



STATE OF  
COLORADO

Drinkard - DNR, Connor <connor.drinkard@state.co.us>

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## Rules Review of Lorencito RN5

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**Reilley - DNR, Robin** <robin.reilley@state.co.us>

Tue, Jun 7, 2022 at 9:10 AM

To: Connor Drinkard - DNR <connor.drinkard@state.co.us>, "Ebert - DNR, Jared" <jared.ebert@state.co.us>, LF scanning <dnr\_drms\_coal\_admin@state.co.us>, Robin Reilley - DNR <robin.reilley@state.co.us>

Good Morning Connor,

Please find my review of specific rules for the Lorencito Mine RN5 permitting action. I'm available to answer any questions that you have.

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Environmental Protection Specialist II



**COLORADO**  
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Mr. Connor Drinkard  
DRMS

6 June 2022

**Re: Lorencito Canyon Mine; Permit C1996084  
DRMS Preliminary Adequacy Review of Permit Renewal Five (RN5)**

Dear Connor:

The Division has completed its preliminary review of Lorencito Canyon Mine's permit (C1996084), renewal RN5 received by the Division on 3 May 2022. My review comprised the following rules:

2.04.7	2.05.3(4)	2.05.6(1)
	2.05.6(4)	2.06.8

Adequacy issues are numbered in italics below.

**Rule 2.04.7 Hydrology Description  
DRMS June 2022**

Permit section 2.04.7 describes the hydrology characteristics of the site (pages 2.04-9 through 2.04-13) for groundwater and for surface water pages 2.04-25 through 2.04-29, Exhibit 8 and Map 2.04.7-1.

- The water quality description comprises pages 2.04-21 through 2.04-31
- Ownership of wells is described beginning on page 2.04-32 of the permit.
- Protection of the hydrologic balance is addressed in Section 2.05-6.3 of the permit.

This section of the permit appears to adequately address the above cited rule with the exception of:

Given climate change, please verify that the hydrologic loss mechanisms; springs, evapotranspiration and precipitation regimes continue to reflect the values stated in the permit (precipitation: 16.32 and 14.94 in/yr depending on altitude).

- 1. Please provide the data and the data analysis of precipitation and evaporation for the past 15 years as supplemental pages to this section of the permit.*



**Rule 2.05.3(4) Pond Plans**  
**DRMS June 2022**

1. Ponds in the permit are comprised of the following and pond information is detailed Exhibit 15.

*Table 1*

Pond 002	Pond 004a	Pond 005	Pond 006a	Pond 007a
Pond 2-2	Pond 4-1	Pond 5-1	Pond 6-1	Pond 7-1
Pond 2-3	Pond 4-3	Pond 010A	Pond 009	Pond 7-2
Pond 001a	Pond 3-1	Pond 008	Pond 009A	Pond 7-3
Pond 003				Pond 7-4

As Built drawings showing pond crosssections, profiles, volumes and spillway characteristics exist for the following ponds. Asbuilts carry a surveyor's certificate and asbuilt certification by a PE.

*Table 2*

006A	007A	008
009	009A	010A
		Pond 10A

Sed Cad analysis (10yr 24hr and 25 yr 24 hr), *Exhibit 15 Fill* existed for all ponds in Table 1 and their associated ditches and spillways.

**Rule 2.05.6(1): Mitigation of Impacts Air**  
**DRMS June 2022**

According to Table 2.03.10-1 a Construction Permit for air quality is no longer required. An Air Pollution control plan is outlined on page 2.05-77 of the permit.

2. *Please verify that a construction permit is currently not required.*

**Rule 2.05.6(4) Public Parks**  
**DRMS June 2022**

There are no properties listed on the National Register of Historic Places within the permit area. Archeological sites are inventoried. The requirements of the above rule are adequately met.

**Rule 2.06.8 Experimental Mining Practices**  
**DRMS June 2022**

DRMS verified if any experimental practices were authorized. The permit indicates that Lorencito Canyon Mine does not plan to engage in any experimental mining practices although mountain top removal and steep slope mining is permitted.

**Rule 2.06.1, 2.06.8 (reclamation), 4.02 (operations), Alluvial Valley Floors  
DRMS June 2022**

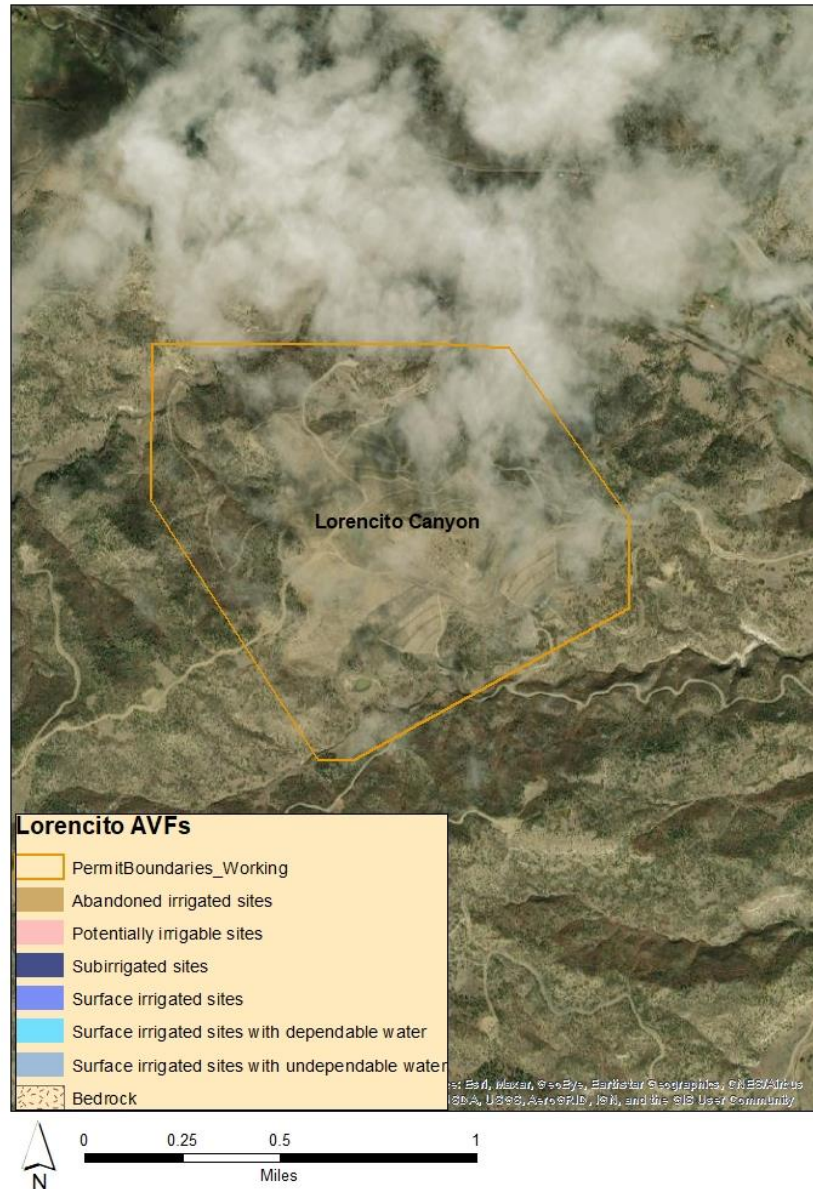
Exhibit 18: *Alluvial Valley Floor Investigation*, discusses the potential of AVF's in the area. The investigation concludes (page 16, Map 2.047-2, Table AV-7), that unconsolidated materials along the Purgatoire River appear to be an AVF and would sustain sub irrigation. Whereas Lorencito, Alamosa and Cow Canyons do not appear to sustain AVFs. These findings point to the AVF definition in sections 1.04(8), (10) (43) (142), of the rules.

Rule 4.02 establishes minimum performance standards for mining in and reclamation of AVF's. Current hydrologic science, evolved since the SMACRA rules were first promulgated may suggest additional protections or more sensitive mining practices. The potential that the current climate regime may be reducing the amount of water available to the Purgatoire River AVF may require a careful analysis of any future mining and associated reclamation practices in the AVF.

**Alluvial Valley Floors Map**

According to the OSM map of Potential Alluvial Valley Floors (AVF), no AVF's or potential irrigable areas exist within the Lorencito Mine permit boundary or the surrounding area as per the map excerpt below.

# Laurencito Canyon Mine AVS's



## **AVF data disclaimer:**

*This is a draft reconnaissance map to assist in identifying potential alluvial valley floors as defined by the Surface Mining Control and Reclamation Act of 1977. With the passage of this act, Congress provided for the preservation of alluvial valleys in the semiarid western United States. This map was digitized and compiled from 22 hardcopy maps produced by the Office of Surface Mining Reclamation and Enforcement in 1985 covering all or part of four coal regions in the western U.S.*

This concludes my review of the above mentioned rules in conjunction with the Lorencito renewal. I'm available to answer any questions that come up.

Sincerely  
R. Reilley M.S. GISP