## Conservation Colorado • Earthworks • INFORM San Juan Citizens Alliance • Sheep Mountain Alliance

June 23, 2017

The Colorado Mined Land Reclamation Board Colorado Division of Reclamation, Mining & Safety 1313 Sherman Street

Denver, Colorado 80203

Via email to: Ginny.Brannon@state.co.us, Jeff.Fugate@state.co.us, Dustin.Czapla@state.co.us, Russ.Means@state.co.us, camille.mojar@state.co.us

Re: Objection to Request for Extension of Temporary Cessation Status, Van 4 Mine, Permit No. M-1997-032

Dear Members of the Mined Land Reclamation Board,

The Information Network for Responsible Mining, Conservation Colorado, Earthworks, San Juan Citizens Alliance and Sheep Mountain Alliance file this objection to Piñon Ridge Mining LLC's request to extend temporary cessation status on the Van 4 Mine, permit no. M-1997-032, for a second five-year period. The staff and members of these organizations are directly and adversely affected parties as defined by Rules 1.1(38.1) and 1.13.6 and take a direct interest in the operations and final reclamation of the Van 4 mine site. The staff and members of these organizations regularly use and enjoy the public lands at and surrounding the Van 4 Mine. We appreciate the opportunity to provide these comments and request that a hearing to review the status of the Van 4 Mine be held before the Mined Land Reclamation Board.

For consideration by the Board, we have the following comments:

## 1. The Van 4 Mine has avoided final reclamation for years in violation of Colorado law.

The Colorado Mined Land Reclamation Act states unequivocally that a mine must be reclaimed after a decade of inactivity. The law says: "In no case shall temporary cessation of production be continued for more than ten years without terminating the operation and fully complying with the reclamation requirements of this article." Throughout its history, the Van 4 Mine has been minimally active and has not produced any substantive amount of ore since its permit was issued in 1997; its permit boundaries were carved from the former Thunderbolt Group (permit no. M-1977-287), where activity ceased in the early 1980s. This extended period of nearly four decades of non-production and token activity at the Van 4 Mine without any effort to complete reclamation is simply unlawful. Denial of the second Notice of Temporary Cessation is consistent with Colorado law and will help bring this mine into prompt compliance.



Van 4 Mine, Montrose County

<sup>2</sup> See Nov. 15, 2013, Notice of Temporary Cessation dated by Energy Fuels Inc., available in permit file at: <a href="http://drmsweblink.state.co.us/drmsweblink/0/doc/1008220/Page1.aspx?searchid=3e08dc85-97b6-4d35-">http://drmsweblink.state.co.us/drmsweblink/0/doc/1008220/Page1.aspx?searchid=3e08dc85-97b6-4d35-</a>

<sup>&</sup>lt;sup>1</sup> Please see C.R.S. § 34-32-103(6) (a)(III)

The Mined Land Reclamation Act (MLRA) speaks unambiguously of the production of ore as a requirement for retaining a reclamation permit at C.R.S. § 34-32-103(6)(a)(I) by specifically requiring that an operator "engage in the extraction of minerals" in order for a reclamation permit to remain in effect. The only exceptions to this requirement are for a mine to either be in full reclamation or to be in an approved period of temporary cessation, limited to two five-year periods. Because the Van 4 Mine has not "produced" as required by the Act, the mine is ineligible for a second five-year period of temporary cessation and it must be required to begin final reclamation.

As the public records of the Division of Reclamation, Mining and Safety show, the Van 4 has had no significant or meaningful mining activity throughout the entire history of its permit, issued in 1997, nor has it had any significant activity since the uranium market collapsed in the 1980s and the Thunderbolt group of mines ceased operating. Shortly after transfer of the mine permit from Denison Mines (USA) Corp. to former owner Energy Fuels Inc., Energy Fuels filed notice of temporary cessation for the Van 4 on June 13, 2012,<sup>2</sup> but for all intents and purposes the Van 4 has been shut down for far longer. The only major activity involving the Van 4 appears to have been the transferal of permits among subsidiaries of Canadian-based corporations.

According to the Van 4 mining plan on file with the Division, the Van 4 shaft was constructed in 1979 and produced some ore after opening. Initial production continued no later than 1984, however, when former owner Union Carbide shut down all of its operations in western Colorado. Some production resumed at the mine between 1989 and 1990.<sup>3</sup> In 1997, as the rest of the Thunderbolt complex was reclaimed and released from permitting, a new permit for the Van 4 was issued by the Division. Two years later, a Division inspection report noted the continuing lack of activity at the site: "At this time [1999], there are no uncorrected problems, other than the long period of inactivity

<sup>&</sup>lt;sup>2</sup> See Nov. 15, 2013, Notice of Temporary Cessation dated by Energy Fuels Inc., available in permit file at: <a href="http://drmsweblink.state.co.us/drmsweblink/0/doc/1008220/Page1.aspx?searchid=3e08dc85-97b6-4d35-9774-b5022e4aa0ef">http://drmsweblink.state.co.us/drmsweblink/0/doc/1008220/Page1.aspx?searchid=3e08dc85-97b6-4d35-9774-b5022e4aa0ef</a>. Energy Fuels notified the Division that the mine had gone on temporary cessation status 17 months prior to the submission of the notice.

<sup>&</sup>lt;sup>3</sup> See Exhibit C, p. 1, Mining Plan, in November 2007 permit application, available in permit file at: <a href="http://drmsweblink.state.co.us/drmsweblink/0/doc/809078/Page1.aspx?searchid=464a01be-7cc8-4d3d-be36-b16ad4d9905c">http://drmsweblink.state.co.us/drmsweblink/0/doc/809078/Page1.aspx?searchid=464a01be-7cc8-4d3d-be36-b16ad4d9905c</a>

without reclamation occurring, and a possibly insufficient bond."4

The record shows that nothing has significantly changed with that situation in the intervening years. In 2001, the operator was again reminded of the temporary cessation requirements in a Division inspection report, which documented the dilapidation of the site's buildings caused by neglect, vandalism and an infestation of rodents. The bond had to be updated in order to consider the costs of preventing exposure of hantavirus to workers. Inexplicably, the Van 4 was not formally placed on temporary cessation status for another 11 years, although the cessation of production had in fact long since occurred.



Van 4 hoist house left open to the elements

During those years, so-called mining activities at the Van 4 consisted of regular maintenance and occasional statements that the mine would be redeveloped for the future,

<sup>&</sup>lt;sup>4</sup> Jan. 13, 1999, inspection report, located in permit file at <a href="http://drmsweblink.state.co.us/drmsweblink/0/doc/347882/Page1.aspx?searchid=464a01be-7cc8-4d3d-be36-b16ad4d9905c">http://drmsweblink.state.co.us/drmsweblink/0/doc/347882/Page1.aspx?searchid=464a01be-7cc8-4d3d-be36-b16ad4d9905c</a>

<sup>&</sup>lt;sup>5</sup> June 4, 2001, inspection report for the Van 4, in permit file at <a href="http://drmsweblink.state.co.us/drmsweblink/0/doc/325984/Page1.aspx?searchid=3e08dc85-97b6-4d35-9774-b5022e4aa0ef">http://drmsweblink.state.co.us/drmsweblink/0/doc/325984/Page1.aspx?searchid=3e08dc85-97b6-4d35-9774-b5022e4aa0ef</a>

as made in numerous and virtually identical annual reports to the Division. A high point of activity was the reopening of a vent hole in 2007 and the realization that the vent was unusable and therefore needed to be reclaimed, requiring the planting of seeds on less than one acre of land.<sup>6</sup> In 2009, the most significant activity was the cleanup of transformer oil spilled on the ground by thieves who had stripped the mine's buildings of electrical wiring.<sup>7</sup> Later that year, the mine's environmental protection plan (EPP) summarized site conditions this way: "The mine is not currently producing, and access into the underground workings is not possible as a result of the existing condition of the headframe and shaft infrastructure." Even then, the mine was not placed on temporary cessation, purportedly because the operator had to make improvements to a stormwater ditch, required by the implementation of the EPP, a task that took the next three years to achieve but does not meet the statutory and regulatory definitions of an "active" mine.



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<sup>&</sup>lt;sup>6</sup> Annual report filed by Denison Mines on Nov. 3, 2009, available in permit file at <a href="http://drmsweblink.state.co.us/drmsweblink/0/doc/898791/Page1.aspx?searchid=3e08dc85-97b6-4d35-9774-b5022e4aa0ef">http://drmsweblink.state.co.us/drmsweblink/0/doc/898791/Page1.aspx?searchid=3e08dc85-97b6-4d35-9774-b5022e4aa0ef</a>

<sup>&</sup>lt;sup>7</sup> April 7, 2009, correspondence from Denison Mines to Bureau of Land Management, in permit file at <a href="http://drmsweblink.state.co.us/drmsweblink/0/doc/882156/Page1.aspx?searchid=3e08dc85-97b6-4d35-9774-b5022e4aa0ef">http://drmsweblink.state.co.us/drmsweblink/0/doc/882156/Page1.aspx?searchid=3e08dc85-97b6-4d35-9774-b5022e4aa0ef</a>

<sup>&</sup>lt;sup>8</sup> See p 1-1 of Attachment H (p. 32 of PDF) in the Hydrological Evaluation of the Van 4 Mine, submitted with EPP on June 8, 2009, available in permit file at <a href="http://drmsweblink.state.co.us/drmsweblink/0/doc/887378/Page1.aspx?searchid=3e08dc85-97b6-4d35-9774-b5022e4aa0ef">http://drmsweblink.state.co.us/drmsweblink/0/doc/887378/Page1.aspx?searchid=3e08dc85-97b6-4d35-9774-b5022e4aa0ef</a>

Significantly, there has been no ore mining at the Van 4. This has been the situation since its permit was issued in 1997 until it was officially granted temporary cessation status in 2012, as well as during the two decades prior to current permitting. Based on facts established in the mine files, the Van 4 is not eligible for an additional period of temporary cessation because, as previously noted, the MLRA requires "the extraction of minerals" for a permit to remain in effect. The permittees have not reported any mineral extraction at the Van 4 since at least 1997, and the extraction of minerals is extremely unlikely to occur in the future despite continuing promises of a price revival from hopeful speculators. It is past time for final reclamation to begin.

2. The Division should take steps to ensure that reclamation promptly occurs and that cleanup costs do not fall on taxpayers.

Reclamation of the Van 4 Mine does not pose a significant financial burden to Piñon Ridge Mining LLC, which purchased the mine for a token amount in 2012<sup>10</sup> with the knowledge that it was on temporary cessation and that final reclamation was imminent under state law. Reclamation and final cleanup of the Van 4 mine should begin as soon as possible. The reclamation requirements for the mine are minimal, and the cost of implementing the reclamation requirements are estimated at \$75,057, the current bond amount. Under the reclamation plan, Piñon Ridge Mining is required to revegetate the surface area, including the waste rock area, backfill the mine shaft, remove the nonfunctioning headframe, and demolish the two dilapidated maintenance buildings, which will be buried onsite. 12

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<sup>&</sup>lt;sup>9</sup> See C.R.S. § 34-32-103(6)(a)(I)

<sup>&</sup>lt;sup>10</sup> See "Energy Fuels to sell Piñon Ridge Uranium Mill for \$2.05 million," The Denver Post, July 8, 2014. The deal included the state-issued license for a uranium processing mill, the five mines of the Sunday Complex, and the Van 4 Mine for just a small fraction of the value of the properties if the market were actually viable. Online at <a href="http://www.denverpost.com/2014/07/08/energy-fuels-to-sell-pion-ridge-uranium-mill-mines-for-2-05-million/">http://www.denverpost.com/2014/07/08/energy-fuels-to-sell-pion-ridge-uranium-mill-mines-for-2-05-million/</a>

The Division's 2012 requirement and cost calculations are available in the permit file at <a href="http://drmsweblink.state.co.us/drmsweblink/0/doc/954982/Electronic.aspx?searchid=464a01be-7cc8-4d3d-be36-b16ad4d9905c">http://drmsweblink.state.co.us/drmsweblink/0/doc/954982/Electronic.aspx?searchid=464a01be-7cc8-4d3d-be36-b16ad4d9905c</a>

The final reclamation map is available in the permit file at <a href="http://drmsweblink.state.co.us/drmsweblink/0/doc/887380/Page1.aspx?searchid=464a01be-7cc8-4d3d-be36-b16ad4d9905c">http://drmsweblink.state.co.us/drmsweblink/0/doc/887380/Page1.aspx?searchid=464a01be-7cc8-4d3d-be36-b16ad4d9905c</a>. Details of building demolition and onsite burials are at p 3 in reclamation costs calculations, in permit file at

Even with just a modest list of reclamation tasks to be considered, the Division should take care to adequately estimate the true current costs of reclaiming the Van 4 Mine and undertake any additional analysis necessary to ensure that the mine's radioactive materials and waste rock are handled so that public health and the environment are protected. The onsite burial of the buildings should also be reconsidered. Because of the request to extend temporary cessation, the MLRA and implementing regulations require the applicant to demonstrate -- and the Division to verify -- the adequacy of the final bond amount after the Division conducts a new inspection of the mine site. The inspection report and any bond recalculation documents should be made available as soon as possible to help inform public participation in this proceeding.



The Van 4 Mine from Google Earth, showing disturbed areas and prominent waste rock area.

We believe the Board's and the Division's careful scrutiny of the applicant's bonding estimate and reclamation plans is of special importance in this case because of the recent actions of Western Uranium Corporation, the corporate owner of Piñon Ridge Mining LLC. According to the management analysis document filed with the Canadian securities exchange by Western Uranium Corporation on March 31, 2017, the company deliberately walked away from a \$210,510 bond for a coal mine in Alaska after pulling out of the project. As the report noted:

During the second quarter of 2016, the Company initiated actions to cancel its coal mining leases in Alaska. In connection therewith, the Company notified the state of Alaska of its intent to forfeit the posted bond in satisfaction of the reclamation liabilities at the site. In response to the Company's notification, the Company received notification that the state of Alaska was initiating forfeiture of the Company's performance bond for reclamation. However, the notice indicated an additional surety bond of \$150,000 in excess of the \$210,500 cash bond, which had been posted by the Company upon purchase of the property. The Company and its advisors do not believe that it is obligated for this additional amount of claimed reclamation obligation. [Emphasis added.] The Company is working with its legal counsel and the State of Alaska to resolve this matter. The Company has not recorded an additional \$150,000 obligation as the Company does not expect, based on the advice of legal counsel, to be obligated to an amount greater than that presently reflected in the reclamation liability. During the year ended December 31, 2016, the Company adjusted the fair value of its reclamation obligation and for the Alaska mine, accreted \$183,510 to bring its reclamation liability to face value. The portion of the reclamation liability related to the Alaska mine, and its related restricted cash are included in current liabilities, and current assets, respectively, at a value of \$215,976 and \$215,976. On January 20, 2017, the State of Alaska notified the Company that its reclamation bond had been forfeited to be used to satisfy the reclamation obligation. However, no amount had yet been determined in respect to the final cost of the reclamation obligation.<sup>13</sup>

Considering the willingness of the parent corporation to walk away from its mining liabilities in Alaska, the Division and Board should do everything reasonable to hold Piñon Ridge Mining and Western Uranium Corporation accountable for cleaning up the Van 4 and prevent Coloradans from being saddled with the costs of covering those

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Copy attached.

<sup>&</sup>lt;sup>13</sup> Western Uranium Corporation, Management Discussion & Analysis, p. 5, filed March 31, 2017, Available for download at <a href="http://www.sedar.com/DisplayCompanyDocuments.do?lang=EN&issuerNo=00026200">http://www.sedar.com/DisplayCompanyDocuments.do?lang=EN&issuerNo=00026200</a>

obligations.

3. The reclamation and environmental protection plans should be updated to consider existing conditions.

The MLRA and the Rules require the final reclamation of the Van 4 to be protective of the environment. The Van 4 Mine submitted an Environmental Protection Plan in 2012 as a requirement of a 2008 legislative confirmation that all Colorado uranium mines meet the MLRA definition of "designated mining operations." Review of the existing EPP confirms that additional analysis and information for the site are needed in order to achieve a final closure that truly returns the land "to a use beneficial to the people of this state" as required under the MLRA.<sup>14</sup>

In 2014, the Gunnison Sage Grouse was protected as a threatened species under the federal Endangered Species Act. The Van 4 Mine is located in designated critical habitat for the grouse, which has a total breeding population of approximately 4,700 birds throughout its entire range. The Van 4 Mine is located in the upland portion of the critical habitat for the San Miguel Basin subpopulation, which is on the verge of extirpation with an estimated 206 birds left. During the federal listing process for the Gunnison Sage Grouse, mineral development was identified as a contributing factor to the decline of the species. Beginning in 2000, when the grouse became a candidate species, the Colorado Department of Natural Resources began actively engaging in private-public efforts to restore habitat and developed a rangewide species conservation plan, indicating the importance and prioritization of state policy to recover the grouse. However, the reclamation and environmental protection plans for the Van 4 Mine did not take into consideration the importance of recovering grouse at the time they were approved. The

<sup>&</sup>lt;sup>14</sup> See C.R.S. § 34-32-102(1).

<sup>&</sup>lt;sup>15</sup> Population estimates documented in the final rule for the listing of the Gunnison Sage Grouse in the Federal Register, Vol. 79, No. 224 at 69196, Nov. 20, 2014, <a href="https://www.gpo.gov/fdsys/pkg/FR-2014-11-20/pdf/2014-27109.pdf">https://www.gpo.gov/fdsys/pkg/FR-2014-11-20/pdf/2014-27109.pdf</a>. Critical habitat designations for the Gunnison Sage Grouse were identified in the Federal Register, Vol. 79, No. 224, on Nov. 20, 2014; in particular, the San Miguel Basin habitat is mapped at p 69359; available online at <a href="https://www.fws.gov/mountain-prairie/species/birds/gunnisonsagegrouse/GuSGCriticalHabitat">https://www.fws.gov/mountain-prairie/species/birds/gunnisonsagegrouse/GuSGCriticalHabitat</a> 11202014.pdf

<sup>&</sup>lt;sup>16</sup> See Colorado's rangewide conservation plan and background information at <a href="http://cpw.state.co.us/learn/Pages/GunnisonSagegrouseConservationPlan.aspx">http://cpw.state.co.us/learn/Pages/GunnisonSagegrouseConservationPlan.aspx</a>

natural sage brush cover of the site has been significantly disturbed through the decades and is in poor condition overall.<sup>17</sup> Because of the need to restore habitat for the Gunnison Sage Grouse, the Division should consider any necessary improvements to the reclamation plan for the Van 4 to support state and federal species conservation goals. The Board and the Division should also take care to avoid approving activities that could cause a prohibited take of the protected species and/or its habitat.<sup>18</sup>

The Van 4 mine is actively grazed by cattle, including on areas constructed out of waste rock with undocumented levels of radioactivity. Even though other uranium mines in the area have conducted and submitted overland gamma surveys that indicated extensive radiological contamination inside mine permit boundaries as well as outside the



Livestock grazing at the Van 4 Mine

<sup>&</sup>lt;sup>17</sup> The Van 4 Mine is located within the BLM "Mesa Creek" grazing allotment (ID CO17014). The Mesa Creek allotment, and the majority of surrounding allotments, do not meet BLM rangeland health standards, with the impacts of mining identified as a contributing factor in 2013 analysis. See BLM rangeland conditions mapping at http://bit.ly/2szL1m5

<sup>&</sup>lt;sup>18</sup> See also enclosed map locating the Van 4 Mine in designated critical habitat for the Gunnison Sage Grouse.

boundaries on access roads and adjacent lands, no equivalent survey has been conducted for the Van 4. Considering the presence of cattle and wildlife as well as the fact that the adjacent public lands are used extensively for recreation, the Division should require such surveys of the Van 4 and consider the best management practices for reclaiming radioactive areas during its current bond review. The Division should require the reclamation plan to be updated to specifically address the site's radioactivity with the goal of returning it to background levels in order to protect livestock, wildlife and public health.

4. The Van 4 Mine does not meet the requirements of the Rules to qualify for an additional five-year period of temporary cessation.

Rule 1.13.1 specifies that mine permits remain in effect only so long as the "operator continues to engage in the extraction of minerals." The Van 4 does not meet this requirement.

Rule 1.13.5(a) requires that the notice for a second period of temporary cessation shall include a demonstration that the financial warranty is adequate to cover the liability. The Van 4 did not meet this requirement because Piñon Ridge Mining did not make any attempt to update the existing bond calculations or make adjustments for inflation. The current bond amount was set by the Division on May 10, 2012.

The operator also failed to meet the requirements of Rule 1.13.5(c) which requires the "demonstration of continued commitment to conduct mining operations at the site" within the next five years because it relies on speculative analysis of the spot uranium market that has scant connection to the likelihood that the Van 4 would actually produce ore in the future. Piñon Ridge Mining also relies on overly optimistic assessments of the viability of the unproven technology of ablation processing to assert that the Van 4 Mine will reopen.

5. Speculative market projections do not accurately reflect the economic outlook for uranium mines in western Colorado.

Since the Van 4 Mine finally and officially entered temporary cessation in 2012, the

market price of uranium has dropped roughly in half yet Piñon Ridge Mining continues to rely on claims of a swift turnaround fueled by a resurgence in nuclear power production as the plan to resume production that is required by Rule 1.13.5(c). In particular, Piñon Ridge Mining cites price forecasts from Cantor Fitzgerald, Haywood Securities, RBC Capital Markets and TD Securities, which are all consistently and eagerly bullish to the exclusive advantage of junior mining companies that are luring investors to support companies that are in the business to mine them rather than uranium.

The Wall Street Journal, the leading business journal, provided quite a different outlook for uranium – and a realistic one – in September 2016:

"There is too much of nearly every commodity. Then there is uranium. The outlook for the element that powers nuclear reactors may be worse than for any other, and there is almost no prospect for improvement soon. Unlike other commodities, low prices won't stimulate demand. No commodity faces the unique pressure that uranium and nuclear fuel do and there is little prospect of a near-term recovery."

In its discussion of future mining plans at the Van 4, Piñon Ridge Mining says that it has "confidence" prices will rise high enough to support sustainable operations as well as the assertion that a new uranium mill will be built and ready to open its doors for business in Paradox Valley in 2019, providing a processing location for ore from the Van 4. This is an unsupportable assumption. In reality, the Piñon Ridge Mill cannot be constructed because the license has been suspended while ongoing litigation between the state and Sheep Mountain Alliance is pending in court. It also makes a particularly unattractive investment opportunity due to its extremely poor economics, excess milling capacity from competitors, and the consistent low prices for uranium that have existed since the market collapsed in the years following the Three Mile Island incident in 1979.

As stated in filings required by Canadian security laws, Energy Fuels Corporation (the former Van 4 owner) continues to suspend uranium mining and milling operations in the current market conditions, as are other uranium producers worldwide. Moreover, Energy

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<sup>&</sup>lt;sup>19</sup> Spencer Jakab, 18 Sept. 2016, 'Uranium Investments Grow Radioactive', Wall Street Journal. <a href="https://www.wsj.com/articles/why-uranium-investments-will-remain-radioactive-1474225882">https://www.wsj.com/articles/why-uranium-investments-will-remain-radioactive-1474225882</a> Copy with original headline enclosed.

Fuels reported that although the \$20-per-pound "spot prices have recovered somewhat from their late-2016 lows, the market remains weak and oversupplied. The Company continues to believe that the continued weak uranium markets are primarily the result of excess uranium supplies caused by large quantities of secondary uranium extraction, excess inventories, and thus far insufficient production cut-backs." The report also confirms that Energy Fuels "does not expect the spot market price of U3O8 to exceed \$54.99 prior to December 2020." Indeed, the futures market has priced uranium yellowcake in the \$20 range out until March 2020. These prices exceed the production costs, and are the likely business reason Energy Fuels transferred the Van 4 assets to Piñon Ridge Mining in 2014.

Piñon Ridge Mining also says that it considers the Van 4 to be a "near-term producer" and that it could commence production quickly at the mine when and if the day of high uranium prices arrives. However, its parent company focuses on other mines and prospects in investment presentations and marketing materials and rarely mentions the Van 4 publicly. Western Uranium Corporation has also not bothered to verify the actual quantity or economic reserves of uranium and vanadium at the Van 4 mine based on the cost of production methodology required by the Canadian regulators; any assumptions of the value of ore bodies or the potential to produce ore are based on historic estimates only. To date, neither Western Uranium nor any of the Van 4's preceding owners have taken steps to produce a Preliminary Economic Analysis (a PEA) for the Van 4 or to verify resources in a NI 43-101 Technical Report, which any mining company must prepare in order to comply with Canadian regulations applicable to mineral estimates. By contrast, Western has produced a NI 43-101 PEA for the majority of its other mines,

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<u>presentation/WUC\_CorporatePresentation\_March\_2017.pdf.</u> Note that the Van 4 is not specifically mentioned in a list of asset properties by Western Uranium on its website at <a href="http://www.blackrangeminerals.com/mines-projects.html">http://www.blackrangeminerals.com/mines-projects.html</a>, and note the use of historic resource estimates that are not verifiable.

<sup>&</sup>lt;sup>20</sup> Energy Fuels Inc., For 10-Q quarterly report to the SEC, March 31, 2017. See p. 18 of the attached report for discussion of poor market outlook and p. 32 for 2020 price prediction.

See projected price quotes for uranium at http://data.tradingcharts.com/futures/quotes/ux.html

An examination of Western Uranium Corporation's investor materials from March 2017 reveals that the primary emphasis of the company's current business model is to promote the ablation processing technology at the Sunday mines in advance of development of all its other properties:

<a href="http://www.blackrangeminerals.com/corporate-">http://www.blackrangeminerals.com/corporate-</a>

advancing them toward production ahead of the Van 4. Without verified resources or a PEA, and considering the physical state of the mine's infrastructure, the Van 4 is simply not a serious candidate for mineral production in the foreseeable future, even by the minimalist standards of the Canadian-based junior mining sector.

Piñon Ridge Mining has done nothing to actively advance actual mining and ore production at the Van 4. There is simply no reason to allow the Van 4 to remain on temporary cessation for another five years.



6. It is not reasonable to rely on an unproven technology to support the resumption of operations at the Van 4 Mine.

In its informal plan to resume mining at the Van 4, Piñon Ridge Mining says that the ablation processing technology will be deployed at the Van 4 Mine, which will enable operations to restart because costs will be significantly reduced. This scenario lacks the data, veracity, and rigor required of claims made by Canadian mining corporations and

incorrectly relies on the assumption that the 11(e)(2) byproduct waste created by ablation processing will be backfilled in the underground workings of the Van 4 as a means of final disposal.

This rosy scenario fails to consider the 2016 determinations of both the Colorado Department of Public Health & Environment and the U.S. Nuclear Regulatory Commission that ablation processing is a uranium milling activity which, in Colorado, requires a full uranium milling Part 18 license authorized under the Atomic Energy Act and that the 11(e)(2) byproduct must be disposed in a tailings impoundment at a licensed and operating uranium mill. There is no means to authorize disposal of ablation waste in the underground workings of mines or anywhere else other than at the impoundments at Energy Fuels' White Mesa Mill near Blanding, Utah. There is no indication that Energy Fuels has the capacity or commercial willingness to accept wastes from Van 4, regardless of price. Colorado's Radiation Control Act and implementing regulations do not allow for the unlicensed possession or the alternate disposal of ablation waste. <sup>23</sup> Piñon Ridge Mining's assertion that it will backfill mine workings with this waste is unrealistic and prohibited by Colorado law. <sup>24</sup>

Ablation processing has only been conducted so far at a pilot scale and has never been subject to commercial-scale testing or deployed as a commercial activity. This lack of proven viability for ablation processing further erodes the validity of Piñon Ridge's plan to resume operations at the Van 4. The additional promises of greatly lowering production costs are also unproven. The company's recent analysis of the costs of ablation processing estimate a reduction between 33 and 44 percent<sup>25</sup>, which is not enough to sustain conventional uranium mining and is not certain. In a recent interview, Piñon Ridge Mining CEO George Glasier estimated the costs of ablating existing stockpiles at mines – which did not include the costs of mining new reserves of ore – to

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with the SEC and available online at <a href="https://www.sec.gov/Archives/edgar/data/1621906/000121390017003160/f10k2016">https://www.sec.gov/Archives/edgar/data/1621906/000121390017003160/f10k2016</a> westernuranium.htm

<sup>&</sup>lt;sup>23</sup> See C.R.S. § 25-11-107(1)(a); accord C.R.S. § 25-11-203(1)(b)(I); accord 42 U.S.C. § 2111; see also 10 C.F.R. §§30.3; 40.3. No person may lawfully own or possess uranium mill tailings without a Colorado Department of Public Health and Environment ("CDPHE") approved "byproduct material" license under C.R.S. § 25-11-203, 6 CCR 1007-1 Part 18.

See Colorado's standards for byproduct material licensing at 6 CCR 1007-1 Part 18 Appendix A.
 See discussion at p. 6 of Western Uranium Corporation's annual report for the 2016 fiscal year, filed

be roughly \$40 per pound.<sup>26</sup>

There are no significantly large waste piles located at the Van 4 Mine, mainly due to the fact that there has been no significant mining there over the past four decades, and thus no stockpile of material ready for ablation or to be "cleaned up" with the experimental technology. The price estimates in Piñon Ridge Mining's plan to resume operations at the Van 4 simply do not take into the consideration the high costs of extracting uranium ore in underground mines on the Western Slope. Nevertheless, the bare assertion that a viable business model can be developed from using ablation processing has become the focal selling point of Western Uranium's investor pitches and, now that it is time to apply for temporary cessation again, is being proposed as the economic solution for the Van 4.

Irony is absent from these pitches, which also trumpet ablation processing as a "cleanup" technology. It is clear from Western Uranium Corporation's formal reports to the U.S. Securities Exchange Commission that reclamation – not mining – is the business model that it strives for:

Ablation mining technology can be used on legacy uranium stockpiles in the Western United States. WUC would ablate these stockpiles, removing 85-90% of the uranium. This is an application through which ablation mining technology could positively contribute to the 'greening of the environment'. According to a study there are approximately 4,225 legacy uranium mines from the 1940-1970 period throughout the Western United States, most of which have waste stockpiles.<sup>27</sup>

In this regard, the Board should hold Western Uranium Corporation and Piñon Ridge Mining LLC to their statements. We are in complete agreement that it is time to allow them to proceed with cleaning up a uranium mine and to contribute positively to the "greening of the environment." The economic realities of the uranium market demonstrate that the only viable economic benefit to the local community lies in the work and employment associated with reclamation activities, rather than speculative future

WUC CEO George Glasier discussed in detail his predictions of cost-savings for the ablation technology in a Jan. 12, 2017, interview with Palisade Radio, available online at <a href="http://palisaderadio.com/george-glasier-a-real-market-shift-in-uranium-is-in-play/">http://palisaderadio.com/george-glasier-a-real-market-shift-in-uranium-is-in-play/</a>.
 Western Uranium Corporation, 2016annual report to SEC, p. 6, available online at

Western Uranium Corporation, 2016annual report to SEC, p. 6, available online at <a href="https://www.sec.gov/Archives/edgar/data/1621906/000121390017003160/f10k2016\_westernuranium.htm">https://www.sec.gov/Archives/edgar/data/1621906/000121390017003160/f10k2016\_westernuranium.htm</a>

mining plans or unsupported technologies.

Toward these shared goals of actual cleanup, we ask the Board to deny the company's request for a second five-year period of temporary cessation for the Van 4 Mine, instruct the Division staff to confirm the reclamation cost estimate, and proceed with final reclamation of the site.

Respectfully submitted,

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