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Mr. Dustin Czapla Environmental Protection Specialist Department of Natural Resources Colorado Division of Reclamation, Mining and Safety Grand Junction Field Office 101 S. Third St., Suite 301 Grand Junction, CO 81501

Re: JD-7 Pit Mine, Permit No. M-1979-094-HR, Response to Comments from Information Network for Responsible Mining ("INFORM")

Dear Mr. Czapla:

I am writing in response to your letter dated February 21, 2013, which requests that Cotter Corporation (N.S.L.) ("Cotter") inform the Division of Reclamation, Mining and Safety ("Division") of how it will respond to the jurisdictional issues presented by INFORM in its letter, dated February 20, 2013, to the Division, regarding Cotter's 112d Amendment Application ("Amendment") for the JD-7 Pit Mine. Based on prior communication with the Division, Cotter understands that your request covers both jurisdictional and non-jurisdictional issues. This letter will respond first to INFORM's concerns on jurisdiction, and second to the non-jurisdictional concerns raised by INFORM.

I. Jurisdictional Issues

INFORM's February 20, 2013 letter incorporates by reference its objections to Cotter's Notice of Temporary Cessation for the JD-7 Pit Mine. In doing so, INFORM incorporates several positions into its letter that misstate the authority of the Division and the Mined Land Reclamation Board ("Board") under the Mined Land Reclamation Act ("MLRA"), C.R.S. §§ 34-32-101 to -127, and its implementing regulations, particularly as to the Division's and Board's authority to approve intermittent status for the JD-7 Pit Mine and to place the JD-7 Pit Mine into temporary cessation. While Cotter will address those positions below, it also wishes to make clear that INFORM's assertions on jurisdiction should not be considered in this proceeding.

The purpose of the Environmental Protection Plan ("EPP") for the JD-7 Pit Mine is to meet the requirements of Hard Rock/Metal Mining Rule 6.4.21 and to update portions of Cotter's permit, not to question the Division's prior approval of intermittent status. The EPP process is neither the time nor proper procedure to criticize Division decisions made more than two decades ago or to present legal arguments regarding how the Division should be implementing its intermittent status and temporary cessation rules. Cotter applied for intermittent status for the JD-7 Pit Mine on February 13, 1991. In that application, Cotter described the activities undertaken since 1981

which constituted mining operations and which qualified the mine to be in intermittent status. By letter dated April 1, 1991, the Mined Land Reclamation Division informed Cotter that the Board had approved Cotter's application on February 25, 1991. The JD-7 Pit Mine's intermittent status has repeatedly been approved since that approval, including in inspection reports for inspections of the JD-7 Pit Mine conducted February 21, 1997, September 24, 1999, and September 23, 2010. Moreover, in a letter dated September 30, 2011, the Division requested that Cotter update its permits by submitting EPPs, which Cotter has now done. INFORM should not be allowed to question these decisions or the JD-7 Pit Mine's future status in a proceeding where such decisions and status are not now being adjudicated, and Cotter is merely attempting to comply with the Division's requests to update its permit and submit an EPP. INFORM's assertions on temporary cessation are especially inappropriate in this proceeding, because Cotter submitted a Notice of Temporary Cessation for the JD-7 Pit Mine in mid-December 2012. The filing of such notice initiates a separate administrative process specifically addressing temporary cessation, and the hearing on that issue has been scheduled for April 17-18, 2013.

Notwithstanding the above, Cotter responds below to the specific jurisdictional issues raised by INFORM.

A. INFORM Comment: It is appropriate to consider these two permitted mines as a single operation through a combined amendment application. It is also vitally important to note that the underground section has no record of ore production since 1981 and ore has never been excavated from the open pit, which is a blight visible for miles across Paradox Valley. These are mines that have been left unreclaimed and in a non-operating state for over three decades. As the Sept. 15, 2011, inspection report says, "The permit history indicates no mining activities for this site have ever occurred."

The existence or not of ore production from the JD-7 Underground Mine since 1981, and from the JD-7 Pit Mine, is irrelevant to the Amendment's approval. As explained in Cotter's Response in Opposition to INFORM's Objections Challenging Cotter's Notices of Temporary Cessation, the MLRA does not require that Cotter produce ore to retain it reclamation permits. INFORM's characterization of the JD-7 Pit Mine as a "blight" is also irrelevant to the Amendment's approval and is insupportable.

The JD-7 Underground Mine has not been left in a "non-operating state for over three decades." The Board issued permit number M-77-308 to Cotter for the JD-7 Underground Mine to extract up to 70,000 tons annually of minerals and waste rock, over a total disturbed surface acreage of 9.29 acres. During active mining, ore and waste rock were brought to the surface via a 1,600-foot decline and placed in the temporary ore storage area or end-dumped on the underground mine waste rock pile. Ore-grade material was trucked off site for processing. When necessary, water encountered in the underground mine was pumped to the surface, treated in the water treatment facility, and discharged per the requirements of a Colorado discharge permit.

Due to market conditions, the JD-7 Underground Mine suspended production in June 1980 and was placed into temporary cessation, but continued to conduct activities defined as mining operations. As explained in Cotter's May 10, 1990 application for intermittent status for the JD-7 Underground Mine, those operations included: repair and operation of the mine dewatering system in preparation for mining; extensive ground control and timber repair in preparation for mining; replacement of a 450-foot water line in preparation for mining; radiometric scanning and mapping; mine ore reserves and feasibility studies; mine surveys to define the ore deposit; application of fire retardant in preparation for mining; and mine vent access road regraveling and regrading in preparation for mining. Letter dated, May 10, 1990, from Cotter, to the Mined Land Reclamation Division, at 3. Cotter also explained that "Over a nine-year period \$863,800 were spent at the mine (an average of \$95,978 per year) on activities of this nature as well as mine maintenance," and the "ability to produce ore from the Mine and process it through a milling facility has been actively maintained " Further, Cotter explained that "Since 1980, Cotter has operated the JD-7 Mine as an intermittent operation." In June 1990, the JD-7 Underground Mine was removed from temporary cessation and granted intermittent activity status. Letter, dated June 26, 1990, from the Mined Land Reclamation Division, to Cotter.

Subsequent to 1990, there was a variety of activity at the JD-7 Underground Mine. Ground support work was conducted in 1993, 1994, and 1999. In 1994, Cotter constructed two lined settling ponds. The mine was de-watered from 1990-1999. In June 1997, the Division of Minerals and Geology approved TR-02, which updated the mining and reclamation plan. In 2005, a vent-hole was re-opened and additional ground support work was conducted. In 2011, Cotter installed a culvert in the access road to the JD-7 Underground Mine and built storm water catchment ponds and diversion ditches. The water treatment facility used for the treatment and discharge of mine and process water remains functional, though the mine is not currently being de-watered and no discharge has occurred since approximately 2007.

Consistent with the above, the JD-7 Pit Mine has not been left in a "non-operating state for over three decades." The Board issued permit number M-1979-94-HR to Cotter for the JD-7 Pit Mine to extract minerals and waste rock from the pit mine over a total surface acreage of 650 acres. The permit acreage was reduced to 490 acres in 1980. Production operations began with removal and storage of topsoil (for reclamation) and the removal of overburden from above the pit ore body. The current site layout and topography (Map 1 in the EPP) represents the state of overburden removal when production activities were paused in April 1981 as a result of market conditions. Despite those conditions, the JD-7 Pit Mine continued to conduct activities defined as mining operations. As explained in Cotter's February 13, 1991 application for intermittent status for the JD-7 Pit Mine, those operations included: determining ore reserves; surface drilling; geologic report preparation; drill plan preparation; and mine feasibility and economic studies. Letter dated, February 13, 1991, from Cotter, to the Mined Land Reclamation Division, at 2. Cotter also explained that "Over the most recent eight year period, \$96,200 were spent at the mine (an average of \$12,025 per year) on activities of this nature, as well as pit maintenance," and the "ability to produce ore from the Mine and process it through a milling facility has been actively maintained " Further, Cotter explained that "Since 1981, Cotter

has operated the JD-7 Pit Mine as an intermittent operation." By letter dated April 1, 1991, the Mined Land Reclamation Division informed Cotter that the Board had approved Cotter's technical revision application requesting intermittent status.

Subsequent to 1990, there was a variety of activity at the JD-7 Pit Mine. In-pit drilling was conducted at the mine in 1991-1993 and 1996-2004. Storm water diversion work was conducted in the pit in 2006. In 2011, Cotter built a drill road in the JD-7 pit, and rehabilitated the storm water pit dam and the upper diversion ditch.

On completion of mining, the JD-7 site will be reclaimed per the mine reclamation plan attached as Exhibit E to the Amendment. As set forth in that plan, Cotter will restore the affected land in accordance with the Board's reclamation performance standards and the Department of Energy's lease requirements.

Β. *INFORM Comment: INFORM has recently filed an objection to Cotter* Corporation's Dec. 15, 2012, Notice of Temporary Cessation in order to address the noncompliance of the JD-7 mines and looks forward to continuing to address those issues with the Division. By reference, we incorporate the comments made by our objection letter here as well. We wish to raise the issues of the long-term idled state and non-production of the JD-7 mines in this forum because the operating status is critically relevant to the overall environmental conditions of the site and the need for an Environmental Protection Plan. The JD-7 mines are not in compliance with the Colorado Mined Land Reclamation Act and the Division has been burdened with the task of continually addressing the permit status of Cotter Corporation's mines and the recalcitrance of this operator over the past five years. In the interests of the public, it is high time to take strong action to improve the environmental conditions of these mines, advance reclamation efforts, and fully implement the underlying principles and intent of the 2008 HB-1161 legislation.

Because INFORM incorporates into its February 20, 2013 letter the comments "made by" its February 12, 2013 objection letter, Cotter incorporates here by reference its Response in Opposition to INFORM's Objections Challenging Cotter's Notices of Temporary Cessation. In that response, Cotter explains why INFORM's positions on intermittent status and temporary cessation are insupportable. Further, Cotter explains why there is no basis to INFORM's contentions that the "JD-7 mines are not in compliance" with the MLRA, and that Cotter has been recalcitrant. INFORM does not explain why "operating status is critically relevant to the overall environmental conditions of the site and the need for an Environmental Protection Plan." With respect to INFORM's final comment, the approval of Cotter's Amendment and EPP will "improve the environmental conditions of these mines, advance reclamation efforts, and fully implement the underlying principles and intent of the 2008 HB-1161 legislation."

II. Non-Jurisdictional Issues

A. INFORM Comment: The most significant activity at the JD-7 over the past three decades cannot, in fact, be described or considered as mining but rather as waste-dumping. In 1996, the Division approved a technical revision to the JD-7's permit to allow 30,000 tons of low-grade uranium ore and waste material acquired from Cotter Corporation's Whitewater Sample Plant to be permanently disposed in the open pit's waste pile. The open pit was excavated in the late 1970s, over 10 million cubic years of overburden was removed, but the mineral body remains untouched. The only activity during a 30-year period was to bring in outside waste to add to the pile. The irony of this activity occurring under a reclamation permit is plain.

The technical revision to dispose of the low grade ore and waste material from the Whitewater Sample Plant underwent considerable review by the Division prior to being approved. Following the disposal of the material in the open pit waste pile, there have been no concerns noticed by either the Division or Cotter regarding this effort.

Cotter has completed several development drilling efforts in the open pit over the past thirty years. Also, Cotter has installed and maintained several stormwater control features at both the open pit and the underground mine facilities to minimize the effects of stormwater run-off from the mine areas.

B. INFORM Comment: At the same time, the lack of focused activity related to actual mining and reclamation becomes evident in the amendment application. For instance, Cotter describes a drainage pit for the underground section as "naturally revegetated." This delightful phrase is also used to describe the open pit's waste rock stockpile. How do major mine features become "naturally revegetated" over time? Through neglect inherent in the failure to undertake active reclamation work over a long period of time. A serious and vigorous effort to conduct reclamation work at this site now and in the future is needed and should be thoroughly spelled out in the final Environmental Protection Plan. Previous efforts at revegetation – natural or otherwise -- should be closely examined to make sure they will provide adequate vegetative cover and wildlife habitat.

Cotter has included a reasonable reclamation plan in the Amendment submittal.

C. INFORM Comment: One significant aspect of the JD-7's reclamation plan is the final state of the open pit. Because uranium mining in the region is typically done underground, the presence of the pit is unusual; that in and of itself increases its ability to rankle a public concerned with the overall aesthetic values of Southwestern Colorado and the area's reliance on a tourism – and recreation-based economy. Since the JD-7 was initially permitted in the 1970s, the

> techniques of reclamation, particularly for open pit mining, have changed dramatically. Yet new ideas about how to handle the final reclamation of the site are not introduced in the amendment application. The Division should take a fresh look at the JD-7 and consider the different alternatives that could be applied. Perhaps the most important option to consider is a final backfilling of the pit in order to reduce the size of the final waste pile that will be left permanently. Any final waste piles remaining on surface should be capped with sufficient topsoil prior to revegetation. While balancing the best methods for protecting the environment and hydrology of the site, the Division should strive to achieve a reclamation plan that returns the site as much as possible to its original topography and to reduce final visual impacts. As contemplated in the application, if the mine ever produces, the size of the waste pile will expand from its current size of 61.9 acres to over 224 acres, greatly increasing the visual impacts to Paradox Valley. In this scenario, backfilling of the pit should be thoroughly analyzed and seriously considered.

In the Amendment, Cotter indicates that the open pit will be backfilled to be able to drain any potential surface run-off. Also, the walls of the open pit will be graded to a 2:1 slope to provide a more stable slope for re-vegetation. This 2:1 slope will be a shallower slope than most of the immediately surrounding slopes of Monogram Mesa. When reclamation of the waste pile with 4:1 slopes is complete, the waste pile will look similar to the immediately adjacent slump block portion of Monogram Mesa where the JD-7 Mine is located.

D. INFORM Comment: Cotter should be required to demonstrate that there is adequate water available to resume mining operations. In the application, Cotter says it will haul 120,000 gallons annually to the site, yet does not include a formal agreement guaranteeing the supply.

Cotter proposes to use the same source of water that it has used for other mining operations in this area in the past.

E. INFORM Comment: Cotter has proposed the installation of four additional water monitoring wells prior to the start of any excavation. These wells should be installed as soon as possible, not simply at a hypothetical time in the future, in order to gather plentiful data and establish a solid baseline analysis of hydrological conditions. A number of constituents of concern -- including radium, arsenic, selenium, aluminum, molybdenum and zinc-- are indicated for passive or active water treatment at the site, even though the water treatment facility has not operated since 2007. Cotter has proposed conducting an initial five quarters of water monitoring in order to establish a baseline; however, water quality monitoring should continue on a quarterly (not semi-annual) basis permanently as a preventive deterrent. The underground section of the mine has a history of producing water and the ability to adequately treat it and comply with

the requirements of the discharge permit will continue to be a concern if mining resumes.

Cotter has proposed installing the monitoring wells and collecting five quarters of monitoring data as recommended by the Division. There does not appear to be any reason to provide more monitoring data at this time.

Cotter recognizes the concerns associated with satisfying discharge requirements of treated mine water, and plans to satisfy the discharge requirements of the Colorado Discharge Permit System permit that is in place as the JD-7 mine operations progress.

F. INFORM Comment: Although Cotter asserts in the amendment application that the potential for generating acid from the ore and waste rock at the site is minimal, it has not adequately demonstrated this in the application. Because ore is not available from the JD-7 due to lack of mining activity, geochemical testing was conducted on old ore from the JD-8 site instead. If ore becomes available at the JD-7 in future, SPLP tests should be conducted on both the ore and waste rock on a regular, quarterly basis. In any case, SPLP tests on the existing waste rock should be required. In addition, the Division should restrict the storage of ore on the clay-lined pad to 30 days, rather than 180 days, so that the potential for acid drainage is reduced.

The potential for acid mine drainage from the waste rock piles was quantified by the Acid-Base Accounting tests that indicated this was not an issue.

Prior to ore being stockpiled on the surface, Cotter will submit to the Division for its review and approval a geochemical evaluation of the ore to be mined.

SPLP tests of the existing waste rock have been done, and the results are included in the amendment application.

As previously mentioned, there is no potential for acid drainage from the ore. Consequently, INFORM's concern for the length of time that ore is stockpiled on the ore pad has been satisfied.

G. INFORM Comment: A full radiometric survey of the JD-7 site should be conducted as soon as possible in order to provide a more complete evaluation of existing conditions. The off-site potential for contamination should be considered as part of the Environmental Protection Plan. During the state's review of the proposed Piñon Ridge Mill located downslope from the JD-7, a soils study documented three separate areas of contamination on the mill property, potentially originating from the JD-7 or another nearby Department of Energy lease tract. The relationships between these various sites and potential sourcepoints for contamination should be outlined in the amendment application.

Cotter will submit the baseline radiometric survey to the Division in the Response to Adequacy Review #1. Cotter is not aware of data or studies linking the JD-7 site with any areas of contamination on the Piñon Ridge Mill property.

H. INFORM Comment: INFORM notes Cotter's assertions in the amendment application that wildlife impacts will be minimal. Yet the JD-7 is home to a number of species important to the overall health of the pinyon-sage habitats in the vicinity, including red-tailed hawks, kestrels, bald eagles, bobcat, lion, grey fox, deer, elk, badger, and coyote. The presence of wildlife in not negligible.

The response Cotter received from Colorado Parks & Wildlife regarding the JD-7 Mine Amendment indicated that minimal impacts to wildlife could be expected.

1. INFORM Comment: The Colorado State Historic Preservation Officer has commented that a full Section 106 consultation must be conducted on the property in order to identify cultural and historic resources in need of protection at the mine, and Cotter has replied that it is not obligated to conduct a survey but will at some point in the future, prior to the commencement of mining activities. There is no valid reason to avoid conducting the appropriate survey now or to avoid addressing the presence of any resources as part of the current amendment application. Delaying this or other important studies related to the JD-7 site will only mean that the final, big-picture look at the overall Environmental Protection plan will not be comprehensive.

Cotter's response to the State Historic Preservation Officer ("SHPO") was that Cotter will conduct a cultural resource inventory prior to initiating additional ground disturbing activities on previously undisturbed Federal public lands covered by its mine permits. There will be sufficient time to conduct such cultural resource inventory, as there is a significant amount of work that will be required on the currently affected lands prior to additional disturbance on previously undisturbed Federal lands covered by the mine permit.

J. INFORM Comment: It does not seem that Cotter has put together an amendment application with the thorough updating, analysis and planning that an Environmental Protection Plan requires. As the technical review proceeds and Cotter responds to the Division's requests, INFORM reserves the right to supplement these comments as appropriate.

Cotter considers the JD-7 Mine Amendment submittal to be a thorough update of the previous mine permit.

The Hard Rock/Metal Mining Rules establish deadlines by which comments on an amendment application must be submitted. *See, e.g.*, Rule 1.7.1(2). Cotter requests that the Board and Division enforce the deadlines set forth in the Rules. Accordingly, comments submitted after the regulatory deadline should be considered untimely and not considered by the Division.

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If you have questions regarding this submittal, please call me at Cotter's Nucla office, 970-864-7347.

Respectfully,

Glen Williams Vice President, Mining Operations

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