



**SHEEP
MOUNTAIN
ALLIANCE**

PO Box 389, Telluride, CO 81435 • 970-728-3729 • FAX 970-239-4989 • www.sheepmountainalliance.org

December 15, 2009

via e-mail (pdf) attachment

Steve Tarlton, Radiation Program Manager

Warren Smith, Community Involvement Manager
Colorado Department of Public Health and Environment Radiation Program
4300 Cherry Creek Dr. So.,
Denver, CO 80246-1530.

cdphe.hmenergyfuels@state.co.us

RE: Radioactive Materials License for Proposed Piñon Ridge Uranium Mill

This letter is submitted jointly by Sheep Mountain Alliance and the Paradox Valley Sustainability Association on behalf of each organization and their respective memberships. This letter describes deficiencies in the Application submitted by Energy Fuels, which seeks a license to construct and operate a uranium mill and associated mill tailings facility which will require perpetual care and maintenance. On behalf of our respective organizations and membership who live, work, and recreate in and around the proposed mill, we urge the CDPHE to conclude that the Application does not contain sufficient information or analysis to trigger the statutory review period.

The mill and tailings disposal proposal has been discussed by Energy Fuels and the CDPHE staff since at least early 2008, and perhaps as early as 2006. The specific deficiencies identified below have been identified during the 30 days in which the CDPHE staff and the public has had an opportunity to review the actual Application. The deficiencies identified form a sound basis for the issuance of a finding that the Application is incomplete. These deficiencies are in addition to the many deficiencies identified by CDPHE staff during the pre-application review period, many of which were not addressed in the Application. Because of the accelerated timeline for a completeness review, we reserve the right to notify the CDPHE of further deficiencies in the Application as our review of the voluminous quantity of materials continues.

These specific deficiencies also serve as examples of the systemic deficiencies in an Application, and application process, which involves a company under such financial duress that it prepared much of the Application in-house, without benefit of the necessary expertise in the required areas of inquiry. The result is an Application which fails to address the serious direct, indirect, and cumulative impacts posed by a uranium mill which starts with mining of ore on federal lands and which will conclude with a transfer of title to the federal government for perpetual care of the mill tailings facility.

Because the application was prepared with significant input by the same CDPHE staffers who will be reviewing the application for completeness, it is also important that the public and other government agencies be given ample opportunity to review the application before a positive completeness determination is issued. This is particularly important where the CDPHE personnel do not currently have the necessary expertise and training in the wide variety of subjects which require scrutiny under Colorado's Radiation Control Act and the other laws which apply to the Energy Fuels proposal.

In House Preparation Contributes to a Lack of Identifiable Methodologies

It is important to note that Energy Fuels dismissed many of their contractors midway through preparation of the application in favor of "in house" preparation of the application. *See Exh. 1 (Energy Fuels June 30, 2009 Financial Statement)*. On its face, the Energy Fuels' "capital preservation" approach to the Atomic Energy Act/Radiation Control Act's licensing requirements permeates the application and requires CDPHE's heightened examination of the financial viability and the financial warranty requirements of state and federal law.

For many of the required areas of inquiry, the Application does not identify the methodology used for either the analysis or the collection of data. Often, federal guidance documents are relied upon without any reference to the requirements of Colorado's Agreement State Program or Colorado law. It appears that the "capital preservation" approach resulted in reliance on data collection and analysis by Energy Fuels employees who lack the training to choose an appropriate methodology, gather the data, and conduct a competent analysis.

The serious deficiencies of this "in-house approach" are exemplified in the Socioeconomic Report, which uses undocumented interviews as the sole basis for "data" concerning employment and other social conditions in Bedrock, Colorado and the Paradox Valley. The Report relies extensively on citations to: "White, Dick. Energy Fuels Resources. Personal Communication April, 2009." The Energy Fuels website lists Mr. White as a geologist with

ties to the troubled Cotter Corporation. There is no indication in the website or the application to suggest that Mr. White has any training, experience, or competence in collecting or analyzing socioeconomic data, whether qualitative or quantitative. Moreover, there is no explanation of the methodology, if any, which was used to satisfy Colorado laws which address social and economic impacts.

Long Term Care Warranty Estimate Absent

The Application conflates the long term care financial warranty (6 CCR 1007-1, Part 18, RH 3.9.5.10) into the decommissioning warranty (*Id.*, 3.9.5.5), whereas the statute and the rule treat them as separate bonding requirements. Moreover, the Application provides no information to support the assertion that the \$250,000 regulatory minimum is the applicable long term care warranty for the present project.

Instead, the Application simply states in the decommissioning warranty section, which was prepared internally by Energy Fuels:

“[The DOE Long Term Care] item is added as a lump-sum, to cover the costs of long-term site monitoring. The value to be used is \$250,000 in 1978 dollars (R.H. 3.9.5.10.4). Using the inflation calculator provided by the U.S. Department of Labor, this lump sum value is \$827,584 in 2009 dollars.

Piñon Ridge Mill Decommissioning and Reclamation Cost Estimate at 22.

The language of the regulations require that two distinct types of financial warranty be established prior to licensing.

RH 18.5 Prior to issuance of the license, the applicant shall (1) establish financial assurance arrangements, as provided by RH 3.9.5, to ensure decontamination and decommissioning of the facility and (2) provide a fund adequate to cover the payment of the cost for long-term care and monitoring as provided by RH 3.9.5.10.

The CDPHE regulations at RH 3.9.5.10 require a separate Long Term Care Warranty based on an actual cost estimate. This Long Term Care Warranty must be maintained during the operating life of the facility. The relevant regulations are quoted here in detail:

(4) The amount of funds to be provided by such long-term care warranties shall be based on Department-approved cost estimates and shall be enough that with an assumed six percent annual real interest rate, the annual interest earnings will be sufficient to cover to the annual costs of site surveillance by the Department, including reasonable administrative costs incurred by the Department, in perpetuity, subsequent to the termination of the license.

(a) For each source material mill licensee, the long-term care warranty must have a minimum value equivalent to \$250,000 in 1978 dollars. The value of the long-term care warranty shall be adjusted annually to recognize inflation. The inflation rate to be used for this adjustment is that indicated by the change in the consumer price index published by the U.S. Department of Labor, Bureau of Labor Statistics. The Department may use other indicators of the inflation rate if reasonable; provided, however, that the license shall not terminate unless the amount of the long-term care warranty is acceptable to the licensing agency and site caretaker.

(b) Cost estimates for facilities and sites requiring long-term care subsequent to license termination are to be based on the final disposition of wastes such that ongoing active maintenance is not necessary to preserve isolation. It is expected that, as a minimum, annual site inspections shall be conducted to confirm the integrity of the stabilized waste systems and to determine the need, if any, for maintenance and/or monitoring. Cost estimates shall be adjusted if more frequent site inspections are required based on an evaluation of a particular site.

Despite the clear requirements of the Radiation Control Act and the implementing regulations, the Application wrongly and with no supporting information, asserts that the regulatory minimum warranty applies to the proposed project, fails to provide any cost estimate, and lumps the long-term care warranty into the decommissioning warranty. This deficiency, standing alone, requires a finding that the Application is not yet complete.

Information Regarding Baseline Air Quality and Potential Air Impacts are Incomplete

The Applicant's promises of future air quality modeling and data collection do not satisfy the completeness requirement. The Application admittedly relies on air quality information which has been rejected by the CDPHE as incomplete.

"Air modeling results, which predict the impact of the Mill Facility on ambient air quality, will be submitted once the APENs have been accepted by APCD. The modeling will be based on the data collected from two meteorological stations located at the Site."

Environmental Report at 1-16. The air modeling and much of the information regarding air emissions as they relate to the licensing process are identified as incomplete in the Application itself, with promises to submit data and modeling at some unidentified later date.

"The APCD is expected to review and comment on the additional APENs and supporting information provided by Energy Fuels. Energy Fuels would then respond to APCD's questions and concerns and conduct air modeling in accordance with APCD protocols. If all issues were resolved, the APCD would prepare draft permits and solicit public comment. Final permits would be issued after the resolution of any public comments received by the APCD."

Further, the CDPHE should not expend any further resources to consider either the APENs or the present Application until such time as Energy Fuels has submitted full and complete information which has been approved by the Air Pollution Control Division, and then incorporated into the Application, as appropriate.

Instead of the current approach, the CDPHE leadership should ensure that the Radiation Division is cooperating with the Air Pollution Control Division and other state agencies with the necessary expertise to examine whether or not the Application relies on acceptable methodologies and information to meet a completeness review.

Impacts to Special Status Fish & Wildlife are Recognized, but Not Addressed

Although the Application mentions impacts to fish and wildlife species that are protected as Threatened or Endangered under the Endangered Species Act ("T&E Species"), Energy Fuels did not conduct any protocol surveys, which is the accepted methodology to

determine if certain species are present and therefore is crucial to any analysis of a project's impact on T&E Species.

Protocol surveys are regularly prepared and reviewed by species' experts. The protocol surveys take into account the best available information about a species natural history so that there is the greatest likelihood for detection if the species is present. Additionally, protocol surveys ensure consistency in data collection, minimize sampling biases, facilitate data comparison, and provides data that more accurately reflects ecological patterns and landscape level changes in distribution and population trends. Lack of detection during a protocol survey does not necessarily mean that a species is absent from a project site or that it may not use the site in the future if suitable habitat is available. Even though the *ad hoc* approach used in the Application identified serious impacts to fish and wildlife, the magnitude of the problem is masked by the failure to use protocol surveys for certain important species.

Further, although some impacts were recognized, the Application does not provide significant mitigation measures for T&E Species and does not suggest that Energy Fuels has consulted with the U.S. Fish and Wildlife Service to ensure that the proposed actions do not constitute prohibited takings of T&E Species or otherwise violate the Migratory Bird Treaty Act. *See: Bennett v. Spear*, 520 U.S. 154, 170 (U.S. 1997) (“any person’ who knowingly ‘takes’ an endangered or threatened species is subject to substantial civil and criminal penalties, including imprisonment.”). As the CDPHE is surely aware, Cotter Corporation recently plead guilty in a federal court proceeding to a criminal violation of the Migratory Bird Treaty Act at the uranium mill in Cañon City, Colorado.

Instead of meeting the continuing duty to avoid taking T&E Species and migratory birds, Energy Fuels proposes that every 5 years, prior to renewing the Mill License, Energy Fuels will “conduct surveys at the Site and immediate vicinity for Threatened, Endangered, and Candidate Species, BLM Sensitive Species, and State of Colorado Species of Concern, as well as for wildlife.” As with the current Application, this proposal for future surveys does not include any protocol level surveys.

The Energy Fuels approach is particularly troublesome where the Application itself acknowledges that prohibited “take” of T&E Species is anticipated by Energy Fuels. Some of the major impacts and deficiencies regarding species, can be gleaned from the *ad hoc* analysis provided in the Application:

- **Canada Lynx** – Federally Threatened. Application recognizes “take” via direct mortality via road kill but provides no U.S. Fish and Wildlife Service review or approval of take, mitigation, or monitoring.
- **Gunnison Sage Grouse** -- Colorado Species of Special Concern, proposed federal Candidate Species. The project site is within its historical range and the cumulative impact zone encompasses a significant portion of its current range, yet there is no effort to identify cumulative impacts or to monitor or mitigation impacts to this species.
- **Black-footed Ferret** – Federally Endangered. Although suitable habitat for current range expansion for this species is available on the project site and in the immediate vicinity, there is no specific acknowledgement of the potential affect and no mitigation or monitoring proposal.
- **Mexican Spotted Owl** – Federally Threatened. Suitable habitat is present on and adjacent to the Site and surrounding uranium mine sites in the cumulative impact zone, however no protocol surveys were conducted for this species even though the Application acknowledges that this species may be disturbed by high noise levels and no mitigation or monitoring was proposed. Additionally the Application does not consider impacts to this species as part of cumulative impacts.
- **Colorado Pikeminnow, Razorback Sucker, Humpback Chub, Bonytail Chub** – Federally Endangered. Water quality and quantity issues are present, but the Application does not acknowledge these issues nor does it seriously discuss direct, indirect, and cumulative impacts and no mitigation or monitoring is proposed.

There is no serious consideration of specific bird species which are protected as T&E Species and that may also fall under the protections of the Migratory Bird Treaty Act. Example species include the California Condor, Southwest Willow Flycatcher, and Whooping Crane. Although the Bald Eagle was delisted in 2007, U.S. Fish and Wildlife Service continues to monitor species for an additional five years following delisting The Site is within the migration corridor and range of both the Bald and Golden Eagle, both species are known to occur in the Paradox Valley, and both of these species are protected under the Bald and Golden Eagle Protection Act.

Non-T&E Species

Wildlife need not be listed as threatened or endangered before they must be fully considered in the Application materials, including the Environmental Report. Many state and federally identified sensitive species known to inhabit the region are not recognized as occurring in the vicinity of the mill site or within the cumulative impact zone despite the presence of suitable habitat on the Site or at the uranium mines. Some of the more prominent species of concern include:

- Kit Fox
- Botta's Pocket Gopher
- Northern Pocket Gopher
- Northern River Otter
- Barrow's Goldeneye
- Northern Goshawk
- Ferruginous Hawk
- American Peregrine Falcon
- Western Snowy Plover
- Black Tern
- Long-billed Curlew
- White-faced Ibis
- American White Pelican
- Sandhill Crane
- Columbian Sharp-tailed Grouse
- Long-nosed Leopard Lizard
- Milk Snake
- Midget Faded Rattlesnake
- Great Basin Spadefoot
- Canyon Tree Frog
- Northern Leopard Frog

Despite some sensitive species having been recognized as occurring in the vicinity and/or having the potential to occur on Site, there were still no mitigation or monitoring programs proposed or protocol level surveys conducted, despite a high potential for negative impacts. Such species included Western Burrowing Owl and Gunnison Sage Grouse. The Application makes a weak commitment to participate in CDOW efforts to increase habitat connectivity for sage grouse by chaining pinyon-juniper habitat while at the same time claiming in the Application that no impacts will occur to pinyon-juniper habitat when asserting that there will be no impacts to Spotted Owls.

Paradox Valley and surrounding canyons and woodlands provide excellent bat habitat. Abandoned uranium mines likely provide bat habitat, therefore renewed mining in region which is spurred by increased regional milling capacity could have significant impact on bats, particularly if any of those mines support maternity colonies. The only impact to bats addressed in the Environmental Report is the attractive nuisance that would be created by the lighting at mill site. Cumulative impacts on bats, which must include mining, is not addressed.

Much of the source information used in the Application for known bat occurrences was extremely outdated (1994), considering there have been major technological improvements in the last 15 years on methods to detect and monitor bats. Further, there

were no cumulative impact assessment for the following species of bats that the Application identified as having the potential to occur on the Site and that are likely to also occur at uranium mine sites.

- Townsend's Big-eared Bat
- Spotted Bat
- Fringed Myotis
- Yuma Myotis
- Big Free-tailed Bat

In short, the Application lacks the accepted methodologies for identification and analysis of wildlife impacts to support a detailed review of the Application.

Failure to Delineate a Specific Proposed Activity

The Application contains many analyses which are based on the design, construction, and operation of a 1000 ton per day facility. Other portions address the operation of a facility at a 500 ton per day processing rate, while acknowledging that the facility is designed to process 1000 tons per day. To complicate matters further, Montrose County purportedly conducted its Special Use Permit review process on a 500 ton per day facility. The uncertainty around this most basic design feature has a drastic affect on many of the operating parameters and the impacts which would emanate from the mill.

For example, the CDPHE's Air Pollution Control Division, based on documented discussions with Energy Fuels staff, has already determined that Energy Fuels intends to build and operate a mill with a 1000 ton per day capacity. The ongoing APCD review of the Clean Air Act requirements is based on a 1000 ton per day proposal. However, several portions of the present Application, including the Environmental Report, only examine impacts of a facility with a 500 ton per day capacity.

The Applicant cannot have it both ways. If scarce and diminishing water resources limit the operating capacity of the mill to 500 tons per day, the Application must reflect this proposal throughout. If it is reasonable to design, construct, and operate a 1000 ton per day facility, as Energy Fuels has represented in several forums, the Application must analyze such a proposal throughout.

It is well known to CDPHE staff that these discrepancies are due to the constraints of local resources, particularly water. It would be arbitrary and capricious to certify as complete an Application which fails to delineate a specific proposed activity.

Toxic Releases

The Environmental Report failed to consider cumulative impacts to fish and wildlife resulting from the increased release of toxic materials from existing and renewed uranium mining in the region. Impacts would include both direct and indirect loss of habitat, introduction of contaminants into environment (radiological, heavy metals, petroleum products, other potential poisons such as antifreeze), bioaccumulation of toxins, direct and indirect mortality, and disruption of current efforts to restore habitats and native species to former range, including endangered and threatened species and species of concern.

The Environment Report failed to consider impacts to water quality as a result of toxic mine tailing runoff, accidental toxic spills (including sulfuric acid, anhydrous ammonia being shipped from Utah or Illinois, petroleum products, yellowcake, and vanadium oxide). Statistical analysis of likelihood for toxic spills into aquatic habitats only took into account highway water crossings, not the extensive distances traveled along stream corridors on extremely windy roads, including areas with steep embankments, therefore the statistical likelihood is grossly underestimated. Keep in mind that only two months ago a tailings waste truck overturned at the Atlas Mill Superfund Site and that the Superfund Site itself had to be shut down for five days to allow for cleanup. The CDPHE has documented cases of accidents involving ore trucks overturning on river banks due to excessive speed. Regardless of their statistical analysis, accidents do happen and quite often.

Further, the Bureau of Land Management, in rejecting an application for approval to resume uranium mining at the Sunday Mine Complex, has required Denison Mines to provide additional information to demonstrate how high levels of cadmium in the mine water will be addressed to protect wildlife livestock and human health. The BLM specifically noted the lack of data addressing Denison's assertion that cadmium impacts would be limited to mule deer. The present Application is similar to the Denison application which the BLM rejected in that Denison did not recognize that does are known to have smaller ranges relative to bucks and that reclaimed mine sites are often heavily grazed due to the higher quality of vegetation on the sites. Importantly, because Cadmium may accumulate in the body, BLM has required Denison to address whether there would "be any potential affects if a hunter were to shoot an individual deer with relatively high cadmium."

The current Application, which lacks information on known concerns of other regulatory regarding the impacts of toxic materials on wildlife, must be rejected as incomplete.

Federal Approvals and Consultation Omitted

The Application fails to identify the need for the Environmental Protection Agency to review and approve the tailings facility pursuant to the Clean Air Act's National Emission Standards For Hazardous Air Pollutants. *See* 40 U.S.C Part 61 (NESHAP Subparts W – Radon Emissions for Operating Uranium Mill Tailings)(NESHAP Subpart A – General Provisions including EPA approvals).

Further, the EPA's role in reviewing and approving the tailings cell design, in combination with the extensive involvement of the Department of Energy as the intended long-term custodian of the wastes, is sufficient to trigger the need to comply with procedural requirements of several other federal laws, including the National Environmental Policy Act, the Endangered Species Act, and the National Historic Preservation Act.

Moreover, it has become abundantly clear that most, if not all, of the entire stream of feedstocks will come from the nearby federal mines which are licensed, managed, and/or regulated by the Bureau of Land Management and the Department of Energy. Further, the ore will be transported down from the surrounding mesas where most of the mines are located, requiring the federal approval of the use of these roads for extensive ore transport.

The review and approval by Colorado's CDPHE cannot substitute for the procedural requirements of the federal laws identified above. Instead, the CDPHE should deem the application incomplete for failing to identify necessary federal approvals and involvement. Further the CDHPE should withhold further expenditure of staff time and other state resources until such time as Energy Fuels can demonstrate that the federal agencies involved in the approval of this project have conducted the necessary analyses and consultations.

Feed Other than Unprocessed Ore Contemplated

The application contains gaps in content related to the minewater treatment residues which Energy Fuels seeks to use as mill feedstocks. Montrose County's conditional approval of a Special Permit (which is currently the subject of litigation) prohibited the

processing of materials other than natural ores, with no objection raised by Energy Fuels. However, the Facility Operations Plan section of the Application reveals that Energy Fuels seeks CDHPE approval for Energy Fuels to accept previously processed materials at the mill for either direct disposal or for yellowcake production.

In addition to raw ore, water treatment residuals from mine water treatment plants in the area are also processed. This uranium source material is minimal and probably represents less than 0.1 percent of the mill feed. Chemical characterization of representative ore and water treatment plant residuals are provided in the Material Containment Plan (Energy Fuels 2009).

Facility Operations Plan at 13. The Operation Plan was finalized November 3, 2009 and submitted shortly thereafter by Energy Fuels, months after many of the impacts analyses were conducted, and after Energy Fuels' September 30, 2009 oral representation to the Montrose Board of County Commissioners that Energy Fuels did not object to Conditions of Approval which preclude processing of materials other than raw ores. As such, the Application should be summarily denied since it proposes to conduct operations which are prohibited by current land use laws, as implemented by Montrose County.

Further, the present Application doesn't provide information regarding mine water treatment process for any of the mines which the Application states will provide unprocessed ore for the mill. This lack of information prevents CDPHE and the public from evaluating the alternate feed processing and disposal portion of the proposal. The minewater residue portion of the Application is not complete enough for detailed review for the following reasons:

- The Application fails to demonstrate, or even make a showing, that the proposal complies with existing legal requirements, including the state and federal rules applicable to proposals to process Alternate Feed and the County's Condition of Approval #10.
- The Application fails to identify the volume of the mine water and mine water sludge anticipated, what treatment is conducted, or how it would be transported and loaded into the mill.
- The Application does not provide verified information on the physical characteristics of the material or the impacts to air, water, health, etc. associated with transport, processing and disposal.

- The only process listed for feedstocks to enter to the mill comes through the ore haulage and ore stockpile route, comprised of equipment designed to handle coarsely crushed solids.
- The Application contains no means for accepting, storing, or introducing uranium-bearing feedstocks which arrive at the mill in liquids or sludge form.
- The Application contains the bare assertion that the sludges and liquids from the Whirlwind Mine would comprise 0.1% of mill capacity. However, no information was provided on which to base the 0.1% assertion. Based on the information in the Application, the only materials under consideration is the waste stream from the Whirlwind Mine, but nowhere is there any discussion of the waste streams at the other area mines which require dewatering as part of the mining activity.
- The Application does not identify or characterize the treatment process which created sludge and liquids at the Whirlwind Mine. It is likely, but not established in the Application, that the mine operation added a process chemicals designed to increase the separation of constituents like selenium and radium. However, there is no analysis of how these process chemicals would impact the chemistry of the mill. It should be noted that Denison's White Mesa mill, which is familiar to many of the Energy Fuels principals, runs its alternate fuels in distinct batches in order to adjust the process chemistry to the specific content of the feedstocks. No such alterations in process chemistry is identified in the present Application.

Although the question of processing materials other than natural ores has garnered much public controversy and has been discussed extensively between Energy Fuels and the Radiation Program Staff, the Application contains barely a passing mention. For this reason alone, the responsible officials in CDPHE leadership should direct that the Radiation Program expend no further state resources on this Application, and limit its role to examining whether or not Energy Fuels has presented a full and complete Application which triggers the formal review process.

Water Use Impacts Analysis Does not Consider Water Depletions at Associated Mines

There is no analysis of the direct, indirect, or cumulative impact of water depletions in light of the past, present, and future dewatering activities at the mines which the Application identifies as the source of feedstocks.

The volume of mine water and associated residues from dewatering the mines adds up to a very substantial volume of water over time. For example, the inactive Whirlwind Mine operates pursuant to a 0.03 MGD discharge limit under the mine water permit issued by the CDPHE. This pumping rate would result in a pre-treatment water quantities of - 30,000 gallons per day, which is more than 33 acre-feet yr. This volume of water must be multiplied by the dozens of mines (located on federal lands) which are identified as likely sources of ore for the mill.

Although this information is readily available, the impacts of related depletions is not included in the Application or the Environmental Report. Due to the overlapping regulatory structure, the Application should include information from the Water Quality Division, the Division of Reclamation and Mine Safety, and the federal agencies which have information on the cumulative and significant impacts of this mill and the associated mines on water supplies and water use.

Standby Procedures are Not Addressed

It is common practice in the uranium processing industry over the past thirty years to run mills in batch runs with considerable periods of inactivity. In fact, neither of the currently licensed mills in the United States are currently processing previously unprocessed uranium ore.

However, the Application does not describe the activities, impacts, and protective measures associated with periods where the mill does not accept and/or process uranium ores. Both Energy Fuels and the Radiation Program staff are aware of that temporary closures are both foreseeable and a regular feature of the uranium processing industry. These matters were discussed between Energy Fuels and staff during the pre-application period, but are not addressed in the Application in any meaningful manner.

The situation at Cañon City, which is well known to both Energy Fuels and the Radiation Program staff, confirms that periods of inactivity are characterized by repeated violations, including criminal violations, of state and federal laws meant to protect air, water, wildlife, and people.

Socioeconomic Analysis

The Socioeconomic Report and the Environmental Report omit the basic information which is required for the CDPHE to begin review of the Application. This component is crucial as the information which the Radiation Control Act mandates that the CDPHE consider also provides an independent basis for the CDPHE to deny the application.

Required, but missing information includes:

- 1) Impacts on potentially affected sectors, such as tourism, retirement, and amenity migrants and part-time residents.

- 2) Stigma and its effects, which include economic costs including loss of tax revenue due to property value loss and reduced tourism activity as travelers and recreationalists stay away rather than “ski, hunt or hike in uranium country,” psychological harm, physiological harm due to boom and bust employment cycles.

- 3) Under real estate analysis, there is no realtor survey, no consumer survey (addressing why people might move to the area and what their concerns are), no case study research on stigma, no tourism analysis on potential impacts, nothing on public awareness and media attention, no retirement analysis, and no scenarios of impacts.

- 4) In addition, there is nothing about the taxpayer services that San Miguel County provides to residents in the west end of Montrose County.

- 5) Socio-economic impacts identified and relied upon by the CDPHE in reviewing applications for uranium mill license amendments at the Cotter facility.

The lack of competent information and data is accompanied by a lack of identifiable methodologies on which the socioeconomic analyses is based. Although there are several references to outdated NRC Guidance documents which were produced in the 1980s, there are few and sometimes no references to the requirements imposed by Colorado statutes and regulations, not to mention the accepted methodologies from the respective socioeconomic disciplines.

The Cost/Benefit Analysis Does Not Provide the Information Required by the Radiation Control Act

The Environmental Report does not contain “an analysis of the environmental, economic, social, technical, and other benefits of the proposed application against environmental costs and social effects while considering available alternatives.” C.R.S. § 25-11-203(2)(c)(VI). Instead, the environmental analysis contains an *ad hoc* discussion which is called a “cost-benefit analysis” but which does not comport with the rigors of any identified or recognized methodology. Social effects are neither quantified nor seriously discussed in a qualitative manner in Section 7 of the Environmental Report nor in Section 4, on which Section 7 purports to rely.

Despite a broad literature, there is no attempt in the Environmental Report to assert reliance on any particular methodology – or combination of methodologies – which would satisfy the statutory criteria. Instead, the Environmental Report simply makes vague reference to NRC Guidance documents, none of which attempt to provide guidance on the implementation of Colorado law which implements the federal Atomic Energy Act. Because there is a robust controversy over the various interdisciplinary methodologies used to compare benefits to costs across various alternatives, it is important that the CDPHE require Energy Fuels to identify and justify the methodology being used to ensure it is appropriate to the current task and mandates of Colorado law.

Conclusion

The deficiencies identified above, and the numerous other deficiencies which the short time frame has not allowed us to identify in detail, establish that the Application and Environmental Report do not meet the rigorous requirements of the Radiation Control Act and the regulations which implement the Act. In order that the resources of the responsible Colorado agencies and the public are not wasted on review of an incomplete application, the current Application must be deemed incomplete. Further, because the Radiation Control Act does not allow incremental review and approval, the requested Incomplete Determination should be accompanied by direction that Radiation Program staff cease to expend state resources on this matter until such time as a new Application is submitted for a completeness review, thereby triggering a new 30-day period when a revised Application is submitted.

Sincerely,
Hilary White

Julie Schneider

s/Hilary White
Executive Director
Sheep Mountain Alliance

s/Julie Schneider
Secretary/Treasurer
Paradox Valley Sustainability Association

cc: Ned Calonge, M.D., CDPHE Chief Medical Officer and Interim Executive Director, Ned.Calongne@state.co.us

Martha Rudolph, CDPHE Director of Environmental Programs,
Martha.Rudolph@state.co.us

Jim Martin, Executive Director, Department of Natural Resources,
Jim.Martin@state.co.us