

**LP-21 MINE PERMIT AMENDMENT**  
**APPLICATION PERMIT No. M-1977-305**

**Adequacy Review 5**

**Response to 2<sup>nd</sup> General Stormwater Comments**

**Dated June 28, 2013**

***July 18, 2013***

**RECEIVED**  
JUL 19 2013  
GRAND JUNCTION FIELD OFFICE  
DIVISION OF  
RECLAMATION MINING & SAFETY

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

**AND**

**O'Connor Design Group, Inc.**

---

2350 G Road ~ Grand Junction, CO 81505 ~ (970) 241-7125

Cotter Corporation (N.S.L.) (Cotter) submits this response to the comments attached to the June 28, 2013 letter from Dustin Czaplá, Division of Reclamation, Mining and Safety (“DRMS”), to Glen Williams, Cotter. The DRMS’ comments are in italics and Cotter’s responses are in bold.

**LP-21 Mine Drainage Design Plan - 2<sup>nd</sup> General Stormwater Comments,**  
**Permit No. M-1977-305 / AM-01**

*The Division of Reclamation, Mining and Safety (DRMS) engineering staff has reviewed the Response to Adequacy Review #4 for the LP-21 Mine prepared by O’Connor Design Group, Inc., dated June 2013. The following comments are posed to ensure adequate engineering analyses and design practices are implemented to eliminate or reduce to the extent practical the disturbance to the hydrologic balance expected by the mining operation with respect to water quality and quantity in accordance with Rules 3.1.6(1), 6.4.21(10) and 7.3.1. Please note, as this site is a designated mining operation (DMO), compliance with Rule 7.3.1 is applicable, thus requiring certified designs and specifications for engineered elements associated with the environmental protection plan (EPP). ). The original comment numbers have been retained for the purpose of tracking responses.*

*9. Pages ESWMP-15 & 16. The composite area weighted CN indicates both subbasins ON 30 and ON 40 are pinyon-juniper cover. The DRMS understands this reclaimed area to have an herbaceous cover, not “pinyon-juniper”. Assuming “poor” cover and the applicant’s justification for HSG “B”, the CN should be 80, not 75. Please correct the CN values for ON 30 and ON 40. This may require redesign and/or analyses for the pond, spillway and channels designed for runoff control for these two subbasins.*

**CN values are determined by comparisons of similar materials from a variety of sources and, based on experience, selecting one from the stormwater software catalog which most closely matches the particular surface being evaluated. The onsite basins (30 and 40) are generally more homogenous than the offsite basins and typically consist of waste rock with small areas of undisturbed sandy material. It is our opinion that the originally selected value of 75 is actually a conservatively high number. Mined waste rock comes from strata consisting of very high percentages of sandstone and sandy material. It has been broken up by the mining process, and on-site inspection indicates a free-draining material even when stockpiled. Selection of CN is rarely based strictly on any one specific category or classification, but more typically by a comparison of several categories of material with similar traits. Waste rock was placed over a majority of the onsite basins 30 and 40. We believed it important to select a value from the Pinyon-Juniper category since this was the underlying soil type for the vicinity. A sub-category from the Pinyon-Juniper catalog heading with a CN value of 75 was therefore selected to be utilized in the calculations. It is more important, in our**

**professional opinion, to select the proper value than to make it fit within a particular description of sub-category.**