# The Lee Ranch Mine's Use Attainability Analysis for the San Isidro Arroyo and Its Tributaries

Peabody Natural Resources Company's Petition for Regulatory Change

Plesant Chad Gaines
Peabody New Mexico Resources

Water Quality Control Commission Hearing October 8, 2019

#### Qualifications: Education & Experience

- Bachelor of Science from Ashford University
- 2006 2012 Employee of Peabody Natural Resources Co.
- 2012- Present Environmental Specialist for Peabody New Mexico Resources
  - Supervisor at El Segundo and Lee Ranch Mines
  - Permitting and Regulatory Compliance
  - Permit Applications, Modifications, and Requirements
  - Contractor Management

#### Lee Ranch Mine

- Began operations in the early 1980s
- 1-6 Seam Surface Coal Mine
- Since beginning of mining disturbed 8,470 acres
- Reclaimed 5,415 acres

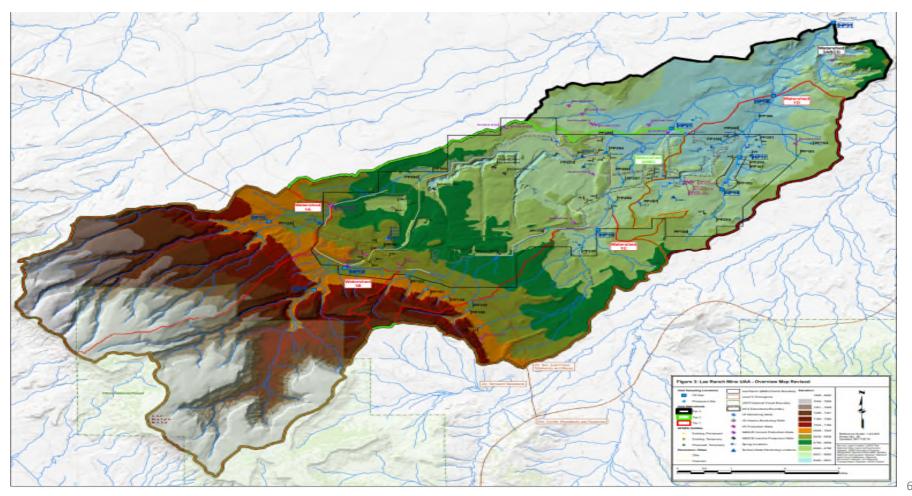
#### Lee Ranch Mine's UAA

- NMED's 2012 UAA concluded the following are emphemeral:
  - 20.6.4.97(c)(1)(k) San Isidro arroyo from the Lee Ranch mine facility outfall upstream to Tinaja arroyo;
  - 20.6.4.97(c)(1)(l) Tinaja arroyo from San Isidro arroyo upstream to Mulatto canyon; and
  - 20.6.4.97(c)(1)(m) Mulatto canyon from Tinaja arroyo upstream to 1 mile northeast of the Cibola national forest boundary.
- Peabody reevaluated and evaluated San Isidro, Arroyo Tinaja, and Mulatto Canyon unnamed tributaries in addition to Doctor Arroyofor the persistence of water
- The UAA concludes that these waters are ephemeral

#### Watersheds and Stream Segments

- Approach: Tiered Watersheds
- Watershed 1A- Arroyo Tinaja
- Watershed 1B- Mulatto Canyon
- Watershed 1C- San Isidro Arroyo
- Watershed 2ABC-Arroyo Tinaja, Mulatto Canyon, and San Isidro
- Watershed 1D- Doctor Arroyo
- Watershed 3ABCD-Arroyo Chico

#### Lee Ranch Mine Area



**Peabody Exhibit 7.** Figure 3, UAA Overview Map.

## Peabody's Original Proposed Regulatory Change

#### 20.6.4.97(C)(1) NMAC:

- (k) San Isidro arroyo from the Lee Ranch mine facility outfall upstream to Tinaja arroyo;
- l) Tinaja arroyo from San Isidro arroyo upstream to Mulatto canyon; and
- (m) Mulatto canyon from Tinaja arroyo upstream to 1 mile northeast of the Cibola national forest boundary.
- (k) San Isidro Arroyo and all tributaries from its confluence with Arroyo Chico to its headwaters, excluding Doctor Springs and the receiving portion of Doctor Arroyo up to 1,000 feet downstream of the spring.

### Peabody's Proposed Regulatory Change

20.6.4.97(C)(1) NMAC:

- (k) San Isidro arroyo, <u>including unnamed tributaries to San Isidro arroyo, from the Lee Ranch mine facility outfall-Arroyo Chico</u> upstream to <u>Tinaja arroyo</u> its headwaters;
- (I) Tinaja arroyo Arroyo Tinaja, including unnamed tributaries to Arroyo Tinaja, from San Isidro arroyo upstream to Mulatto canyon; 2 miles northeast of the Cibola national forest boundary;
- (m) Mulatto canyon from <u>Arroyo</u> Tinaja <del>arroyo</del> upstream to 1 mile northeast of the Cibola national forest boundary; and,
- (n) <u>Doctor arroyo</u>, including unnamed tributaries to <u>Doctor arroyo</u>, from San Isidro arroyo <u>upstream to its headwaters</u>, and <u>excluding Doctor Spring and Doctor arroyo from the spring to its confluence with the unnamed tributary approximately one-half mile downstream of the spring.</u>

# Thank you!