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GRAND JUNCTION FIELD OFFICE
DIVISION OF
RECLAMATION MINING & SAFETY

February 28, 2013

Dustin Czapla
Colorado Division of Reclamation, Mining and Safety
Grand Junction Field Office
101 S. Third St, Room 301
Grand Junction, Colorado 81501

RE: SR-13A Response to Adequacy Review 3

Mr. Czapla:

Attached are two copies of Cotter Corporation's (N.S.L.) Response to Adequacy Review 3 for the SR-13A Mine Permit #M-1977-311.

If you have any questions or concerns regarding the information submitted please call me at the number shown below.

Respectfully,

Glen Williams
Vice President, Mining Operations

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**SR-13A MINE PERMIT AMENDMENT
APPLICATION PERMIT No. M-1977-311
Response to Adequacy Review #3**

February 2013

Prepared by Cotter Corporation (N.S.L.)

Cotter Corporation N.S.L. (Cotter) submits this response to the January 24, 2013 letter from Dustin Czapla, Division of Reclamation, Mining and Safety (“DRMS”) to Glen Williams, Cotter. The DRMS’ comments are in italics and Cotter’s responses are in bold.

SR-13A Mine, File No. M-1977-311, Amendment (AM1) Application
Adequacy Review 3

- 1. According to the mine plan, the proposed main portal may be unstable. A geotechnical stability analysis and plan for stabilization of the portal and the overlying sandstone must be submitted to the Division for review and approval prior to any mining at the site. Please commit to this.*

Cotter commits to doing a geotechnical stability analysis of the main portal area as well as a plan for stabilization of the portal and overlying sandstone prior to any mining at the site.

- 2. Pursuant to Rule 6.3.3 (h), please specify how much water will be used in conjunction with the operation, and the source of this water.*

The SR-13A mining operation is anticipated to require 5,000-10,000 gallons of water per month. The water is anticipated to be purchased commercially and hauled to the site from either Naturita or Egnar, Colorado.

- 3. Pursuant to Rule 6.3.3 (j), please specify how you will comply with applicable Colorado water laws and regulations governing injury to existing water rights.*

As noted in the EPP the SR-13A Mine did not encounter any water during the previous mining effort, and no water is expected to be encountered during the proposed mining operations. If water is unexpectedly encountered during the proposed mining operations Cotter will take appropriate steps to obtain any necessary well permits or water replacement plans required to protect vested water rights. Water contained at the site by drainage control structures will be released within 72 hours.

- 4. Regarding the ore pad, the EPP states that the material for the clay liner will be transported from a nearby property. Please inform the Division of the exact source for the clay material.*

The material for the clay liner will be obtained from a permitted source. The exact location of the material will be determined prior to

construction. Cotter will inform DRMS of the exact source for the clay material before construction of the liner begins.

5. The reclamation plan proposes to remove the material beneath the ore stockpile pad (p. D-3), to cap the ore pad with soil once ore has been completely removed, and to vegetate the pad area (p.T-8). Please inform the Division of the depth of material that will be removed to be placed inside the mine portal. Additionally, SPLP tests indicate that there is potential for uranium and related constituents to be leached from the ore stockpile. According to the EPP, it is expected that any mobilized constituents will be sorbed by the clay liner. Therefore there is potential that the clay liner will contain elevated levels of radionuclide following mining. Prior to capping the ore pad area during reclamation a radiometric survey shall be completed. Please commit to this.

If unacceptable levels of radionuclide are found in the ore pad area, additional material may need to be removed.

Cotter Corporation will commit to doing representative soil samples and a radiometric survey of the proposed ore pad location prior to construction of the ore pad and placement of the clay ore pad liner. Cotter Corporation proposes during final reclamation to collect representative soil samples to determine the amount of clay liner to remove and place inside the mine portal as part of the backfill material. Cotter proposes to use a clean-up standard of 5 pCi/g Ra226 above the background in the first 6 inches of soil for determining the clean-up limit. The reason for the soil samples is to eliminate the potential for extraneous gamma ‘shine’ from the surrounding mine waste material from impacting the radiometric survey results during reclamation.

If necessary Cotter can place 6” – 18” of clay based soils over the ore pad area to minimize potential radiation exposures and potential leaching of uranium constituents into the surrounding area.

6. The EPP states that ore will not be stored on the ore pad for more than 180 days during mining.

Please inform the Division of the detailed methods the operator will take to ensure this.

Cotter’s mining procedures use a first in/first out method of transporting ore from the stockpile. The site foreman is responsible for enforcing this procedure and ensuring that the ore is not left on the pad for more than 180 days.

7. *Addressing Rule 6.4.21 (1 l)(a) - In your November 2012 response to Adequacy Review #1 you identified the existing and reasonably potential future uses of the down gradient Dolores River water. Please indicate the existing "surface water receiving stream standards". If receiving stream standards have not been determined, please indicate this.*

The surface water receiving stream standards for this portion of the Dolores River are included as attachment 1.

8. *Addressing Rule 6.4.21 (1 l)(b) - Water quality baseline conditions for the Dolores River down gradient of the site must be established. Please commit to satisfying the requirements of this rule before commencement of any future mining at the site.*

Cotter commits to establishing water quality baseline conditions for the Dolores River down gradient of the site prior to commencement of mining at the site.

9. *A request to release 3.81 acres from the permitted area was incorporated with this application. A request to release acreage must be processed separate from this AMI application and in accordance with Rule 4.17.*

A separate request to release the 3.81 acres from the permitted area has been sent to DRMS.

ATTACHMENT 1

35.6(4) STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 10 <u>BASIN: Lower Dolores River</u> Stream Segment Description	Classifications	NUMERIC STANDARDS						
		PHYSICAL and BIOLOGICAL	INORGANIC mg/l		METALS µg/l			
1. Mainstem of the Dolores River from the bridge at Bradfield Ranch (Forest Route 505, near Montezuma / Dolores County Line) to the Little Gypsum Valley Bridge at the San Miguel/Montrose County Line.	Aq Life Cold 1 Recreation E Water Supply Agriculture	D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH ₃ (ac/ch)=TVS Cl ₂ (ac)=0.019 Cl ₂ (ch)=0.011 CN=.005		S=0.002 B=0.75 NO ₂ =0.05 NO ₃ =10 Cl=250 SO ₄ =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) U(ac)=TVS U(ch)=30 Zn(ac/ch)=TVS

RADIONUCLIDE STANDARDS

Parameter	Picocuries per Liter
Radium 226 and 228*	5

URANIUM

- All waters of the Gunnison/Lower Dolores River Basin, are subject to the following basic standard for uranium, unless otherwise specified by a water quality standard applicable to a particular segment. However, discharges of uranium regulated by permits which are within these permit limitations shall not be a basis for enforcement proceedings under this basic standard.
- Uranium level in surface waters shall be maintained at the lowest practicable level.
- In no case shall uranium levels in waters assigned a water supply classification be increased by any cause attributable to municipal, industrial, or agricultural discharges so as to exceed 30 µg/l or naturally-occurring concentrations (as determined by the State of Colorado), whichever is greater.
- In no case shall uranium levels in waters assigned a water supply classification be increased by a cause attributable to municipal, industrial, or agricultural discharges so as to exceed 30 µg/l where naturally-occurring concentrations are less than 30 µg/l.

Abbreviations:

The following abbreviations are used in the above tables:

ac = acute (1-day)
Ag = Silver
Al = Aluminum
As = Arsenic
B = Boron
Ba = Barium
Be = Beryllium
Cd = Cadmium
ch = Chronic (30-day)
Cl = Chloride
Cl₂ = Residual chlorine
CN = free cyanide
Cr^{III} = Trivalent chromium
Cr^{VI} = Hexavalent chromium
Cu = Copper
dis = dissolved
D.O. = dissolved oxygen
E. coli = escherichia coli
F = fluoride
Fe = iron
Hg = mercury
Mg/l = milligrams per liter
ml = milliliters
Mn = manganese
NH₃ = un-ionized ammonia as N(nitrogen)
Ni = nickel
NO₂ = nitrite as N (nitrogen)
NO₃ = nitrate as N (nitrogen)
OW = outstanding waters
P = phosphorus
Pb = lead
S = sulfide as undissociated
H₂S (hydrogen sulfide)
Sb = Antimony
sc Se = sculpin selenium
SO₄ = sulfate
sp = spawning
Tl = thallium
Tr = trout
Trec = total recoverable
TVS = table value standard
U = uranium
ug/l = micrograms per liter
UP = use-protected
Zn = zinc

In addition, the following abbreviations are used:

Fe(ch) = WS(dis)
Mn(ch) = WS(dis)
SO₄ = WS