



STATE OF
COLORADO

Girardi - DNR, Chris <chris.girardi@state.co.us>

Tierra Piedra Ranch- AM-1 Adequacy Review #2

1 message

Girardi - DNR, Chris <chris.girardi@state.co.us>

Wed, Sep 3, 2025 at 8:19 AM

To: Nathan Barton <NABarton@wastelineinc.net>

Cc: Ryan Clark <ryan@petrox-resources.com>, trent@coxinet.net, Jared Ebert - DNR <jared.ebert@state.co.us>

Good morning,

Attached to this email is a pdf of the Division's Adequacy Review #2 letter and Reclamation Cost Estimate for the Amendment Application (AM-1) for the Tierra Piedra Gravel Pit, permit number M-2009-081.

A hard copy will not be sent unless requested. Please feel free to reach out if you have any questions or concerns.

Thanks,

Chris Girardi

Environmental Protection Specialist



COLORADO
Division of Reclamation,
Mining and Safety
Department of Natural Resources

P: (720) 793-3041

Physical: 1313 Sherman Street, Room 215, Denver, CO 80203

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2 attachments

TierraPiedra_AM1_AdequacyReview2_M2009081.pdf
293K

TierraPiedra_CostEstimate2025_M2009081.pdf
228K



COLORADO
Division of Reclamation,
Mining and Safety
Department of Natural Resources

September 3, 2025

Ryan Clark
Tierra Piedra Ranch, LLC
12600 W. Colfax, Ste C440
Lakewood, CO 80215

Re: Tierra Piedra Gravel Pit, Permit No. M-2009-081
Receipt of 110c Construction Materials Amendment Application
Adequacy Review #2

Dear Ryan Clark:

On July 1, 2025, the Division of Reclamation, Mining and Safety (“Division” or “DRMS”) received your 110c Construction Materials Reclamation Amendment Application Package for the Tierra Piedra Ranch Gravel Pit, permit no. M-2009-081. The Application was deemed complete on July 21, 2025. The Division sent a Preliminary Adequacy Review Letter on August 11, 2025, and received a response from the Operator on August 20, 2025. Based on review of the material submitted, the Division has identified the following items must be addressed before the application can be approved. Please submit a cover letter responding to each of the items listed below. Please submit revised Exhibits as necessary.

Rule 6.3.2- Exhibit B- Site Description:

1. A wildlife statement prepared by the Colorado Parks and Wildlife (CPW) is not required for 110c operations. However, the application states that the area is abundant in wildlife, including mule deer. Review of CPW’s Mule Deer Severe Winter HPHD mapping tool indicates that the permit area is located within a Mule Deer Severe Winter Range, which are defined as part of the overall winter range where 90% of individuals are located when the annual snowpack is at its maximum and/or temperatures are at a minimum in the two worst winters out of ten. These areas provide crucial wintering habitat during both severe and mild winters by providing ideal forage, vegetation, and topographic features for both species. Regardless of weather patterns, winter is the most stressful period for ungulates due to the challenges winter poses for forage availability. CPW recommends not constructing during the winter season (December 1 to April 30).

Operator Response: We understand the information you provided, as stated. Thank you. This was also, we believe, addressed by CPW (then CDOW, as we recall) in comments in 2009. We also note that you did not request any action on our part in this item. Was that overlooked? Please let us know. We did contact the



local CPW representative this year and verified that the proposed expansion would not significantly impact habitats or species.

Division Response: The Division is seeking clarification that the Operator will abide by CPW recommendations of not constructing during the winter season (December 1 to April 30).

Rule 6.3.3- Exhibit C- Mining Plan:

2. Item 22 indicates the Operator intends to accept clean materials for backfill and stabilization in accordance with DRMS rules, including broken cement and borrow materials. To import backfill inert structural fill material generated outside the permit area, the Operator will need to submit a request for the importation of inert fill to the Division (see attached enclosure). Alternatively, the Operator could also provide the Division with a notice of the proposed backfill activity at a later date through a Technical Revision when the request is forthcoming, which this notice should include the following:
 - a. A narrative that describes the approximate location of the proposed activity
 - b. The approximate volume of inert material to be backfilled
 - c. A signed affidavit certifying that the material is clean and inert as defined in Rule 1.1(22)
 - d. The approximate dates the proposed activity will commence and end
 - e. An explanation of how the backfilled site will result in a post-mining configuration that is compatible with the approved post-mining land use
 - f. A general engineering plan stating how the material will be placed and stabilized in a manner to avoid unacceptable settling and voids

Operator Response: In past applications, the original or amendment applications have been assumed to be a request for importation, and no special request or Technical Revision has been required for this purpose either for processing/recycling or for beneficial backfill for reclamation. This is the first time we have been aware of a special form. At present, we cannot specify even an approximate location(s) for using off-site material of the approximate volume, but the standard procedures always include requiring a statement that the material is clean and inert in accordance with all local, State, tribal, and federal requirements. This is because the availability of such material varies (based on customer and project needs) and cannot be predicted, including during what part of mining/reclamation the material will be available. The use of the term “affidavit” implies that such a statement needs to be notarized: is that now required of those who may bring materials? We understand that the interpretation of the rules and regulations does not change, but we are unaware of any change in this requirement in the last several years (since last obtaining a permit). The requirement to file and pay for a technical revision is, to the best

of our knowledge and belief, new and requires information that has not been required in the past. Has guidance been published on this new requirement?

DRMS Response: In accordance with Rule 6.3.3, the description of the mining plan must be adequate to satisfy the requirements of Rule 3.1 and demonstrate compliance with Rule 3. Rule 3.1.5(9) requires an operator/applicant to provide the Office with a notice if structural fill generated outside of the permit area will be used for backfill; and that such a notice shall include specific information cited in the rule and listed above. As indicated in DRMS's initial Adequacy Review Letter, the Operator can submit the previously provided TR form to import inert backfill material when they have a better idea of the nature and backfill location of the imported inert backfill material in accordance with Rule 3.1.5(1)(9). Rule 3.1.5(9)(c) requires that a signed affidavit certifying that the imported material is clean and inert; however, the rule does not require the affidavit be notarized. The Operator will be required to submit both these items if they intend to import structural fill from outside the permit area. If the Operator commits to submitting a TR and signed affidavit before importation of structural fill material from outside the permit area, then no further action is needed. Please note if the Operator imports structural fill material generated outside the permit area without submitting a signed affidavit and TR to the DRMS beforehand, this could result in a Notice of Possible Violation and a Board Hearing in accordance with Rules 3.2(3) and 3.2(4).

Rule 6.3.4- Exhibit D – Reclamation Plan:

3. Item 3d states that the landowner may decide to monocrop alfalfa instead of the proposed reclamation seed mix. Monocropping alfalfa would not be sufficient to establish a diverse, vegetative cover from species native to the region pursuant to Rule 3.1.10(1), and not suitable for a post-mine land use of grazing/wildlife habitat. The applicant would need to submit an Amendment to revise the post mine land use to cropland.

Rule 6.3.9- Exhibit I- Proof of Filing with County Clerk:

4. In accordance with Rule 1.6.2(1)(c), any changes to the application must be reflected in the public review copy which was placed with the Archuleta County Clerk and Recorder. In accordance with Rule 6.3.9, please provide our office with an affidavit or receipt indicating the date the revised application pages were placed with the Archuleta County Clerk and Recorder.

Operator Response: As discussed in both the review letter and by phone, the

Division considers the twenty-some items to be matters of clarification and not to be amendments to the application. Therefore, we do not believe that Rule 1.6.2(1)(c) is applicable or appropriate in this situation.

DRMS Response: While DRMS did express that many of the adequacy items were clarifications and questions rather than revisions to the amendment application, any changes to the application, including the Adequacy Review Response, revised exhibit text, revised figures, new figures, etc., must be placed with the Archuleta County Clerk and Recorder in accordance with Rule 1.6.2(2) until final agency action on the application. After the revised and/or new material is submitted to the county clerk, please provide our office with an affidavit or receipt indicating the date the revised application pages were placed with the Archuleta County Clerk and Recorder pursuant to 1.6.2(2).

Financial Warranty:

5. Enclosed is the reclamation cost estimate for the Amendment Application. Please review the estimate and let us know if you concur.

Response to Inspection Report Response:

Item 1: Thank you for the clarification regarding the date of last activity, please include an accurate date of last activity in future Annual Report submittals. This inspection problem is considered abated, as the Operator has provided notice of the resumption of mining operations, which will occur before the corrective action due date of October 13, 2025.

Item 2: DRMS provides approval of an extension to October 13, 2025 to place new boundary markers at the site.

Item 3: Acknowledged, thank you for the clarification. A revised Inspection Report will be issued.

Item 4: Acknowledged.

Item 5: Acknowledged.

This concludes the Division's second adequacy review of the amendment application package. This letter shall not be construed to mean that there are no other adequacy deficiencies in the application package. Please note the Division is required to issue a decision regarding the

application on **September 12, 2025**. If all adequacy deficiencies have not been addressed before this date, please request an extension of time to allow for continued review of the application. Please be aware that the Division may deny the application if outstanding adequacy issues remain when the decision date arrives and/or inadequate time is provided for the Division to review the response to the adequacy issues.

If you have any questions, please contact me by telephone at (720) 793-3041, or by email at chris.girardi@state.co.us.

Sincerely,



Chris M. Girardi
Environmental Protection Specialist

CC: Jared Ebert, DRMS
Nathan Barton, WASTELINE, INC.
Mary Buck, EXOK, Inc.

Enclosure: DRMS Reclamation Cost Estimate

COST SUMMARY WORK

Task description: Cost Estimate

Site: Tierra Piedra Gravel Pit

Permit Action: 2025 Update

Permit/Job#: M2009081

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 9/2/2025

County: Archuleta

Filename: M081-000

User: CMG

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Finish grade along pond banks	EXCAVATE	1	45.50	\$7,138
002	Topsoil replacement around pond, rip compaction	DOZER	1	6.96	\$2,414
003	Revegetation	REVEGE	1	3.00	\$2,156
004	Mob/ Demob	MOBILIZE	1	4.86	\$4,486
<u>SUBTOTALS:</u>				60.32	\$16,194

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$327

Performance bond: 1.05

Total = \$170

Job superintendent: 30.16

Total = \$2,266

Profit: 10.00

Total = \$1,619

TOTAL O & P = \$4,382

CONTRACT AMOUNT (direct + O & P) = \$20,576

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \$0

Total = \$0

Engineering work and/or contract/bid preparation: 4.25

Total = \$875

Reclamation management and/or administration: 5.00

\$1,029

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$6,286

TOTAL BOND AMOUNT (direct + indirect) = \$22,480

HYDRAULIC EXCAVATOR WORK

Task description: Finish grade along pond banks

Site: Tierra Piedra Gravel Pit Permit Action: 2025 Update Permit/Job#: M2009081

PROJECT IDENTIFICATION

Task #: 001 State: Colorado Abbreviation: None
Date: 9/2/2025 County: Archuleta Filename: M081-001
User: CMG

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat 320D L 9'-6" Stick Horsepower: 148
Attachment 1: ROPS Cab Weight (MT): 21.55
Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	<u>\$60.46</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$37.10</u>	<u>100</u>
Operator Cost/Hour:	<u>\$59.31</u>	<u>NA</u>
Total Unit Cost/Hour:	<u>\$156.87</u>	

Total Fleet Cost/Hour: \$156.87

MATERIAL QUANTITIES

Initial volume: 12,500 CCY Swell factor: 1.165
Loose volume: 14,563 LCY

Source of estimated volume: Division of Reclamation, Mining & Safety
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Excavator Cycle Time (load bucket, swing loaded, dump bucket, swing empty):

Basic Job Condition Description: AVERAGE
Secondary Job Condition within Basic Description: AVERAGE
Cycle Time Value: 0.284 minutes

Load Bucket Capacity

Bucket Size Class: Large
Rated Capacity: 2.08 LCY (heaped)
Bucket Fill Factor: 0.975 Loose material - mixed moist aggregates (95-100%) 0.975
Adjusted Capacity: 2.03 LCY

Job Condition Correction Factors Site Altitude: 6200 feet

		Source
Altitude Adj:	<u>0.90</u>	<u>(CAT HB)</u>
Job Efficiency:	<u>0.83</u>	<u>(1 shift/day)</u>
Net Correction:	<u>0.75</u>	<u>multiplier</u>

Unadjusted Hourly Unit Production:	<u>428.45</u>	LCY/Hour
Adjusted Hourly Unit Production:	<u>320.05</u>	LCY/Hour
Adjusted Hourly Fleet Production:	<u>320.05</u>	LCY/Hour

JOB TIME AND COST

Fleet size:	<u>1</u>	Excavator	Total job time:	<u>45.50</u>	Hours
Unit cost:	<u>\$0.490</u>	/LCY	Total job cost:	<u>\$7,138</u>	

BULLDOZER WORK

Task description: Topsoil replacement around pond, rip compaction

Site: Tierra Piedra Gravel Pit Permit Action: 2025 Update Permit/Job#: M2009081

PROJECT IDENTIFICATION

Task #: 002 State: Colorado Abbreviation: None
Date: 8/12/2025 County: Archuleta Filename: M081-002
User: CMG

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8SU
Horsepower: 310
Blade Type: Semi-Universal
Attachment: 3-shank ripper
Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

	<u>Utilization %</u>
Ownership Cost/Hour: <u>\$179.60</u>	<u>NA</u>
Operating Cost/Hour: <u>\$110.45</u>	<u>100</u>
Ripper own. Cost/Hour: <u>\$15.28</u>	<u>NA</u>
Ripper op. Cost/Hour: <u>\$3.66</u>	<u>40</u>
Operator Cost/Hour: <u>\$38.02</u>	<u>NA</u>
Total unit Cost/Hour: <u>\$347.00</u>	
Total Fleet Cost/Hour: <u>\$347.00</u>	

MATERIAL QUANTITIES

Initial Volume: 2,420
Swell factor: 1.215
Loose volume: 2,940 LCY

Source of estimated volume: (3acres)(43560sq.ft./acre)(0.5'D)/27= 2420 CY
Source of estimated swell
factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 200 feet
Unadjusted hourly
production: 491.9 LCY/hr

Materials consistency
description: Loose stockpile 1.2

Average push
gradient: 0 %
Average site altitude: 6,200 feet

Material weight: 1,600 lbs/LCY

Weight description: Top Soil

<u>Job Condition</u>	<u>Correction Factor</u>	<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.200	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.8593

Adjusted unit
production: 422.69 LCY/hr

Adjusted fleet
production: **422.69** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.821/LCY

Total job time: **6.96** Hours

Total job cost: **\$2,414**

REVEGETATION WORK

Task description: Revegetation

Site: Tierra Piedra Gravel Pit Permit Action: 2025 Update Permit/Job#: M2009081

PROJECT IDENTIFICATION

Task #: 003 State: Colorado Abbreviation: None
Date: 9/2/2025 County: Archuleta Filename: M081-003
User: CMG

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			Total Fertilizer Materials Cost/Acre	\$0.00

Application

Description	Cost /Acre
	\$
Total Fertilizer Application Cost/Acre	\$0.00

TILLING

Description	Cost /Acre
	\$
Total Tilling Cost/Acre	\$0.00

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Crested Wheatgrass - Standard	3.00	13.77	\$16.54
Smooth Brome - Lincoln	4.00	13.31	\$19.89
Alfalfa - NK Spredor 3 (creeping)	2.00	9.64	\$6.11
Sainfoin - Remont	5.00	2.18	\$18.92
Totals Seed Mix	14.00	38.91	\$61.46

Application

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$242.30
Total Seed Application Cost/Acre	\$242.30

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description	Cost /Acre
Weed spray, hand, aquatic area, nox. [DMG]	\$203.77
Total Mulch Application Cost/Acre	\$203.77

NURSERY STOCK PLANTING

Common Name	No/ Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre					\$0.00

JOB TIME AND COST

No. of Acres:	3	Cost /Acre:	\$507.53
Estimated Failure Rate:	25%	Cost /Acre*:	\$303.76
*Selected Replanting Work Items:	SEEDING		

Initial Job Cost:	\$1,522.59
Reseeding Job Cost:	\$227.82
Total Job Cost:	\$1,750
Job Hours:	3.00

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: **Mob/ Demob**

Site: **Tierra Piedra Gravel Pit** Permit Action: 2025 Update Permit/Job#: M2009081

PROJECT IDENTIFICATION

Task #: 004 State: Colorado Abbreviation: None
Date: 9/2/2025 County: Archuleta Filename: M081-004
User: CMG

Agency or organization name: DRMS

EQUIPMENT TRANSPORT RIG COST

Shift basis: 1 per day
Cost Data Source: CRG Data

Truck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED, 400 HP (2ND HALF, 2006)

Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT TRAILER (25T, 50T, AND 100T)

Cost Breakdown:

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$21.47	\$38.32	\$48.96
Operating Cost/Hour:	\$31.47	\$60.11	\$65.86
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$22.25	\$22.25
Total Unit Cost/Hour:	\$75.46	\$143.20	\$159.59

NON-ROADABLE EQUIPMENT:

Machine Description	Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Cat D8T - 8SU	53.08	\$194.88	\$159.59	1	\$354.47	\$159.59	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$5.99	\$75.46	2	\$162.90	\$150.92	\$250.00
Cat 320D L 9'-6" Stick	23.70	\$60.46	\$75.46	1	\$135.92	\$75.46	\$250.00

Subtotals:

\$653.29	\$385.97	\$750.00
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ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x2, 1/2 T.	\$20.11	1	\$20.11	\$20.11
Lube Truck, 4x2, 190 HP	\$40.52	1	\$40.52	\$40.52

Subtotals:

\$60.63	\$60.63
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EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	<u>PAGOSA SPRINGS</u>	
Total one-way travel distance:	<u>28.00</u>	miles
Average Travel Speed:	<u>60.00</u>	mph
 Total Non-Roadable Mob/Demob Cost *	 \$4,429.85	
‘* two round trips with haul rig:		
Total Roadable Mob/Demob Cost **	<u>\$56.59</u>	
** one round trip, no haul rig:		

Transportation Cycle Time:

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>0.47</u>	<u>0.47</u>
Return Time (Hours):	<u>0.47</u>	<u>0.47</u>
Loading Time (Hours):	<u>0.75</u>	<u>NA</u>
Unloading Time (Hours):	<u>0.75</u>	<u>NA</u>
Subtotals:	<u>2.43</u>	<u>0.93</u>

JOB TIME AND COST

Total job time:	<u>4.87</u>	Hours
Total job cost:	<u>\$4,486</u>	