

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

The Division of Reclamation, Mining and Safety has 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: Highway 72 Mill Site INSPECTION TYPE: Illegal (Unpermitted Operation)	MINE/PROSPECTING ID#: M-2022-044 INSPECTOR(S): Russ Means, Jared Ebert, Jason Musick and Michael Cunningham	MINERAL: Gold INSP. DATE: July 1, 2022	COUNTY: Jefferson INSP. TIME: 07:10 a.m.
OPERATOR: Rocky Flats Environmental Solutions, LLC, Dave Emslie, Paul Danio	OPERATOR REPRESENTATIVE: Paul Danio	TYPE OF OPERATION: ILL - Illegal	

REASON FOR INSPECTION:		BOND CALCULATION TYPE:	BOND AMOUNT:
Citizen Complaint		None	No Bond Held
DATE OF COMPLAINT:		POST INSP. CONTACTS:	JOINT INSP. AGENCY:
April, 14, 2022		CDPHE, EPA, MSHA, Jefferson County	None
WEATHER:	INSPE	CTOR'S SIGNATURE:	SIGNATURE DATE:
Clear	U	il Cif	July 14, 2022

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: Availability Of Records, Acid or Toxic Materials, Hydrologic Balance, Processing Waste/Tailing, Processing Facilities, Storm Water Management Plan

PROBLEM/POSSIBLE VIOLATION: Possible Violation: Failure to first obtain a reclamation permit from the Mined Land Reclamation Board before engaging in a new mining operation as required by 34-32-109(2) C.R.S.

CORRECTIVE ACTIONS: This possible violation will require a hearing before the Mined Land Reclamation Board. The schedule and other details for the MLRB hearing will be provided under a separate document to be sent via certified mail to the operator.

CORRECTIVE ACTION DUE DATE: 8/17/22

OBSERVATIONS

The July 1, 2022, inspection of the Highway 72 Mill Site ("Mill Site") was conducted by Michael Cunningham, Russ Means, Jared Ebert and Jason Musick of the Division of Reclamation, Mining and Safety ("Division") in response to a citizen complaint received on April 14, 2022. The citizen complaint stated that an unpermitted mill facility was being operated at 17200 Highway 72 in Jefferson County, approximately 2.4 miles east of Highway 93 at the end of Umber Ct. The Mill site is located on a 1.9 acre parcel owned by Rocky Flats Environmental Solutions, LLC. According to the Colorado Secretary of State, Mr. Dave Emslie is the registered agent for Rocky Flats Environmental Solutions, LLC.

The Division had also previously received an anonymous citizen complaint in regards to unpermitted milling activity at the Mill Site on September 6, 2020. Upon receipt of the anonymous citizen complaint, the Division attempted to conduct an inspection of the facility on September 21, 2020. Upon arriving at the Mill Site the Division made immediate contact with Mr. Paul Danio, who directed Division staff to leave the property and denied the Division access to inspect the Mill Site.

On June 23, 2022, the Division requested permission from the operators to access the Mill site to conduct an inspection to determine compliance with the Colorado Mined Land Reclamation Act § 34-32-101 *et seq*. On June 24, 2022, Mr. Danio responded to the Division and again denied the Division access to the Mill site. Pursuant to C.R.S. 34-32-121, the Division may enter upon the lands of the Operator at all reasonable times for the purpose of inspection to determine compliance with the Act. As a result of receiving multiple citizen complaints alleging unpermitted milling activity at the site and the potential for the mill to be handling acid or toxic producing materials and utilizing designated chemicals, the Division executed an Administrative Search Warrant to enter and inspect the Hwy 72 Site on July 1, 2022. The Administrative Search Warrant (copy enclosed) was Ordered by the Jefferson County District Court on June 27, 2022.

On July 1, 2022, Division staff arrived at the Mill facility at approximately 7:10 am. The Division was accompanied by the Jefferson County Sheriff's Department, who served a copy of the Administrative Search Warrant to the Operator. Upon arriving at the site, Division staff made contact with Mr. Lane Nolan who identified himself as an employee of the mill facility. Shortly thereafter, Mr. Ted Butterfield arrived at the site and also identified himself as an employee of the mill facility. Mr. Danio arrived to the site approximately 15 minutes after the start of the Division's inspection.

Stockpiled Ore

Upon arrival at the property, the Division observed a stockpile of ore along the Hwy Site driveway. The stockpile of ore was placed on the ground without any secondary containment. According to Mr. Nolan, the ore had been imported from the Cross Gold Mine, File No. M-1977-410, which is located in Boulder County. The operator of the Cross Gold mine has verified to the Division that it shipped approximately 20 tons to the Hwy 72 Mill Site in August/September of 2021.

Large Metal Tanks

Immediately to the east of the ore stockpile, the Division observed three large metal tanks. The metal tanks may possibly be associated with former industrial activities that previously occurred at the site. The Division was able to confirm that one of the tanks was empty; however, the other metal tanks were inaccessible and it could not be determined by the Division at the time of the inspection if the metal tanks were currently being

utilized.

Two 5,000 Gallon Plastic Tanks of Cyanide Solution Without Secondary Containment

In addition, the Division observed two large plastic tanks immediately adjacent to the metal tanks. The plastic tanks have a capacity of approximately 5,000 gallons each and had labels indicating they contained cyanide solution (see Figures 2 and 3). Mr. Nolan verified that the tanks were used to hold cyanide solution that was being utilized in the mill facility. The Division observed solution in the tanks; one tank was nearly at full capacity and the other tank was approximately 30% full. The metal and plastic tanks were located on a concrete pad (see Figure2), which contained a concrete berm along the south side of the tanks. The concrete berm would not function as secondary containment as it did not fully enclose the tanks. A loss of solution from the tanks has the potential to flow off-site. The facility is located immediately to the north and upgradient of Barbara Gulch, an ephemeral drainage that flows eastwards into Leyden Lake. Leyden Lake is a City of Arvada storm water detention facility that is located between Highway 72 and W. 82nd Ave. Leyden Lake flows into Leyden Creek, which is a tributary of Ralston Creek.

Primary Mill Facility

The Division next proceeded to enter the main building located to the east of the tanks described above. Within the main building the Division observed standard milling equipment including a ball mill, numerous flotation tanks, shaker tables, filter presses, and agitator tanks. Although the mill was not operating at the time of the inspection, the Division's observations during the inspection indicated that the mill had been running. Clean-up of spillage from the loader bin was observed. The drain in this area reports to an unknown discharge. The mill drum gear was well greased, indicating operation. Other general observations by the Division include no safety guards on the gear and the electrical connections were not up to code. It was clear to the Division that the conventional mill circuit had been previously operated as evidenced by solution and concentrates within the flotation cells. Froth and foam concentrates were observed and photographed in the cells that are being used. Sedimentation on the shaker tables indicted recent use as well.

In addition to the equipment described above, the Division observed numerous 55-gallon plastic drums and 275-gallon plastic totes (see Figure 9). The Division observed labels on some of the 55-gallon drums which indicated they contained Circutek EC-807, which is an electroless copper designed for high performance metallization in the printed circuit board industry. It is unclear how this chemical was being utilized in the milling process, but the hazard label indicated that the chemical is highly toxic to aquatic life. The Division also observed open bags of copper sulfate and numerous 5-gallon buckets with unidentified fluids (see Figure 16).

Cyanide Agitator Tanks Running During Inspection

A secondary room within the main building contained the aforementioned cyanide circuit and agitator tanks as well as filter presses (see Figure 13). Based on the Division's observations the secondary room was also being utilized as a laboratory. The Mill Site was clearly operational as the cyanide agitator tanks were running at the time of the inspection (see Figure 11). There was no secondary containment for any of the equipment or chemicals stored within this area of the building. DRMS asked Mr. Butterfield about spill protocols. Mr. Butterfield indicated he was not aware of any neutralization protocols for the cyanide solution.

The Division did not observe spill containment equipment or products, ventilation hoods, first aid stations, eye wash stations, or emergency showers at the Hwy 72 Mill site which would be standard safety measures in a permitted and regulated mill facility of this sort. Additionally, there was no secondary containment for any of

the equipment or chemicals stored within the main building. A loss of process solution within the main building had the potential to flow out of the building and/or possibly into existing floor drains.

Ancillary Buildings

Following the inspection of the main building, the Division proceeded to inspect the outside building. The Division observed diesel tanks, generators, scrap metal and various pieces of dysfunctional equipment. Oil and fuel spills were observed staining the soils and no secondary containment or spill prevention was being employed. In addition, there were two shipping containers located on the south side of the building which contained additional equipment as well as bags of soda ash and a 55-gallon drum containing propylene glycol.

A second building located to the east of the main building contained ore stockpiles, an ore sorter and a conveyor line that connected to the main building. Remnants of super sacks were observed indicating shipments from outside sources.

A third building was located on the east end of the property which contained a kiln, foundry crucibles and bags of soda ash. Based on the equipment present in this building, the Division believes the Operator has been smelting metals recovered from the milling process.

DRMS staff also observed two travel trailers on site. One was hooked up to electrical and appeared to be the residence of one of the workers or Mr. Danio.

Enforcement Actions

Milling is defined as a "Mining Operation." Under 34-32-103(8), C.R.S. Based on the observations made during the inspection, the Division has reason to believe Rocky Flats Environmental Solutions, LLC, Dave Emslie, and Paul Danio are in engaged in a mining operation and are in violation of C.R.S. 34-32-109(2) for failing to obtain a reclamation permit prior to engaging in a mining operation. The possible violation will be scheduled for consideration by the Mined Land Reclamation Board, during the August 17-18, 2022 Board meeting. Formal notice of the possible violation and Board hearing will be sent under separate cover.

Due to the use of designated chemicals in the mill, specifically cyanide, which pose a significant threat to human health and the environment, the Division issued a Cease-and-Desist Order (copy enclosed) during the inspection. The Cease-and-Desist Order prohibits the continued operation of the mill facility by Rocky Flats Environmental Solutions, LLC, Dave Emslie, Paul Danio and its associates.

This concludes the inspection report.

Any questions or comments concerning this inspection report should be forwarded to Michael Cunningham at the Division of Reclamation, Mining and Safety, Room 215, 1001 E 62nd Ave, Denver, CO 80216, via telephone at (303)866-3567, ext. 8116, via email at <u>Michaela.cunningham@state.co.us</u>.

PERMIT #: M-2020-044 INSPECTOR'S INITIALS: MAC INSPECTION DATE: July 1, 2022

PHOTOGRAPHS



Figure 1. Ore stockpiles adjacent to site access road.



Figure 2. Tanks with cyanide solution, outside of main building entrance.



Figure 3. Cyanide solution label/hazardous materials placard.



Figure 4. Ball mill inside of main building.



Figure 5. Fluid around base of ball mill, note the drain.



Figure 6. Ball mill ore feeder.



Figure 7. Shaker tables.



Figure 8. Flotation cells with concentrate foam.



Figure 9. Unidentified fluids in plastic totes.



Figure 10. Cyanide Leach tanks.



Figure 11. Cyanide agitator tanks running at the time of inspection.



Figure 12. Laboratory Equipment located over floor drain.



Figure 13. Filter press.



Figure 14. Copper sulfate.



Figure 15. Unlabeled 55 gallon drums.



Figure 16. Unidentified fluid in 5-gallon buckets.



Figure 17. Ore conveyor into main building.



Figure 18. Secondary building - ore/waste rock storage.



Figure 19. Waste rock in secondary building.



Figure 20. Ore sorter and conveyor line in secondary building.



Figure 21. Waste rock/tailings stockpile on east on of property.



Figure 22. Kiln in ancillary building.



Figure 23. Foundry crucible for smelting.



Figure 24. Cease and Desist Order posted at site entrance.

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Figure 25. Location Map

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Figure 26. Mill Facility boundary and key features.

GENERAL INSPECTION TOPICS

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

(AR) RECORDS <u>PV</u>	(FN) FINANCIAL WARRANTY <u>N</u>	(RD) ROADS <u>N</u>
(HB) HYDROLOGIC BALANCE <u>PV</u>	(BG) BACKFILL & GRADING <u>N</u>	(EX) EXPLOSIVES <u>N</u>
(PW) PROCESSING WASTE/TAILING <u>PV</u>	(SF) PROCESSING FACILITIES <u>PV</u>	(TS) TOPSOIL <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>N</u>	(FW) FISH & WILDLIFE <u>N</u>	(RV) REVEGETATION <u>N</u>
(SM) SIGNS AND MARKERS <u>N</u>	(SP) STORM WATER MGT PLAN <u>PV</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>PV</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

Inspection Contact Address

Paul Danio 17200 Highway 72 Arvada, CO 80007

Enclosures: Administrative Search Warrant Cease-and-Desist Order

EC: Paul Danio, <u>paulydanio@gmail.com</u> Dave Emslie, <u>dave@prospectorsgoldandgems.com</u> Jefferson County Public Health Craig Myers (EPA), <u>Myers.Craig@epa.gov</u> Kerry Guy (EPA), <u>guy.kerry@epa.gov</u> Andrea Adigan (EPA), <u>adigan.Andrea@epa.gov</u> Brad Breland (MSHA), <u>Breland.Brad@dol.gov</u> Mitch Brown (Jefferson County Public Health), <u>mlbrown@co.jefferson.co.us</u> Doug Jamison (CDPHE), <u>doug.jamison@state.co.us</u> Mary Boardman (CDPHE), <u>mary.boardman@state.co.us</u>

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DISTRICT COURT, JEFFERSON COUNTY,	(37) (E0-47-5%)
COLORADO	COMBINED COURT
	JEFFERSON COUNTY, CO
100 Jefferson County Parkway Golden, CO 80401	
IN THE MATTER OF THE ENTRY AND INSPECTION OF:	
Hwy 72 Mining Site and Milling Operation	COURT USE ONLY
Philip J. Weiser, Attorney General	Case No.:
SCOTT SCHULTZ, SENIOR ASSISTANT ATTORNEY	
GENERAL	oli Si 😹 🖬
1300 Broadway, 7 th Floor	
Denver, CO 80203	a fine and the second second
Phone: 720-508-6256	840 00 0 TX C 0 1
Email: scott.schultz@coag.gov	
Registration Number: 38666	2. 10 No. 10 No. 10 No. 10
*Counsel of Record	TA INCREMENT IN THE INTERNATION OF
ADMINISTRATIVE SEARCH WARRANT TO ENTE PURSUANT TO C.R.S. § 34-3	

TO: Division of Reclamation Mining and Safety 1313 Sherman Street, Room 215 Denver CO 80203

Application having been made, and the Court finding, that there is sufficient basis to issue an administrative search warrant authorizing the entry, inspection, and any necessary sampling of the property described as:

17200 State Highway 72, Golden, 80403 ("Hwy 72 Site"), Jefferson County, Colorado

for the purpose of ascertaining compliance with the Colorado Mined Land Reclamation Act, §§ 34-32-102, *et seq.*, C.R.S. ("Mining Act") and its implementing regulations, 2 C.C.R. 407-1 ("Mining Rules").

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IT IS HEREBY ORDERED THAT, pursuant to C.R.S. § 34-32-121, AUTHORIZED REPRESENTATIVES of the Colorado Division of Reclamation Mining and Safety, totaling not more than 4 persons (not including peace officers), and peace officers, ARE AUTHORIZED TO ENTER, INSPECT, and CONDUCT ANY NECESSARY SAMPLING of the Hwy 72 Site, 17200 State Highway 72, Golden, 80403, to ascertain compliance with the Mining Act and the Regulations at anytime during the 10 day period the warrant is in effect.

In order to adequately inspect the Hwy 72 Site the Division is granted full access to all areas of the Site and any records kept at the Operation, that may pertain to the operator's compliance or noncompliance with the Mining Act and Rules, including but not limited to:

a. all structures, property and equipment potentially associated with mining operations;

b. all documentation and records, including written, electronic, and other storable formats associated with the mine management activities conducted;

The sole purpose of the entry and inspection, and sampling authorized hereunder is to ascertain compliance with the Mining Act and Rules. The entry and inspection authorized hereunder will be conducted by representatives of the Division duly authorized to conduct inspections. Except as necessary to gain access to areas of the property or records relating to compliance or noncompliance with the aforementioned state laws, the Division shall not enter other areas of the property nor shall they inspect other records not related to the mining or milling operation. The entry, inspection, and sampling shall be initiated as soon as practicable after the issuance of the administrative search warrant and shall be concluded within ten (10) business days thereafter. Re-entry of the property during that period and under the conditions expressed herein is hereby expressly permitted.

The Division's representatives shall afford an opportunity to representatives of the Facility, if present at the property when this administrative search warrant is executed, to accompany them during the course of the inspection for the purpose of observing the inspection.

During the course of the inspection the Division is authorized to take environmental samples, photographs and other measurements of materials regulated under the Mining Act or Rules, to copy records and other documents located on or within said property, to employ other reasonable investigative techniques, and to speak privately with any owner, operator, employer, employee or other representative of the Facility or their contractors.

The above activities shall be limited to those necessary for the purpose of entry and inspection authorized hereunder and shall be conducted in such a manner so as to avoid all unreasonable disruption of the operation of, and activities conducted by, the Facility or their contractors on the property. Any confidential information, including trade secrets, privileged information, and confidential commercial, financial, geological, or geophysical information obtained during the entry and inspection shall be preserved in accordance with C.R.S. § 24-72-204(3)(a) of state open records law and all other applicable laws.

If environmental samples are taken by Division representatives during the course of the inspection, representatives of the Facility will be entitled to observe any testing that the Division may perform, and may receive splits of the samples.

DONE this 27th day of June, 2022.



PHILIP J. WEISER Attorney General

/s/ Scott Schultz

SCOTT SCHULTZ, 38666* Senior Assistant Attorney General Resource Conservation Unit Natural Resources & Environment Section Attorneys for State of Colorado *Counsel of Record