Uranium Watch

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USDA-Forest Service
1617 Cole Boulevard, Building 17
Lakewood, Colorado 80401
Attn: Director—MGM Staff
via: http://www.regulations.gov

Re: Advanced Notice of Proposed Rulemaking for Locatable Minerals; 36 CFR Part 228. FS–2018–0052. 83 Fed. Reg. 46451, September 13, 2018.

Dear Sir or Madam:

Below please find Uranium Watch's comments on the Advanced Notice of Proposed Rulemaking (ANPR) for Locatable Minerals. Uranium Watch is a public interest non-profit organization is southeast Utah. UW has over 15 years of involvement in the regulation of uranium mining on public lands in the Four Corners region. This includes mining on lands administered by the Department of Agriculture, US Forest Service (USFS) and the Department of Interior, Bureau of Land Management (BLM). The focus of these comments will be related to uranium mines and mining.

UW incorporates by reference comments submitted by Earthworks et al.

1. Extension of Comment Period

The U.S. Forest Service should extend the time for comments on the ANPR. A 30-day comment period is not sufficient for the submittal of substantive comments. Many individuals and organizations that have information and experience to share with the USFS have other important on-going work would appreciate additional time to review pertinent information and compose meaningful comments.

2. Access to Documents

2.1. The USFS often does not make applications and supporting documents readily available online during their review of an application and their review and decision making under the National Environmental Policy Act (NEPA). It is then up to an

interested party to submit a Freedom of Information Act (FOIA) Request in order to access the application under consideration. This takes time and sometimes, money. This practice of withholding public records during an application review and NEPA process is obviously an attempt to limit informed public input. This practice must cease. All relevant application, USFS review, and NEPA documents must be make readily available online.

2.2. Utah,[1] New Mexico, Colorado and other states have electronic systems to keep track of documents associated with mine applications and permits and to make those documents readily available to the public. Unfortunately, neither the BLM or USFS have such systems. Therefore, it is difficult for the agency staff, other interested government entities, mine owners and applicants, and the public to access pertinent records. This is contrary to the document access systems of other federal and state regulatory agencies, such as the Nuclear Regulatory Commission[2] and the Utah Division of Oil, Gas & Mining.[3] The USFS should adopt a electronic system so that is easy to access applications and supplementary information, NEPA review documents, USFS and other relevant permits and approvals, correspondence, inspection reports, and numerous other relevant information about the regulation and operation of a mine. The lack of a comprehensive electronic document systems hampers agency review and regulation, academic research, and public knowledge and informed input.

3. The USFS proposal to significantly amend USFS mining regulations requires a complete analysis, pursuant to the National Environmental Policy Act (NEPA). Considering the scope of the regulations proposed to be revised and the impacts to environmental, cultural, historical, and human health resources resulting from operations authorized under these regulations, the USFS must complete an Environmental Impact Statement (EIS) in full compliance with NEPA prior to codification of any revisions.

4. Executive Order 13817

4.1. The ANPR (page 46453) discusses Executive Order 13817, A Federal Strategy to Ensure Secure and Reliable Supplies of Critical Minerals, issued December 20, 2017. Pursuant to the Order, the Secretary of the Interior published a list of 35 mineral commodities vital to the economic and national security of the United States. Uranium was one of those commodities. The ANPR states (page 46452, col. 2):

> The revision of 36 CFR part 228, subpart A, also would facilitate, support, and ensure the policy objectives of Executive Order 13783, Promoting Energy Independence and Economic Growth, issued March 28, 2017, as outlined in its Section 2a. Providing a more efficient process for approving

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[1] http://ogm.utah.gov/minerals/MineralsPDO/angularmineralsfilesbypermtiinfo.php

[2] https://www.nrc.gov/reading-rm/adams.html

[3] http://ogm.utah.gov/minerals/MineralsPDO/angularmineralsfilesbypermtiinfo.php

> exploration activities for the energy-producing locatable minerals uranium and thorium would reduce regulatory burdens that unnecessarily encumber energy production consistent with Sec. 1(b) of the Order as well as ultimately expand the means of domestic energy production consistent with Sec. 1(c) of the Order. Increasing the clarity of requirements for submitting a proposed plan of operations or modifying such a plan along with the clarity of the process the Forest Service uses in receiving, reviewing, and approving a plan of operations would benefit and support the safe, efficient development of uranium, an important potential and current domestic energy resource, and thorium, a potential domestic energy resource, consistent with Sec. 1(b) or the Order.

4.2. The quote above is out of touch with the reality of the current uranium mining experience and its history. There is no need for expedited processes for the exploration or mining of uranium on USFS lands. There is no lack of sources of uranium ore from existing conventional uranium mines and in situ leach (ISL) uranium recovery operations at this time and in the foreseeable future. Most of the uranium ore produced in the US is from BLM lands. All of the permitted conventional uranium mines in Utah, Colorado, and Arizona are on standby and have been for the past 5 years or longer. Some uranium mines in Utah have been on standby for decades. There are no operating uranium mines on USFS lands or mines on a non-operational status that UW is aware of. There is one mine undergoing development—the Canyon Mine on the South Rim of the Grand Canyon, but that development has slowed down, with no underground or surface-at-underground mine workers during the 3rd Quarter of 2018 (July, August, and September).[4] The Canyon Mine is a known uranium resource on USFS land that was permitted decades ago, but the price of uranium is such that the mine is not fully developed and has not started producing after over 30-years of existence. There is no justification whatsoever for expediting the processes for uranium exploration or mining on USFS lands.

4.3. Regarding the production of thorium (that is thorium-232), I am not aware of any energy production in the U.S. that uses thorium as its source of energy. The USFS should identify possible sources of thorium on USFS lands and the possible use of that radioactive mineral in energy production at existing or proposed (that is, based on the submittal of an application) facility.

4.4. This is not to say that clarity and comprehensiveness in the permitting process for uranium mines is not warranted. Of importance is the fact that the USFS and the BLM do not differentiate between uranium mines and other hard rock mines. Uranium mines have unique health and safety and environmental risks. Uranium mines are subject to

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[4] https://arlweb.msha.gov/drs/drshome.htm

specific Environmental Protection Agency (EPA) and Mine Safety and Health Administration (MSHA) regulations to protect public health and safety and worker health and safety. EPA (or, in Utah, the Division of Air Quality) regulates the radon emissions from underground uranium mines[5]and the discharge of mine water off site[6] under the Clean Air Act and Clean Water Act, respectfully. Uranium mines contaminate the soil, air, and water with radioactivity from the uranium: waste rock, low grade ore, ore pads, mine-water treatment facilities, off-site emissions due to wind and water, and other pathways. Yet, there is no specific regulatory program to address these emissions or the permanent disposal of radioactive materials at the site. Radiological site characterization and monitoring are not required. Therefore, it behoves the USFS in considering the development and regulation of all mines to address the unique health, safety, and environmental impacts of uranium mining.

5. Interim Management Plans

5.1. BLM regulations require Interim Management Plans (IMPs) for mining operations. 43 C.F.R. § 3809.401(b)(5) requires that an IMP be submitted as part of the Plan of Operations. 43 C.F.R. § 3809.424(a)(1) requires submittal of a modification of the IMP if circumstances change. For uranium mines, lengthy periods of non-operation are the norm, so IMPs are an important regulatory requirement. The BLM requirements for IMPs:

> 43 C.F.R. § 3809.401(b) Your plan of operations must contain the following information and describe the proposed operations at a level of detail sufficient for BLM to determine that the plan of operations prevents unnecessary or undue degradation:
> ***
> (5) *Interim management plan*. A plan to manage the project area during periods of temporary closure (including periods of seasonal closure) to prevent unnecessary or undue degradation. The interim management plan must include, where applicable, the following:
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> (i) Measures to stabilize excavations and workings;
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> (ii) Measures to isolate or control toxic or deleterious materials (See also the requirements in §3809.420(c)(12)(vii).);
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> (iii) Provisions for the storage or removal of equipment, supplies and structures;
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> (iv) Measures to maintain the project area in a safe and clean condition;

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[5] 40 C.F.R. Part 61 Subpart B.

[6] 40 C.F.R. Section 440.30

(v) Plans for monitoring site conditions during periods of non-operation; and

(vi) A schedule of anticipated periods of temporary closure during which you would implement the interim management plan, including provisions for notifying BLM of unplanned or extended temporary closures.

5.2. Currently, the USFS has no such regulations. Therefore, during sometimes lengthy period of non-operation, uranium mines (and other types of mines) are subject to site degradation, site hazards, on and offsite contamination, and other adverse conditions and impacts. There are many such examples at uranium mines in Utah that have been placed on standby for extended periods, sometimes over 25 years. Uranium mines, particularly, need a safe shut down process, including the sealing of portals and radon ventilation shafts during periods of non-operation. Utah, also, in considering requiring IMPs for hard rock mines, and has asked at least one uranium mine owners to submit such a plan for a mine that has not operated since the 1980s. Therefore, the USFS should include the requirement for IMPs and a requirement to adhere to the IMP during periods of "temporary" cessation of operation. If a mine does not have an IMP or suspends operation without having an IMP, or if conditions at the mine change, the USFS should require the submittal of an IMP in a timely manner by a date certain.

6. Temporary Cessation of Operation.

6.1. The USFS has no meaningful provisions associated with temporary cessation of operation, unlike the BLM and unlike states such as Colorado, New Mexico, and Utah. That means that a mine can remain on standby for an indefinite period of time, alternate between periods of operation and non-operation indefinitely, and maintain an operational permit for decades without ever even developing the mine (as with the Canyon Mine in Arizona). The problems associated with this lack of regulation for periods of mine non-operation are numerous. Mines should not be allowed to remain on standby indefinitely, as been the case with some uranium mines on private and BLM lands in Utah. There should be specific requirements and tight controls. A mine operator should be required to submit a notice of suspension of operation and implement the IMP. The USFS should inspect the mine to assure that the IMP provisions are implemented. The mine owner must be required to periodically inspect the site, notify of mine reactivation, and submit annual reports on any reclamation work, site conditions, and general site and operational status.

6.2. The USFS should not allow a mine operator to maintain a permit for operation for decades without any mine development or operation. There should be a time limit on the approval of a Plan of Operation, Record of Decision, and EIS. Further, the USFS should require an update of a NEPA review if a mine has not operated for 20 years, if the mine never was developed and commenced operation or if the mine operated intermittently during that 20 year period, or if new conditions and information becomes available.

7. The Canyon Mine, Kaibab National Forest, Arizona.

7.1. The Canyon Mine is an example of the USFS limited knowledge when it comes to regulating uranium mines and the failure to adequately review a 25-year old EIS and other mine documentation in order to determine whether new information and a supplemental review and EIS was warranted. The USFS approved the initial October 1984 Canyon Mine Plan of Operations (POO) in September 1986. According to the USFS, the mine went on standby in 1992. It had never been developed and never had workers employed at the mine. Based on MSHA data for the Canyon Mine, there were no workers at the mine until the 3rd quarter of 2012.[7] In 2012, the Kaibab National Forest completed a review of the Canyon Mine POO and associated approval documentation and determined that no modification or amendment to the existing POO was necessary; that no correction, supplementation, or revision to the environmental document was required; and that operations at Canyon Mine could continue as a result of no further federal authorization being required.[8] This decision was the subject of a legal challenge and is still in court.

7.1. However, UW is aware of at least 2 operational conditions and environmental impacts that the USFS failed to identify and evaluate in the 1980s and in 2012. First, the original review of the POO did not fully address the disposition of the mine water that would need to be removed from the Canyon Mine during mine development, mine operation, and possibly during periods of non-operation, or standby. An evaporation pond was constructed, but it was not large enough to hold and evaporate the quantities of water that were being removed from the mine after mine development commenced. The mine owner and operator, Energy Fuels Resources (USA) Inc., started to use 2 methods to address the extra mine water. Mine water was sprayed on the mine site, where some of it drifted off-site. But, there was no supplemental evaluation of the impacts of the spraying of this water at the site and the impacts off-site.

The second method of dealing with the excess water was to put the water into tanker trucks and transport it to the White Mesa Uranium Mill, White Mesa, San Juan County, Utah. The Mill is owned and operated by Energy Fuels. Over 100 tanker trucks of impacted mine water from the Canyon Mine workings were transported to the Mill for use in the Mill processing circuit. However, there was a problem—those shipments of water out of state were illegal. Arizona law does not allow the transport of groundwater for use out of state without authorization by the Director of the Arizona Department of Water Resources (ADWR) and does not authorize the transport of water for direct disposal. Energy Fuels failed to submit the required application and receive the ADWR Director's approval. Apparently, Energy Fuels was not aware of this legal requirement. The ADWR did not fine Energy Fuels, but made clear the requirement for an application,

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[7] https://arlweb.msha.gov/drs/ASP/MineAction70002.asp

[8] https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5376035.pdf
https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5376042.pdf

hearing, opportunity for public comment, and the Director's approval if additional water is transported to the White Mesa Mill from Arizona.[9]

The issue of water from the mine and how that water would be handled should have been fully discussed and evaluated in the USFS review of the POO and in the NEPA review, but was not. The issue remains to be resolved. With no underground or surface mine workers during the past 3 months, it does not appear that mine water is being pumped, but is accumulating underground and will have to be removed at a later time. Additional mine water will be accessed when the drifts into the ore body are developed and when the ventilation shaft from the surface to the lowest elevation is constructed.

The USFS should have supplemented the EIS for the Canyon Mine to address these mine-water removal methodologies and impacts, but failed to do so.

7.2. The second aspect of the mine operation that was not identified and evaluated was the impacts from the noise from industrial fans at the top of the ventilation shaft that will be installed at the Canon Mine prior to operation, pursuant to the requirements of 40 C.F.R. Part 61 Subpart B, National Emission Standards for Radon Emissions From Underground Uranium Mines.[10] Subpart B was promulgated in 1989, after the original POO. The fans that will draw air into the mine and force radon from the mine make an extremely loud industrial noise that can be heard for long distances. The USFS did not evaluate the impacts of that noise on the local wildlife. There are possible impacts to nesting birds (including California Condors) and calving elk. In the Environmental Assessment for the La Sal Mines Complex, La Sal, Utah, the BLM and USFS evaluated the impacts on wildlife of the numerous fans at the top of the ventilation shafts. These shafts are distributed in the Manti-La Sal National Forest and on BLM lands in the vicinity of the La Sal Mines Complex.[11]

The USFS should have supplemented the EIS for the Canyon Mine to address these impacts, but failed to do so.

8. In addition to evaluating BLM mining regulations, the USFS must also review state mining regulations that are applicable to mines on public lands, such as the states of Colorado, New Mexico, and Utah. Mines on USFS lands in those and other states must comply with state regulatory programs. Therefore, even if current mining operation on USFS land do not require a POO, the applicable state regulatory agency requires a mine

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[9] http://www.uraniumwatch.org/canyonmine.az/ADWR_EFRI_CanyonMine_UWComplaintResponse_170727.pdf
http://www.uraniumwatch.org/canyonmine.az/ADWR_UW_ComplaintDocuments_RecordsResponse_1709-1-17.pdf

[10] https://www.law.cornell.edu/cfr/text/40/part-61/subpart-B

[11] https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage&currentPageId=149110

plan and follows a mine-plan approval process.

9. All mineral exploration and mining operations, except those with the most de-minimus impacts, must require a POO, NEPA review, and a public notice and comment decision making process. The POO, IMP, and environmental analysis requirements must be specific and comprehensive.

10. The USFS must take a hard look at the reality of the existing and historic USFS mines. The USFS must take a hard look at what has happened at the mines and their existing and historic conditions and how a different program could have made a difference. The USFS must determine what elements of a new regulatory program are needed to protect the public health and safety and the environment.

11. New regulations must not be vague and must take into consideration actual mining conditions over time. The USFS must be committed to actually enforcing the regulations.

12. The USFS must take into consideration the need for public trust: trust in an open process, open reviews, open decision making, and a comprehensive and competent regulatory program. Currently, you do not have that trust from knowledgeable members of the public and public interest organizations.

Thank you for the opportunity to comment.

Sincerely,

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