

The Environmental Impact Analysis reviews the various projected social and economic impacts; geologic, hydrologic, radiological, chemical, and other physical parameters; transportation impacts; and proposed offsets or mitigations to identified impacts.

License Decision

Based on the analyses conducted and documented in the Decision Analysis and Environmental Impact Analysis, the department is granting a radioactive materials license for a 500 ton-per-day uranium mill to Energy Fuels Resources Corporation for the Piñon Ridge project.

The department's evaluation includes a determination of the project's ability to meet statutory, regulatory, and guidance requirements and sound engineering practices. The mill design and operating procedures are keyed to these requirements, as discussed in this document. Furthermore, potential impacts to the environment, economic and social features, and transportation have been considered in the decision and mitigation measures identified, where applicable, as discussed in the Environmental Impact Analysis.

The facility license is being issued pursuant to Part 3 of the regulations with all of the conditions authorizing the receipt, possession, use, and transfer of radioactive material that are necessary for an operational uranium recovery facility, along with other additional requirements and conditions that the department has deemed appropriate or necessary for licensees engaged in uranium recovery operations.

The license is subject to all the provisions of the Radiation Control Act, now or hereafter in effect, and to all rules, regulations, and orders of the department. Additionally, the license contains a number of pre-requisite conditions that detail requirements that the department has deemed appropriate or necessary that must be met by the licensee during the pre-construction, construction, and pre-operational phases of facility development. As

the facility moves through these phases and moves closer to the operational phase, the license will be amended to revise, remove, and/or add additional conditions to better reflect the current conditions of the facility.

License Conditions

The department has included conditions in the license to address specific operational or design requirements and specifies deliverables and schedules for construction, start-up and certain specific operations. Some license conditions mirror regulatory requirements important for specific activities or specify actions that go beyond the regulatory requirements where extra features or protections are desirable.

Public Process

An extensive public process was conducted by Montrose County as part of the conditional use permit review for the mill beginning in 2008, and the department conducted significant outreach and public meetings related to the radioactive materials license in 2009 and 2010.

In addition, the team contacted and shared information with local government officials, and several state agencies including:

- Colorado Department of Local Affairs
- Colorado Department of Natural Resources, Division of Wildlife
- Colorado Department of Natural Resources, State Engineer
- Colorado Department of Public Safety
- Colorado Department of Public Health and Environment, Water Quality Control Division
- Colorado Department of Public Health and Environment, Air Pollution Control Division
- Colorado Department of Transportation
- Colorado Office of Archaeology and Historic Preservation

Montrose County provided several documents for the review, including the April 20, 2010 Review of Piñon Ridge Project Environmental Report, the March 31, 2010 Draft Montrose County Socioeconomic Impact Study, and the Montrose County Master Plan 2010.

Materials generated from the numerous public meeting and hearings include meeting transcripts and notes, and supplemental information provided at these meetings. Specific meetings included:

- January 21, 2009: First Required Public Hearing (Nucla)
- February 17, 2010: Second Required Public Hearing (Montrose)
- February 18, 2010: San Miguel County Commissioner Meeting (Telluride)
- June 8, 2010: Public comment meeting (Montrose)
- June 9, 2010: Public comment meeting (Telluride)

- June 10, 2010: Availability session (Ophir)
- July 13, 2010: Public comment meeting (Naturita)
- July 13, 2010: Availability session (Paradox)

Numerous comment letters, e-mails, and cards were received and considered in the development of the license decision.

Description of Licensing Process

A Radioactive Materials License is required for entities that handle radioactive materials in Colorado. Once a license is granted, it can be amended, and a periodic (usually every five years) license renewal is necessary to update information, verify proposed activities, and validate the ability of the operator to operate within license requirements, and to protect their workers, the public, and the environment. Changes to operation, key personnel, and other aspects of the activity will require a license amendment. The department conducts routine oversight of the facility through review of documents and reporting, and onsite inspections. In addition, department staff will be on site during critical construction and start-up activities.

As required under the RCA, the department must complete the application review and draft a license (if appropriate) and decision analysis in a specified time; for the EFR application a decision is required by Jan. 15, 2011. The applicant has 60 days to review the decision analysis (and license, if appropriate) and request a formal hearing on the license. If a hearing is not requested, the license becomes final.

If requested, a hearing must be held before a hearing officer near the location of the facility in accordance with the Administrative Procedures Act, which includes specific legal processes such as formal party status, discovery, depositions, formal testimony, cross-examination, etc. The hearing officer provides his/her recommendation to the executive director of the department, and a final department decision is rendered. This decision can be appealed to District Court through an appellate process that uses the existing record to review the department's decision.

For Further Information

For further information, please contact:

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