

BEFORE THE
U.S. NUCLEAR REGULATORY COMMISSION

In the Matter of COGEMA MINING, INC. (Christensen & Irigaray Ranch Facilities)

Renewal of License SUA-1341

April 10, 2009

POWDER RIVER BASIN RESOURCE COUNCIL REQUEST FOR HEARING

Pursuant to 10 C.F.R. § 2.309, Powder River Basin Resource Council has an affected interest in this matter and we hereby file this request for hearing.

This request/petition is timely filed on April 10, 2009 based on the Federal Register Notice published at 74 Fed. Reg. 6436 (February 9, 2009).

Background

On May 30, 2008 COGEMA Mining, Inc. (hereafter “COGEMA”) submitted a License Renewal Application to the U.S. Nuclear Regulatory Commission (hereafter “NRC”) to renew Source Materials License SUA-1341 for the Christensen and Irigaray Ranch Facilities in Johnson and Campbell Counties, Wyoming. On December 29, 2008, the NRC found that the application was administratively complete to begin a technical review.

Standard of Review

Renewal of COGEMA’s license must comply with section 69 of the Atomic Energy Act, which provides that

[t]he Commission shall not license any person to transfer or deliver, receive possession of or title to, or import into or export from the United States any source material if, in the opinion of the Commission, the issuance of a license to such person for such purpose would be inimical to the common defense and security or the health and safety of the

public.

42 U.S.C. § 2099. In issuing a license, the NRC must find that “[t]he applicant’s proposed equipment, facilities and procedures are adequate to protect health and minimize danger to life or property.” 10 C.F.R. § 40.32.

In addition to these laws of specific application to NRC proceedings, the NRC and the applicant are subject to federal laws of general application, including but not limited to, the National Environmental Policy Act (NEPA), Endangered Species Act (ESA), Migratory Bird Treaty Act, National Historic Preservation Act, Clean Water Act, Safe Drinking Water Act, and the Clean Air Act. Failure to comply with some or all of these important environmental laws may involve criminal liability for the applicant and/or federal officials. *See e.g. Bennett v. Spear*, 520 U.S. 154, 174 (1997)(it is a ‘crime for ‘any person [to] knowingly violate any provision of [the ESA].’”)

Powder River Basin Resource Council Interest in This Matter

Powder River Basin Resource Council (hereafter “PRBRC”) is a nonprofit, tax-exempt organization located in Sheridan, Wyoming. PRBRC has approximately 1,000 members, the majority of whom live in rural areas of the Powder River Basin. PRBRC was formed in 1973 by ranchers and concerned citizens of Wyoming to address the impacts of mineral development on rural people and communities. PRBRC has a long standing history of advocacy working to protect people and places in the Powder River Basin, and in the past few years we have been active in uranium issues in the Powder River Basin and Black Hills areas of Wyoming. This petition is brought on behalf of PRBRC and our members who live, work, and/or recreate near COGEMA’s past and planned facilities and will be impacted in a variety of ways stemming from air, land, and water impacts caused by the facilities. PRBRC interests that will be adversely

affected if the license renewal application is approved without substantial additions and modifications include: (1) breathing clean air (2) drinking clean water that is vital to homes and businesses of PRBRC members (3) protecting the natural ecology, including wildlife and vegetation, of the region from unnecessary and potentially detrimental impacts and (4) having energy development near homes and communities where PRBRC members live, work, and/or recreate follow all applicable laws and regulations.

Relevant Facts and Positions:

PRBRC requests an oral hearing concerning the following relevant facts and positions:

(1) The license renewal application is incomplete in several aspects:

(A) The application is lacking a complete description of local hydrogeology, including groundwater flow direction and speed, confining layers, porosity, fractures, and fissures. The application fails to discuss analysis of fracturing and faulting, both natural and human-induced, which may contribute to cross-contamination of underground aquifers. The application needs to disclose how the integrity of the confining layers has been assessed.¹

(B) The application lacks a complete disclosure of COGEMA's compliance history, including documentation of past spills, underground excursions, and evaporation pond liner leaks. This compliance history is a key indicator of COGEMA's future ability to protect public health and the environment.

(C) The application fails to fully document the amount of groundwater, including Class I groundwater supplies, that will be consumed during mining operations and wellfield restoration activities. The application must be amended to contain a full and scientifically defensible analysis of groundwater drawdown and aquifer recharge in order to determine the significance

¹ The application states that "The ore-bearing strata is physically and hydraulically separate from overlying and underlying aquifer." Application at 7-21. However, there is no discussion of the basis for that statement.

(including severity and length) of groundwater impacts.

(D) The application does not contain a description of baseline (e.g. pre-mining) groundwater quality. In particular, baseline data for new mine fields should be disclosed in the application.²

(E) Given past experience, it is unlikely that groundwater quality will be restored to pre-mining conditions. The application must fully disclose the likelihood of returning water to baseline characteristics. The application should also contain an alternatives analysis of restoration methods and determine best available technology that will be required for restoration if alternative concentration limits are allowed (e.g. returning to class of use).

(F) The application needs to disclose the effectiveness of evaporation ponds as a waste disposal method given climatic conditions and amounts of waste water. If evaporation ponds are not effective, COGEMA should prioritize the use of deep disposal wells as a waste disposal method.

(G) The application needs to disclose whether the permit for the deep disposal wells will be amended or re-issued prior to use or disclose whether regulatory requirements have changed since the permit was issued in 1992. Application at 4-14.

(H) COGEMA fails to disclose and analyze impacts to wildlife and livestock habitat that will occur during mining operations and after surface reclamation. COGEMA does not discuss loss of brush density or other irreversible impacts of mining operations. The application needs to detail surface reclamation plans for the future well fields, not just reference reclamation for past well fields. Application at 6-13.

(I) The application does not contain results and analysis from recent wildlife surveys and

² It is also unclear from the application what baseline water quality is. Has baseline water quality testing already been conducted (for instance prior to any mining activity) or will it be conducted prior to re-start/expansion?

does not disclose whether additional wildlife surveys will be conducted prior to installation of new well fields. The application also fails to demonstrate any attempt to initiate consultation or otherwise ascertain from the Fish and Wildlife Service whether the proposed operations, including but not limited to the evaporation ponds, holding ponds, and any other open water, pose a threat to species protected by the Endangered Species Act and/or the Migratory Bird Treaty Act.

(G) The application lacks an analysis of whether the Pathfinder Mines Corporation Shirley Basin tailings facility will be available throughout the lifetime of COGEMA's facilities for byproduct waste disposal. An analysis of storage capacity of the licensed byproduct disposal facility is needed. If storage capacity is not sufficient, an alternative waste disposal plan must be included in the application.

(H) The application should disclose whether operating permit OP-254 for the dryer facility will be modified to comply with current air quality regulations (if regulations have changed since the permit was issued).

(I) While the application discusses past air quality monitoring activities, the application needs to discuss whether new air quality monitoring stations will be added and whether previously used stations are active and ready to be used for the re-start of operations. The application should include a map of air quality monitoring stations that will be active for this project. Additionally, the stations at Irigaray monitor both radon and particulate matter whereas the Christensen stations only monitor radon. Application at 5-59-60. The application should detail an appropriate monitoring plan for particulate matter at the Christensen project.

10 C.F.R. § 40.9 requires full and complete disclosure of all material facts in the application.

(2) COGEMA “is a subsidiary of COGEMA Resources, Inc., a wholly owned subsidiary of AREVA NC, Inc. AREVA NC, Inc. is a United States subsidiary of COGEMA, S.A.E. located in France.” Application at 5-1. “The General Manager [of the Christensen and Irigaray Facilities] reports to the President, COGEMA Mining, Inc. in Bessines Sur Gartempe, France.” Application at 5-2. The NRC may not issue a license to a corporation that is “owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government.” 40 CFR § 40.38(a). It is critically important that the issue of the Applicant’s foreign ownership be assessed in light of the Congressional mandate that nuclear material be regulated “in the national interest and in order to provide for the common defense and security and to protect the health and safety of the public.” U.S.C. § 2133(d).

(3) COGEMA operations will consume vast amounts of groundwater. This consumption will have negative impacts on local and regional groundwater supplies used by residents, including PRBRC members, for domestic and stock purposes. Groundwater consumption may directly impact current uses of the aquifer, especially artesian wells, and will likely impact future uses of the aquifer.

(4) COGEMA will negatively impact ground and surface water quality. The ore zone aquifer (the Wasatch formation) provides water for local domestic and stock wells, application at 2-14, and mining activities may endanger these water resources. Contaminants include Radon-222, uranium, arsenic, selenium, aluminum, iron and manganese which are mobilized during mining operations. Application at 3-23.

(5) During restoration activities, COGEMA may inject hydrogen sulfide (H₂S) to clean-up some of the heavy metals mobilized during mining operations. H₂S is a highly toxic substance and injection into the aquifer may produce health and safety impacts.³ Compliance with hazardous waste law and the Emergency Planning and Community Right-to-Know Act (EPCRA) is required. Additionally, environmental impacts analysis must be conducted pursuant to the National Environmental Policy Act (NEPA) prior the injection of chemical agents if impacts have not previously been analyzed in prior NEPA documents.

(6) COGEMA underestimates the length of operations, including restoration and reclamation activities. This allows them to underestimate the financial assurance calculation and also allows them to underestimate environmental impacts, including the length of time of surface disturbance and groundwater consumption during restoration. The application needs to be amended to fully reflect past experiences with restoration, which will allow COGEMA to more accurately predict future activity. For instance, based on past experience, it is unlikely that “Restoration of each mine unit is designed to be accomplished within a two to three year period to keep up with the mining schedules” as stated in the application. Application at 6-8.

(7) COGEMA’s operations will negatively impact wildlife populations, which present unique recreational opportunities for PRBRC members, other local residents, and visitors to the area. Although the application discloses that eight sage-grouse leks and sage-grouse habitat are present in the survey area, the application lacks a substantive discussion about possible sage-grouse

³ The application does not disclose what amounts of H₂S will be injected nor how the injected H₂S will be removed after operations.

impacts. Mining activities, including fencing, surface disturbing activities, use of overhead power lines, increased truck traffic and noise, evaporation ponds (and resulting spread of west Nile virus), and habitat fragmentation caused by additional access roads, will negatively impact wildlife species including the greater sage-grouse. Greater sage-grouse populations are declining in the Powder River Basin and recent scientific studies have shown that one of the leading causes for this decline is mineral development.⁴ In light of these population declines locally and throughout the West, the U.S. Fish & Wildlife Service is now considering emergency-room protection by listing sage-grouse pursuant to the Endangered Species Act.⁵ The Wyoming Bureau of Land Management (BLM) has also taken actions to protect the species and the greater sage-grouse is listed as a Special Status Species under the BLM's Sensitive Species Policy. Species are designated as "sensitive" to ensure actions on BLM administered lands consider the welfare of these species and do not contribute to the need to list a Special Status Species under the provisions of the Endangered Species Act. BLM Wyoming Sensitive Species Policy and List at 1. NRC's actions in this matter, especially if conducted in consultation with BLM, must comply with the Sensitive Species Policy and other legal requirements to protect sage-grouse populations in and around the permit area. Additionally, the application must analyze impacts to migratory birds. Migratory waterfowl are drawn to open water during their migration.

COGEMA's facility is located within what is commonly known as the Central Flyways. The Fish and Wildlife Service has recently conducted a successful criminal prosecution pursuant to

⁴ See, e.g. Lyon and Anderson 2003, Holloran 2005, Kaiser 2006, Holloran et al. 2007, Walker et al. 2007a, Doherty et al. 2008. Findings from the studies were summarized and highlighted in a 2008 guidance member from the Western Association of Fish and Wildlife Agencies. Memorandum from Tom Christiansen and Joe Bohne, Wyoming Game and Fish Department, to Terry Cleveland and John Emmerich (Jan. 29, 2008), with attached report *Using the Best Available Science to Coordinate Conservation Actions that Benefit Greater Sage-Grouse Across States Affected by Oil & Gas Development in Management Zones I-II (Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming)*. Although focused on oil and gas impacts, the studies are highly relevant to other drilling operations, such as in-situ leach uranium facilities.

⁵ See 73 Fed. Reg. 23172, announcing the Fish and Wildlife Service's current, ongoing "status review" which will determine if the Service will pursue listing the sage-grouse.

the Migratory Bird Treaty Act past against Cotter Corporation, a uranium mill operator whose activities resulted in the death of migratory waterfowl at the uranium mill near Canon City, Colorado, which is also located on this well-established migratory route. *U.S.A. v. Cotter* 08-po-01022 (D. Colo. 2008)(judgment in criminal proceeding entered on March 12, 2008, consisting of a \$15,000.00 fine and compliance plan).

(8) COGEMA's operations will negatively impact local and regional air quality. The facilities will produce substantial amounts of fugitive dust and will be a significant source of particulate matter in the area.⁶ COGEMA fails to consider paving roads, using dust suppressant, or other alternatives to mitigate impacts to air resources that are utilized by PRBRC members and other Wyoming citizens.

(9) COGEMA's operations will release radioactive materials into the air. Radon gas will be released directly into the atmosphere from lixiviant makeup takes, Application at 4-1, ion exchange facilities, Application at 4-2, evaporation ponds, and other facilities. The application does not indicate the extent of these emissions nor does it contain an analysis of public health impacts. Including a Health Impact Assessment in the application and related environmental documents will allow NRC to fulfill its responsibility under NEPA to consider the effects on the "human environment." 42 U.S.C. § 4332(B), 40 C.F.R. § 1508.14. The protection of public health was one of the primary goals of NEPA. During congressional hearings, Senator Henry Jackson, one of the Act's primary authors, testified that one of NEPA's main purposes is to

⁶ The Irigaray operations will emit 89.5 tons per year of particulate matter. Application at 4-2. The application says that "The impacts of operations at the Irigaray site upon the air quality in the area are minimal." Application at 7-2. In contrast to this statement, the facilities will emit just under half of what the Dry Fork coal-fired power plant, currently under construction near Gillette, Wyoming, is permitted to emit (199.8 tpy of particulate matter).

stimulate the health of the nation. With this history in mind, the Council on Environmental Quality regulations specifically require agencies to consider “the degree to which the proposed action affects public health or safety.” 40 C.F.R. § 1508.27(b).

(10) COGEMA underestimates the financial cost of restoration and environmental clean-up.

COGEMA’s bond estimate is only \$9.5 million. Application Attachment 6.1 at 2.

Underestimating the bond leaves the public at risk – both financially and environmentally.

(11) The Environmental Report does not contain information and analysis compliant with NEPA.

The NRC must conduct an Environmental Impact Statement pursuant to NEPA prior to renewing the license (a major federal action significantly impacting the environment). In particular, the Environmental Report does not contain a complete impacts analysis of cumulative impacts of uranium operations relative to other past, current, and reasonably foreseeable development activities, including other uranium operations, coalbed methane (CBM) development, other oil and gas operations, and abandoned exploration wells. Cumulative impacts may include cross-contamination of aquifers, cumulative surface water impacts because of discharges to Willow Creek, increased groundwater drawdown, increased air quality impacts – particularly fugitive dust, and cumulative land quality and wildlife impacts. Environmental impacts analysis conducted pursuant to NEPA must be completed prior to NRC staff recommendations regarding the license renewal. NEPA requires environmental analysis to be made “available to public officials and citizens before decisions are made and before actions are taken.” 40 C.F.R. § 1500.1(b). Council on Environmental Quality regulations also provide that “the final environmental impact statement shall normally precede the final staff recommendation.” 40

C.F.R. § 1502.5(c).⁷

(11) If a license is granted in this matter, the NRC must require legally enforceable mitigation measures to minimize impacts to surface, air, and water resources. To the extent standard operating procedures or best management practices are relied on to reduce impacts to below significance, they must be enforceable license or regulatory requirements not merely statements without teeth in an Environmental Report. The weighing of risks against benefits in view of the circumstances of particular projects is required by NEPA in view of Atomic Energy Act. The two statutes and the regulations promulgated under each must be viewed in *para material*. Citizens for Safe Power, Inc. v. NRC, 524 F.2d 1291, 1299 (DC Cir. 1975).

CONCLUSION

For the reasons stated above, the foregoing legal principles and facts clearly support the standing of PRBRC to participate in a hearing and the admissibility of the contentions stated in the petition and request for hearing.

Respectfully submitted,



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⁷ Additionally, "Preparation of an environmental impact statement on a proposal should be timed (§ 1502.5) so that the final statement may be completed in time for the statement to be included in any recommendation or report on the proposal." 40 C.F.R. § 1508.23.