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DIVISION OF RECLAMATION MINING AND SAFETY

June 9, 2016

Tyler O'Donnell Colorado Division of Reclamation, Mining and Safety 1313 Sherman Street, Room 215 Denver, CO 80203

RE: 44<sup>th</sup> Lane Project File No. M-2016-009 Response to Preliminary Adequacy Review V

Dear Mr. O'Donnell,

Please accept the following corrections, clarifications and additional information in response to the application adequacy review correspondence dated April 15, 2016. Exhibit narrative edits are presented in bold text. The exhibits impacted by the application amendment are incorporated into this exhibit list.

## **APPLICATION**

- Item 2: The project name was changed from 44<sup>th</sup> Lane to Pueblo County Aggregate Project (PCAP).
- 2. Item 3 and 3.2 include external haul road acres.

# 6.4.1 EXHIBIT A

 The legal description includes the north and southwest haul road parcel owners and property descriptions. The proposed mining area lies within the Pueblo County 2016 Gravel Crushing Project Area #2 (Figure included in Exhibit A)

# 6.4.2 EXHIBIT B

4. The index map includes the north and southwest haul road.

# 6.4.3 EXHIBIT C

 Proposed stockpile locations and two haul roads are included on Exhibit C-4 Pre-Mining Map.

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#### 6.4.4 EXHIBIT D

This exhibit substantially changed with this submission due to the Division's adequacy items, community input and project modifications. The new exhibit is provided to replace the previously submitted exhibit.

6. The mine plan includes topsoil stockpile management and preservation with vegetation. The narrative now reads as follows:

Topsoil stockpile erosion caused by wind will be minimized by strategically locating the stockpiles on the east side of the mesas whenever possible, blocking effects of the prevailing westerly winds. Topsoil that is not replaced on backfilled slopes in a time short enough to avoid deterioration will be seeded with the seed mix presented in Exhibit E, per the recommendation of Mr. Richard Rhoades on April 29, 2016. Topsoil stockpiles will be seeded during late fall.

- 7. Fremont commits to salvaging as much topsoil/growth medium as possible with a minimum objective of six inches.
- 8. Because the Badger Hills area is a fragile semi-arid eco-system, effort will be made to maintain historic stormwater flow onto native, undisturbed areas. The narrative now reads:

Because Badger Hills is a semi-arid environment, stormwater best management practices (BMPs) will filter and release storm water that falls on to or flows across the affected area as much as possible. Berms and swales will be constructed that direct storm water to detention basins or filtration outlets. Detention basins will be constructed in areas where storm water will infiltrate within 72 hours. Straw bale or straw wattle filtration outlets will be constructed along and in swales and berms filtering sediment, releasing storm water onto undisturbed areas at historic flow rates wherever possible. Stormwater BMPs (berms, swales and detention basins) will be constructed of overburden and/or mining fines.

9. The narrative now reads:

The target reserve is the Cascajo gravel terrace that ranges in thickness from 10 to 15 feet. Gravel will be mined 10 to 15 feet deep to shale or clay loam the stratum immediately below the target reserve. Topsoil and overburden is minimal with prominent gravel outcrops.

10. The first paragraph of the exhibit includes the following sentence.

Gravel will be mined 10 to 15 feet deep to shale or clay loam, the anticipated stratum immediately beneath the material to be mined.

Environmental Alternatives Inc.. 1107 Main Street, Cañon City, CO 81212 www.envalternatives.com • e-mail: angela@envalternatives.com Phone: 719-275-8951 11. The haul roads, proposed construction and location, are included in the mine plan. The narrative now reads:

The mine will have two haul roads both on private property to minimize potential interruptions to the community and agricultural industry in the area. The proposed haul road construction is included in this exhibit. The southwest haul road will access the southwest corner of the mine permit area and extend west to 36<sup>th</sup> Lane, a Pueblo County commercial vehicle corridor (Amended Pueblo Area 2035 Long Range Transportation Plan, pg 2-13, 2010), crossing private property and CO State Land Board parcels. The north haul road will access the northeast corner of the permit area, crossing the Bessemer irrigation ditch and extend north to CO Hwy 50. A typical construction diagram is included in this exhibit.

- 12. The topsoil in each processing area will be salvaged and segregated prior to the commencement of mining of the specific phase.
- 13. The response is consistent with the February submission.

#### 6.4.5 EXHIBIT E

This exhibit substantially changed with this submission due to the Division's adequacy items, community input and project modifications. The new exhibit is provided to replace the previously submitted exhibit.

14. The applicant proposes reclamation to rangeland because the land is currently used for cattle grazing. Badger Hills is located in the desert of southeastern Pueblo County. Existing vegetation is stressed by drought, grazing and the rocky soil. Reclamation to rangeland will improve vegetation productivity thus improving cattle grazing opportunity. The CO State Land Board currently leases the proposed mining area to Mr. Dan Henrichs for cattle grazing. Pritekel Brothers Farm Inc. currently grazes cattle on some subject parcels. This will be consistent with, in harmony with and contribute to the surrounding agricultural community and economy.

Regarding mechanics of earthmoving, the narrative now reads as follows:

Prior to revegetating, slopes will be reconstructed and the mine floor contoured to blend with surrounding topography with blades and bull dozers. A minimum of six (6) inches of topsoil will be placed on affected surfaces with scrapers and loaders. Bulldozers will compact slopes and blend topography with undisturbed areas. Compacted surfaces found in processing areas, under stockpiles and haul roads will be ripped with a dozer fitted with a claw and/or roughened with a tractor fitted with a harrowing disk.

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15. The seed bed will be prepared as described by Mr. Richard Rhoades of the Southern NRCS District Office in the Reclamation Plan dated May 14, 2001 (incorporated into the application by reference) and included in the original application submission. The exhibit now reads as follows:

Mr. Richard Rhoades of the Pueblo Office of the NRCS prepared a detailed reclamation plan in 2001. He reviewed the plan on October 27, 2015, confirming it is still an appropriate reclamation plan. Fremont will prepare the seed bed and reclaim as described in the NRCS plan included in this exhibit.

16. Regarding effective erosion control and siltation of the affected land, the exhibit now reads as follows:

During final grading and seed bed preparation, where potential exists for erosion and siltation of the affected land to areas outside the affected land, straw wattles or straw bales will be placed at the interface.

- 17. A weed control plan is provide as requested.
- 18. Item 14 of the adequacy review referencing Rule 6.4.5(1)(a) is redundant to Item 10 of the review and is answered in Item 12 of this correspondence.
- 19. Mr. Richard Rhoades reviewed the seed mix on April 29, 2016 (email and telephone conversation) and again confirmed it was adequate for reclamation. He did not recommend including forbs and/or shrubs in reclamation seed mix. Mr. Rhoades has since retired. Beth Fortman and Rick Romano both of NRCS also reviewed the plan and concurred with Mr. Rhoades plan. The NRCS email is included with this submission.
- 20. Final seeding will take place in late fall.
- 21. Slopes will be reconstructed to 3H:1V slope gradient.
- 22. Fremont commits to placing a minimum of six inches of plant growth medium on affected areas during final reclamation.
- 23. The mine disturbance will not manifest as a pit but rather as lowered elevation of the mesa tops with 3H:1V slopes and level areas contoured to blend with undisturbed areas. Fremont commits to using the available overburden and waste rock on the mine floor and slopes during reclamation.
- 24. On page 2 of the NRCS reclamation plan, Mr. Rhoades recommends scarifying the mine floor to a depth of six inches. Environmental Alternatives Inc.

### 6.4.6 EXHIBIT F

- 25. The seed mix provided on the map was corrected.
- 26. The footnote was corrected to spreading a minimum of six inches of topsoil.

# 6.4.7 EXHIBIT G

- 27. Water will only be used for dust suppressant and will be applied to affected areas using a 4000 gallon water truck equipped with spray bars. An average of 6000 gallons will be used per day during peak production season. More water will be applied as needed to meet Colorado Department of Public Safety, Air Pollution Control Division fugitive dust limits.
- 28. All water will be purchased from a Stonewall Springs LLC.

#### 6.4.8 EXHIBIT H

29. The description of game and non-game resources in the vicinity, including the burrowing owl, prairie dog colony and empty golden eagle nest, are included in the February 16, 2016 submission along with CO Division of Parks and Wildlife recommended protocol and actions to protect vicinity wildlife (incorporated into the application by reference). Fremont respects Mr. Mike Trujillo of CO DPW as the wildlife expert and accepts his description of food, habitat, migratory routes and effect of human activity on vicinity wildlife.

In addition, The Colorado Natural Heritage Program at CO State University, performed a database search for threatened and endangered species in the project area (incorporated into the application by reference). It too was included in the February 16, 2016 submission. The identified sensitive species are present in and near water ways such as the Arkansas River and vegetation near the river. The proposed project area does not contain trees and does not have non-precipitation surface water flows.

**30.** The mine plan and southwest haul road were modified so as not to encroach on the empty golden eagle nest.

#### 6.4.12 EXHIBIT L

31. The reclamation cost estimate was not included in the Division's adequacy review correspondence.

# <u>6.4.13 EXHIBIT M</u>

32. The modified chart is enclosed. Please replace this chart with the previously submitted chart.

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#### 6.4.14 EXHIBIT N

33. The exhibit includes southwest and north haul road agreements.

#### 6.4.15 EXHIBIT O

34. The exhibit includes proof of ownership for haul road parcels.

#### 6.4.17 EXHIBIT Q

**35.** Please find proof of application delivery to the NRCS Pueblo Field Office and Pueblo Board of County Commissioners.

#### 6.4.18 EXHIBIT R

36. Proof of filing this amendment with the Pueblo County Clerk and Recorder on June 8, 2016 is included.

#### 6.4.19 EXHIBIT S

37. The structure agreement for fences within 200 feet of the southwest haul road is included.

#### **OTHER CONCERNS**

- 38. Please find proof of publication in Pueblo Chieftain.
- 39. Please find proof of mailing to owners of record of all land surface within 200 feet of the boundary of the affected lands.
- 40. Regarding the CO DPW comments of March 29, 2016, Fremont is in regular contact with NRCS Pueblo office for guidance with reclamation including seed mixes. Beth Campbell and Bill Ault of the Turkey Creek Conservation District performed a weed inventory survey on the subject property and wrote a report that was included in the February 19, 2016 submission.
- 41. The applicant concurs with the CO Division of Water Resources comments.

Please feel free to call me directly at 719-275-8951 or email at <u>angela@envalternatives.com</u> with any questions.

Respectfully submitted,

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Angela M. Bellantoni Ph.D.

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# Enclosures:

- 1. Application page 1
- 2. Exhibit A to replace previously submitted exhibit, including Pueblo County 2016 Gravel Crushing Project Area #2
- 3. Exhibit B to replace previously submitted exhibit
- 4. Exhibit C to replace previously submitted exhibit
- 5. Exhibit D to replace previously submitted exhibit, including Typical Haul Road Section
- 6. Exhibit E to replace previously submitted exhibit including Weed Control Plan
- 7. NRCS email from Elizabeth Fortman
- 8. Exhibit F to replace previously submitted exhibit
- 9. Exhibit H to replace previously submitted exhibit
- 10. Exhibit M to replace previously submitted exhibit
- 11. Exhibit N to replace previously submitted exhibit
- 12. Exhibit O to replace previously submitted exhibit
- 13. Proof of mailing to county commissioners and soil conservation district
- 14. Exhibit R Proof of filing this submission with Pueblo County Clerk and Recorder
- 15. Structure agreement for fences along Pikes Peak Home Center parcel
- 16. Proof of publication in the Pueblo Chieftain
- 17. Proof of mailing to owners of property within 200 feet of affected area.

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