




MINERALS PROGRAM INSPECTION REPORT
PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

MINE NAME: Platte Valley Operation	MINE/PROSPECTING ID#: M-1989-120	MINERAL: Sand and gravel	COUNTY: Weld
INSPECTION TYPE: Monitoring	WEATHER: Clear	INSP. DATE: December 20, 2022	INSP. TIME: 10:00
OPERATOR: Holcim - WCR, Inc.	OPERATOR REPRESENTATIVE: Wyatt Webster	TYPE OF OPERATION: 112c - Construction Regular Operation	

REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Complete Bond	BOND AMOUNT: \$754,732.00
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None
INSPECTOR(S): Peter Hays Hunter Ridley	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: February 19, 2023

The following inspection topics were identified as having Problems or Possible Violations. OPERATORS SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF THE PERMIT AND APPLICABLE RULES AND REGULATIONS. If a Possible Violation is indicated, you will be notified under separate cover as to when the Mined Land Reclamation Board will consider possible enforcement action.

INSPECTION TOPIC: Signs & Markers

PROBLEM: The mine identification sign was not posted at the entrance of the mine site. This is a problem for failure to post a mine identification sign as required by Rule 3.1.12(1). The Operator shall, at the entrance of the mine site post a sign, which shall be clearly visible from the access road, with a minimum size equaling one hundred and eighty-seven (187) square inches, such as eleven (11) inches in height and seventeen (17) inches in width, with appropriate font size, with the following: the name of the Operator, a statement that a reclamation permit for the operation has been issued by the Colorado Mined Land Reclamation Board; and the permit number.

CORRECTIVE ACTIONS: The Operator shall, at the entrance of the mine site, post a sign which shall be clearly visible from the access road with the following: the name of the operator, a statement that a reclamation permit for the operation has been issued by the Colorado Mined Land Reclamation Board; and the permit number. The Operator shall submit photo documentation that a proper sign has been posted by the corrective action date.

CORRECTIVE ACTION DUE DATE: 3/31/23

OBSERVATIONS

The Platte Valley Operation site was inspected by Peter Hays and Hunter Ridley with the Division of Reclamation, Mining and Safety (Division/DRMS) as required by the Transfer of Permit and Succession of Operators (SO4) process and Rule 1.12. Mr. Wyatt Webster with Holcim – WRC, Inc. (Holcim) was present during the inspection.

On August 15, 2022, Holcim – WRC, Inc. submitted a Transfer of Permit and Succession of Operators (SO4) Application Form. Holcim provided a replacement Financial Warranty for the same dollar amount maintained by the previous operator, Aggregate Industries – WCR, Inc. (AI), in the amount of \$754,732.00.

On August 29, 2022, the SO1 application was approved by the Division. Holcim is the permitted operator of the site and AI was released from reclamation responsibility for the site.

The Platte Valley Operation is an 112c operation permitted for 190 acres with 133 acres of mining disturbance. The site was actively processing material from the nearby Tucson South site, M-2004-044, permitted by Holcim during the inspection. No mining excavation was occurring at the Platte Valley site.

The Platte Valley Operation site is divided into 5 mining phases as indicated on the map below.

Phase 1 is mined out and used as sediment ponds and process water storage. The conveyor system from the Tucson South site runs through Phases 1. Phase 3 is mined out and is used as sediment ponds. The approved final reclamation plan for Phase 3 indicates the area will be backfilled to create upland or wetland areas. Phase 5 is partially mined in the northeast corner of the phase. Phase 5 contains the processing plants, product stockpiles, concrete batch plant and concrete recycling area. The approved Reclamation Plan states this phase will be backfilled for industrial use. Phases 2 and 4 have been mined to create an open-water lake. The eastern portion of Phase 4 is being backfilled by Broda Inert Fill Company to create a future industrial use area. The backfill operation was observed during the inspection. The backfilling is progressing from north to south along the eastern permit boundary.

During the first amendment application (AM1) in 2003, the Operator committed to backfill Phase 2 to at least 200 feet from the Platte River by April 2004 in areas where mining has occurred to within 100 feet of the river as an interim flood control measure. The Operator committed to backfill the Phase 2 areas closest to the Platte River to at least 400 feet from the river as the final flood control measure. These interim and final backfilled areas are required instead of constructing the 1990 approved flood control structures.

The Operator has backfilled the area adjacent to the Platte River in Phase 2 since the last inspection (indicated by the red circle). The minimum 200' offset was observed during the inspection as show on the map below.



View of backfilled section of Phase 2 adjacent to the Platte River

The approved Reclamation Plan includes one (1) open water lake in Phases 1 and 2 surrounded by a mix of industrial use, wetland and upland areas. The Operator stated during the inspection the post-mining use would be revised from open water lake to rangeland with the backfilling of all exposed groundwater at the site with inert structural fill materials.

The Division considers a change in the post-mining land use a significant revision to the approved Reclamation Plan. Pursuant to Rule 1.1(6), an "Amendment" means a change in the permit or an application which increases the acreage of the affected land, or which has a significant effect upon the approved or proposed Mining Plan or Reclamation Plan. The Division will require the Operator to submit an amendment application to revise the post-mining land use.

The Division currently holds a financial warranty in the amount of \$754,732.00. The Division is required to recalculate the reclamation bond amount as part of the SO process. The Division's review of the financial warranty determined the current financial warranty is inadequate to reclaim the site.

The Division calculated the cost to backfill the exposed groundwater at the site at \$8,900,000.00, an increase of \$8,145,268.00. A copy of the bond estimate for SO4 is attached.

Due to the amount of the increase, the Division will allow the Operator sufficient time to review and comment on the estimate prior to issuance. The Division will issue a notice of surety increase (SI) letter for the required financial warranty amount after the review period. Holcim will have sixty (60) days from the date of the letter to submit the additional financial warranty pursuant to Rule 4.2(2).

The Applicant is required to update the financial warranty estimate pursuant to Rule 6.4.12 with the pending amendment application to revise the post-mining land use to rangeland.

As cited as a problem on the first page, the required updated mine sign was not observed at the entrance gate. The Division will require the Operator to post a sign per Rule 3.1.12(1) and submit photo documentation by the corrective action date.

Photographs taken during the inspection are attached. If you need additional information or have any questions, please contact me at the Division of Reclamation, Mining and Safety, 1313 Sherman Street, Room 215, Denver, CO 80203, by telephone at 303.866.3567 x 8124, or by email at peter.hays@state.co.us.

Inspection Contact Address

Neil Whitmer
Aggregate Industries - WCR, Inc.
1687 Cole Blvd.
Golden, CO 80401

Enclosure – SO Financial Warranty Estimate

Ec: Jared Ebert, DRMS

PHOTOGRAPHS



Incorrect Platte Valley Operator mine sign



View of the processing plant from the west side of the site looking east



View of the Broda backfill operation from the southeast corner of the site looking north



View of the South Platte River from the southwest corner of the site looking north



View of the backfilled area in the southwest corner of the site (Phase 2) along the Platte River looking south



View of the backfilled area in the southwest corner of the site (Phase 2) along the Platte River looking north



View of the Broda operation from the southwest corner of the site looking east



View of the Broda operation and processing plant from the southwest corner of the site looking northeast

GENERAL INSPECTION TOPICS

The following list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each

(AR) RECORDS----- <u>Y</u>	(FN) FINANCIAL WARRANTY----- <u>N</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>N</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(EX) EXPLOSIVES----- <u>N</u>
(PW) PROCESSING WASTE/TAILING---- <u>Y</u>	(SF) PROCESSING FACILITIES----- <u>Y</u>	(TS) TOPSOIL----- <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>N</u>	(RV) REVEGETATION---- <u>N</u>
(SM) SIGNS AND MARKERS----- <u>PB</u>	(SP) STORM WATER MGT PLAN---- <u>N</u>	(RS) RECL PLAN/COMP-- <u>N</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>N</u>	(SC) EROSION/SEDIMENTATION--- <u>N</u>	(ST) STIPULATIONS----- <u>N</u>
(AT) ACID OR TOXIC MATERIALS----- <u>N</u>	(OD) OFF-SITE DAMAGE----- <u>N</u>	

Y = Inspected / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

COST SUMMARY WORK

Task description: Bond Summary

Site: Platte Valley Operation

Permit Action: SO4 Bond Estimate

Permit/Job#: M1989120

PROJECT IDENTIFICATION

Task #: 401

State: Colorado

Abbreviation: None

Date: 2/19/2023

County: Weld

Filename: M120-401

User: PSH

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
402	Phases 2 and 4, 39.2 Ac, 30' Depth	SITEMAINT ENANCE	1	0.00	\$5,982,240
403	Phases 1,3,5, 20.8 Ac, 10' Depth	SITEMAINT ENANCE	1	0.00	\$1,342,292
404	Topsoil 190 Ac @ 6" Depth	SCRAPER1	1	62.61	\$194,163
405	Vegetate 190 Ac	REVEGE	1	120.00	\$343,854
406	Mob / Demob	MOBILIZE	1	4.66	\$12,379
<u>SUBTOTALS:</u>				187.27	\$7,874,928

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$159,074
Performance bond:	1.05	Total =	\$82,687
Job superintendent:	93.63	Total =	\$7,034
Profit:	10.00	Total =	\$787,493
		TOTAL O & P =	\$1,036,288
		CONTRACT AMOUNT (direct + O & P) =	\$8,911,216

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	\$500	Total =	\$500
Engineering work and/or contract/bid preparation:	0.00	Total =	\$0
Reclamation management and/or administration:	0.00		\$0

CONTINGENCY: 0.00 Total = \$0

TOTAL INDIRECT COST = \$1,036,788

TOTAL BOND AMOUNT (direct + indirect) = \$8,911,716
(\$8,900,000.00
Rounded)

SITE MAINTENANCE

Task description: Phases 2 and 4, 39.2 Ac, 30' Depth

Site: Platte Valley Operation

Permit Action: SO4 Bond Estimate

Permit/Job#: M1989120

PROJECT IDENTIFICATION

Task #: 402

State: Colorado

Abbreviation: None

Date: 2/19/2023

County: Weld

Filename: M120-402

User: PSH

Agency or organization name: DRMS

UNIT COSTS

Maintenance Item	Hours per Year	Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Import Backfill Material	3000.00	USER PROVIDED ITEM	1,495,560.00	1	\$4.00	\$5,982,240.00

Job Hours: 0.00

Total Cost: \$5,982,240.00

SITE MAINTENANCE

Task description: Phases 1,3,5, 20.8 Ac, 10' Depth

Site: Platte Valley Operation

Permit Action: SO4 Bond Estimate

Permit/Job#: M1989120

PROJECT IDENTIFICATION

Task #: 403

State: Colorado

Abbreviation: None

Date: 2/19/2023

County: Weld

Filename: M120-403

User: PSH

Agency or organization name: DRMS

UNIT COSTS

Maintenance Item	Hours per Year	Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Import Backfill Material	1500.00	USER PROVIDED ITEM	335,573.00	1	\$4.00	\$1,342,292.00

Job Hours: 0.00

Total Cost: \$1,342,292.00

SCRAPER TEAM WORKTask description: Topsoil 190 Ac @ 6" DepthSite: Platte Valley OperationPermit Action: SO4 Bond EstimatePermit/Job#: M1989120**PROJECT IDENTIFICATION**

Task #: 404 State: Colorado Abbreviation: None
 Date: 2/19/2023 County: Weld Filename: M120-404
 User: PSH

Agency or organization name: DRMS**HOURLY EQUIPMENT**COSTShift basis: 1 per day

Equipment Description	
-Scraper:	Cat 637G
-Dozer:	NA
Support Equipment -Load Area:	Cat D8T - 8SU
-Dump Area:	NA
Road Maintenance -Motor Grader:	CAT 16M
-Water Truck:	Water Tanker, 3,500 Gal.

Cost Breakdown:

	Scraper Work Team		Support Equipment		Maintenance Equipment	
	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	NA	100	NA	100	100
Ownership cost/hour:	\$264.49	NA	\$124.85	NA	\$163.86	\$14.98
Operating cost/hour:	\$296.10	NA	\$97.63	NA	\$109.86	\$33.32
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	\$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	NA	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$47.07	NA	\$40.04	NA	\$46.87	\$38.91
Unit Subtotals:	\$607.66	NA	\$262.52	NA	\$320.59	\$87.21
Number of Units:	4	0	1	0	1	1
Group Subtotals:	Work:	\$2,430.64	Support:	\$262.52	Maint:	\$407.80

Total work team cost/hour: \$3,100.96**MATERIAL QUANTITIES**

Initial volume: 153,266 CCY Swell factor: 1.000
 Loose volume: 153,266 LCY

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

HOURLY PRODUCTION**Scraper Bowl (volume) Basis:**

Material weight: 1,600 lbs/LCY Struck Volume: 24.00 LCY
 Material description: Top Soil Heaped Volume: 34.00 LCY
 Rated Payload: 81,600 pounds Average Volume: 29.00 LCY
 Payload Capacity: 51.00 LCY Adjusted Capacity: 29.00 LCY

Cycle Time:Scraper Loading Time: 0.80 MinutesManeuver and Spread Time: 0.60 MinutesJob Condition Correction:

Site Altitude: 4950 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NA	

Travel Time:Road Condition: Very hard, smooth, asphalt or concrete, no tire penetration 1.2Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1000.00	0.00	1.20	1.20	2952	0.51

Haul Time: 0.51 minutesReturn Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1000.00	0.00	1.20	1.20	2963	0.45

Return Time: 0.45 minutesTotal Scraper team cycle time: 2.36 minutesAdjusted for job conditions: 611.95 LCY/HourSelected Number of Scrapers: 4 Scraper(s)Adjusted single scraper team (unit) hourly production: 2,447.80 LCY/HourAdjusted multiple scraper team (fleet) hourly production: 2,447.80 LCY/HourUnadjusted unit production/hour: 737.29 LCY/Hour

Optimal Number of Scrapers per push dozer: _____

JOB TIME AND COSTFleet size: 1 Team(s)Total job time: 62.61 HoursUnit cost: \$1.267 /LCYTotal job cost: \$194,163

REVEGETATION WORKTask description: Vegetate 190 AcSite: Platte Valley OperationPermit Action: SO4 Bond EstimatePermit/Job#: M1989120PROJECT IDENTIFICATIONTask #: 405State: ColoradoAbbreviation: NoneDate: 2/19/2023County: WeldFilename: M120-405User: PSHAgency or organization name: DRMSFERTILIZING**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
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$117.18
Total Tilling Cost/Acre	\$117.18

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Switchgrass - Blackwell	0.50	4.47	\$5.75
Blue Grama - Lovington	0.30	4.90	\$4.79
Sideoats Grama - Vaughn	1.35	4.43	\$11.31
Western Wheatgrass - Barton	2.40	6.06	\$16.80
Totals Seed Mix	4.55	19.85	\$38.65

Application

Description	Cost /Acre
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Drill Seeding (DRMS Survey Cost)	\$232.00
Total Seed Application Cost/Acre	\$232.00

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Hay, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$421.36	\$842.72
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$3.04	\$3.04
Total Mulch Materials Cost/Acre				\$845.76

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$73.00
Weed spray, truck, aquatic area, annuals [DMG]	\$22.81
Weed spray, truck, aquatic area, nox. [DMG]	\$62.72
Total Mulch Application Cost/Acre	\$158.53

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:	190	Cost /Acre:	\$1,392.12
Estimated Failure Rate:	30%	Cost /Acre*:	\$1,392.12
*Selected Replanting Work Items:	TILLING,SEEDING,MULCHING		
Initial Job Cost:	\$264,502.80		
Reseeding Job Cost:	\$79,350.84		
Total Job Cost:	\$343,854		
Job Hours:	120.00		

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Mob / Demob**Site: **Platte Valley Operation**Permit Action: **SO4 Bond Estimate**Permit/Job#: **M1989120****PROJECT IDENTIFICATION**Task #: **406**State: **Colorado**Abbreviation: **None**Date: **2/19/2023**County: **Weld**Filename: **M120-406**User: **PSH**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:	\$15.25	\$23.06	\$37.58
Operating Cost/Hour:	\$25.26	\$30.83	\$51.41
Operator Cost/Hour:	\$27.71	\$27.71	\$27.71
Helper Cost/Hour:	\$0.00	\$20.22	\$20.22
Total Unit Cost/Hour:	\$68.22	\$101.82	\$136.92

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	47.71	\$124.85	\$101.82	1	\$226.67	\$101.82	\$250.00
Cat 637G	57.28	\$264.49	\$136.92	4	\$1,605.64	\$547.68	\$1,000.00
CAT 16M	28.73	\$163.86	\$101.82	1	\$265.68	\$101.82	\$250.00

Subtotals: **\$2,097.99** **\$751.32** **\$1,500.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Water Tanker, 3,500 Gal.	\$87.21	1	\$87.21	\$87.21
Light Duty Pickup, 4x4, 1 T. Crew	\$24.30	1	\$24.30	\$24.30

Subtotals: **\$111.51** **\$111.51**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: BRIGHTON, CO
 Total one-way travel distance: 5.00 miles
 Average Travel Speed: 30.00 mph

Total Non-Roadable Mob/Demob Cost * \$12,341.73
 ** two round trips with haul rig:
 Total Roadable Mob/Demob Cost ** \$37.17
 ** one round trip, no haul rig:

Transportation Cycle Time:

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.17	0.17
Return Time (Hours):	0.17	0.17
Loading Time (Hours):	1.00	NA
Unloading Time (Hours):	1.00	NA
Subtotals:	2.33	0.33

JOB TIME AND COST

Total job time: 4.67 Hours

Total job cost: \$12,379