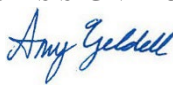




MINERALS PROGRAM INSPECTION REPORT
PHONE: (303) 866-3567

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: Nahcolite Project	MINE/PROSPECTING ID#: M-1983-194	MINERAL: Carbonates	COUNTY: Rio Blanco
INSPECTION TYPE: Monitoring	WEATHER: Clear	INSP. DATE: August 28, 2023	INSP. TIME: 11:00
OPERATOR: Natural Soda LLC	OPERATOR REPRESENTATIVE: Kirk Daehling	TYPE OF OPERATION: 112d-3 - Designated Mining Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: None	BOND AMOUNT: \$4,466,425.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: DRMS	JOINT INSP. AGENCY: None	
INSPECTOR(S): Amy Yeldell	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: September 7, 2023	

GENERAL INSPECTION TOPICS

The following inspection topic(s) were identified as having a **Problem (PB)**, which includes correction actions and a deadline whereby the Operator must demonstrate compliance with the conditions of the Permit and the requirements of the Act and Rules. Failure to address the corrective actions by the deadline may cause the Division to escalate the Problem to a **Possible Violation (PV)** and schedule the issue for formal hearing before the Mined Land Reclamation Board (Board).

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

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

INSPECTION TOPIC: Stormwater Management Plan

PROBLEM/POSSIBLE VIOLATION: Problem: Trash and sedimentation was observed surrounding the plant area affecting functionality of Stormwater BMPs. All drainage control and containment facilities shall be properly operated and maintained as specified in the approved Stormwater Management Plan pursuant to Rule 3.1.6 and 6.4.21(10)(b).

CORRECTIVE ACTIONS: Trash, ditches and berms surrounding the plant area need to be cleaned out/constructed so that water flows to the appropriate BMP features as designed prior to discharge. All site facilities shall function (operated and maintained) as designed in the approved Stormwater Management Plan. The operator shall provide photo documentation to the Division verifying that all facilities have been reconstructed/ maintained, and that the site has been stabilized so that facilities function as designed in the approved Stormwater Management Plan by the corrective action date.

CORRECTIVE ACTION DUE DATE: 10/31/23

OBSERVATIONS

This inspection was conducted as part of the Colorado Division of Reclamation, Mining, and Safety (Division) normal monitoring program. The Nahcolite Project is a 112d-3 permitted site that includes a total of 12,248 permitted acres with a maximum disturbance of 260 acres. At this time, approximately 100 acres have been affected. The site is located approximately 25 miles southwest of Meeker, Colorado in Rio Blanco County. Kirk Daehling, Jamie Reck and Jerry Daub represented the operator and accompanied Amy Yeldell of the Division on the inspection. No represented from the White River Field Office BLM was present.

This is the third quarter inspection for 2023. The primary focus of this inspection was stormwater management. Additionally the two new/extended pads and additional roads for the 18H-1V and 18H-IR-W wells were observed. There are no open revisions for this permit. No changes to production level or staffing have occurred or are anticipated in the near future. Division staff first checked in at the main office.

Jamie Reck will be taking over for Nathan Fisk as the EHS Manager moving forward.

Backfilling and Grading:

Construction of the access road and new pad for 18H-1V and subsequent wells is also completed (Photo One). The 15 pad has been extended to the south on a higher tier (level) to accommodate the 18H-IR-W and subsequent wells. Well pad construction is completed (Photo Two). The access road is either through the 15 Pad on the southwest side or from the existing county road to the south. Both pads appear to be constructed as approved under TR-50. Cut slopes are stable and perimeter berms/ditching is in place.

Explosives:

Explosives are not used in conjunction with this operation

Financial Warranty:

The Division holds \$4,466,425.00 in financial warranty. The Division last updated the reclamation cost estimate in February of 2023 for TR-50. The bond is considered sufficient at this time and will not be recalculated as part of this inspection.

Hydrologic Balance:

No spills/leaks were observed along the pipeline during this inspection, nor were any reported this quarter to date. See additional comments under Stormwater Management.

Other:

Wells 18H-1V and 18H-IR-W have not yet been drilled. They are planned for spring of 2024.

Well 14H-R was being plugged at the time of the inspection. Staff did not inspect the site/well. One of each of the pairs for 15, 16 and 17 are also scheduled for this fall.

Right of Entry:

The Operator has a valid Plan of Operations with the BLM which meets the requirements of Rule 6.3.7 for maintaining its Legal Right of Entry.

Reclamation Success:

No areas were inspected for reclamation success or release.

Revegetation:

No evaluations to interim reclaimed pads were conducted.

Support Facilities On-site:

The inside of the processing facility was not inspected this quarter. During the inspection the conveyor on the cyclone is being switched out for a screw. No other major equipment modifications or maintenance were indicated. Division staff walked the perimeter as part of the stormwater inspection.

Signs and Markers:

A mine sign was posted at the turn off from CR 24 as required by Rule 3.1.12(1).

Special Categories Of Mining:

This is a Designated Mining Operation (DMO). Stormwater features are considered an Environmental Protection Facility (EPF). See the Stormwater Mgmt Plan section for comments.

Stormwater Management Plan:

The primary focus of this inspection was stormwater management and the associated drainage control and containment facilities (BMP features). Surface water control and containment facilities are considered EPF per Rule 6.4.21(10). Natural Soda holds a Commercial and Industrial General Discharge Permit with CDPHE. Certification Number COG-501736 has four outfalls. The permit expired on 12/31/2021 but according to CDPHE as of 8-1-23 has been administratively continued. The most recent Stormwater Management Plan (SWMP) was provided to the Division under AM-3. The majority of BMP features are centered around the plant since it is the greatest source of potential pollutants. Other potential sources are the pipeline, access roads and well pads.

Per the SWMP all well pads shall have silt fences or berms around the perimeter of the well pad as long as it is

in existence to prevent erosion. Upon inspection all pads had perimeter berms surrounding the leveled gravel area. Additionally most pads appear to be using berms on the up gradient side to divert clean water around the pad. Then any affected water is collected into ditches and then a sediment pond. The two newly constructed pads also had straw wattles just outside of the pad footprint to help control run-on water flowing into the stormwater ditches (Photo Three).

In order to mitigate erosion of the access roads and to provide runoff control, all access roads should be crowned and ditched along the trace of the roads per the approved SWMP. The existing well field roads all had ditches on either side of the road. In some areas minor erosion and sedimentation was observed. These ditches need periodic maintenance to ensure they are of sufficient capacity and properly aligned to direct flows to appropriate containment and if needed discharge points.

Stormwater surrounding the plant area is managed by 8 drainage zones, 6 catchments and 4 outfalls. All vehicle maintenance is done within the shop area so that materials are not exposed to stormwater discharge. Similarly the storage silos and bulk loadout building is enclosed to keep the sodium bicarbonate dust contained. The dust that accumulates in this area is then periodically washed down to the process ponds. Additionally there are a handful of floor drains located within Zones 1, 2 and 3 that also allow for periodic wash downs and clean ups if material was spilt adjacent to the plant and load out areas (Photo Four).

The employee parking lot on the south side of the plant has been constructed since the last Figure 2 (SWMP Map) was created. Outfall 003-A conveys runoff from Zone 4. According to Ms. Reck Outfall 003-A was recently cleaned out. Standing water was observed (Photo Five). A culvert directs water from the outfall point under the road to the east and into the catchment of Zone 4 which ultimately reports to an unnamed tributary of the Yellow Creek. During the inspection it appears that only the southern half of Zone 4 drains to the south. The northern half drains to the north and east into Zone 2 and the catchment of Zone 4. The Zone 4 catchment also had standing water at the time of the inspection.

Outfall 004-A discharges water from Zone 5. There is a berm separating the majority of Zone 5 from the parking area. Water generally sheds to the west and is collected into the Zone 5 catchments but is not directed to a discharge point (Photo Six). Only the water collected into the southeast finger of Zone 5 will report to Outfall 004-A. All other water will be diverted around the perimeter of the plant and into Zone 6 and on (Photo Seven). Based on grade, flows from Outfall 004-A will join Outfall 003-A. Small puddles of water were observed in the perimeter ditches (catchments) of Zone 5.

Zones 6, 7 and 8 all have a cut slope on the west/ northwest side with a catchment Zones 5-8 (ditch) to direct water to the north end of the plant into Catchment Zone #8. Catchment Zones 5-8 had some sedimentation and erosion, but overall the ditch appeared to be effectively directing water (Photo Eight). The Catchment Zone #8 is bisected by a dirt berm resulting in two pond features, both of which had standing water (Photo Nine). Ultimately water flows to the east into Outfall 002-A on the southwest side of the road to the evaporation pond. Sedimentation from the parking area was evident and erosion was observed within the catchment Zones 5-8 and Outfall 002-A (Photo Ten). There was also trash present in the catchment #8. This is cited as a problem for failure to operate and maintain drainage control and containment facilities per Rule 6.4.21(10)(b). Trash and excess sediment shall be removed from the Zone 8 catchment and Outfall 002-A so that water can be properly captured and appropriately directed to approved outfall location.

Lastly the Catchments for Zones 2, 3, and 4 were inspected. The northeastern tip of the catchment is Outfall 001-A (for Zones 1, 2 and 3). Based on grading not all of the water from Zone 3 goes into the Zone 2, 3 and 4 catchment. Specifically it continues to flow to the east off the edge of the road embankment resulting in erosion. Additionally overtime a berm has been placed between the parking area and catchment Zone 2, 3, and 4 so that

water cannot flow into the catchment, rather it flows along the ditch and out into the driveway entrance (Photo Eleven). Water designed to flow into the Zone 2, 3 and 4 catchment is not being properly channeled and flowing from the road into the unnamed tributary of the Yellow Creek. This is cited as a problem for failure to operate and maintain drainage control and containment facilities per Rule 6.4.21(10)(b). Ditched and berms within Zones 1, 2 and 3 need to be cleaned out/constructed so that water flows to the appropriate BMP features as designed prior to discharge.

Topsoil:

Topsoil was salvaged from each of the newly constructed pad areas. Stockpiles are gently sloped and located on the south (uphill) side of the pads. Seeding has not occurred to date. Topsoil stockpiles shall be interim reclaimed this fall to help preserve topsoil quantity and quality.

Responses to this inspection report should be directed to Amy Yeldell at the Division of Reclamation, Mining and Safety, Room 215, 1001 E 62nd Ave, Denver, CO 80216. Direct contact can be made by phone at 303-866-3567 Ext 8183 or via email at amy.yeldell@state.co.us

Inspection Contact Address

Kirk Daehling
Natural Soda LLC
3200 CR 31
Rifle, CO 81650

Enclosures:

Figure 2 – SMWP Map
CDPHE Certification

EC:

Travis Marshall, Senior EPS, Grand Junction DRMS
James Roberts, BLM-White River Field Office
Jamie Reck, Natural Soda LLC
Jerry Daub, Daub and Associates, Inc.

PHOTOGRAPHS



Photo 1: New pad for 18H-1V



Photo 2: The extended 15 pad for well 18H-IR-W



Photo 3: Perimeter berm and additional straw waddles on pad 18H-1V



Photo 4: In floor drains within the loadout are and adjacent to the plant.



Photo 5: Outfall 003-A for Zone 4 has standing water



Photo 6: Outfall 004-A behind piping, ditch doesn't connect.



Photo 7: Catchment Zone 5 holding water



Photo 8: Catchment Zones 5-8 had some sedimentation and erosion



Photo 9: Catchment Zone 8 with trash and standing water

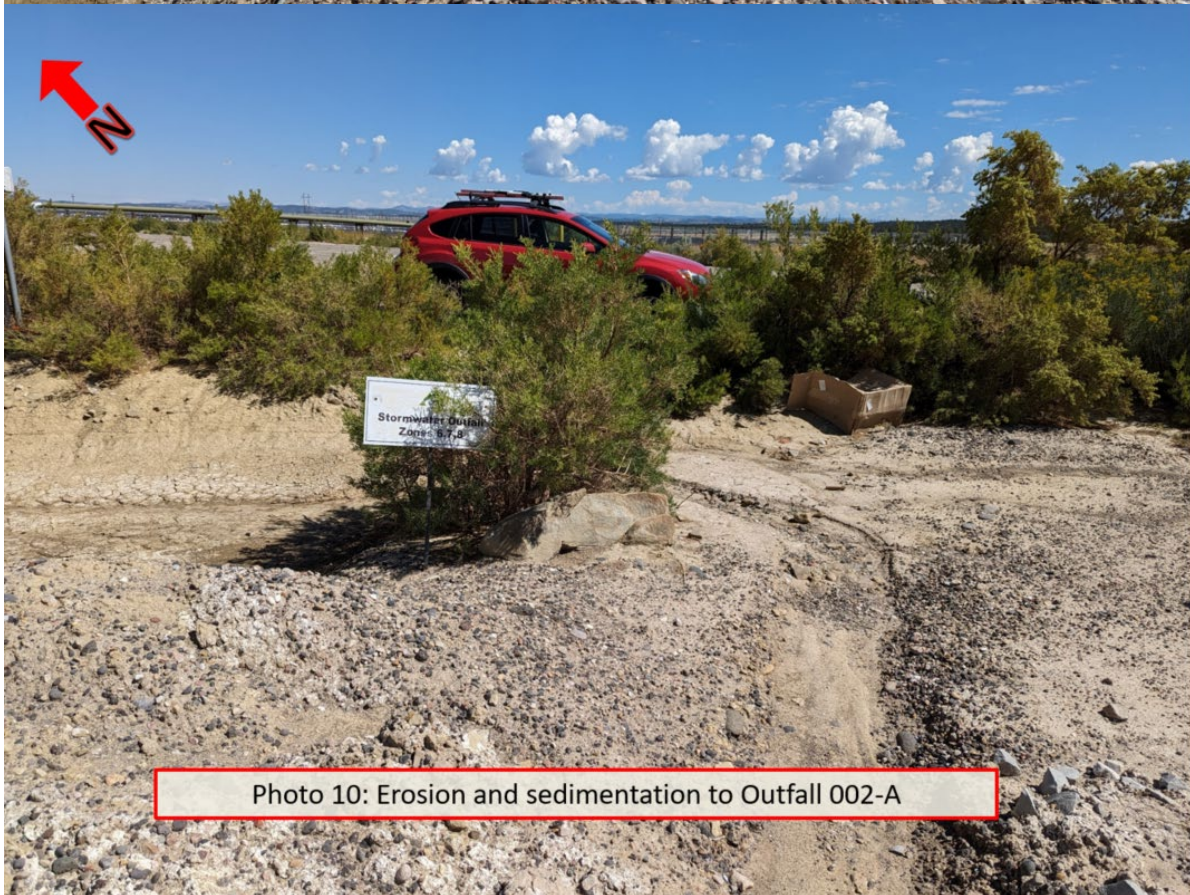
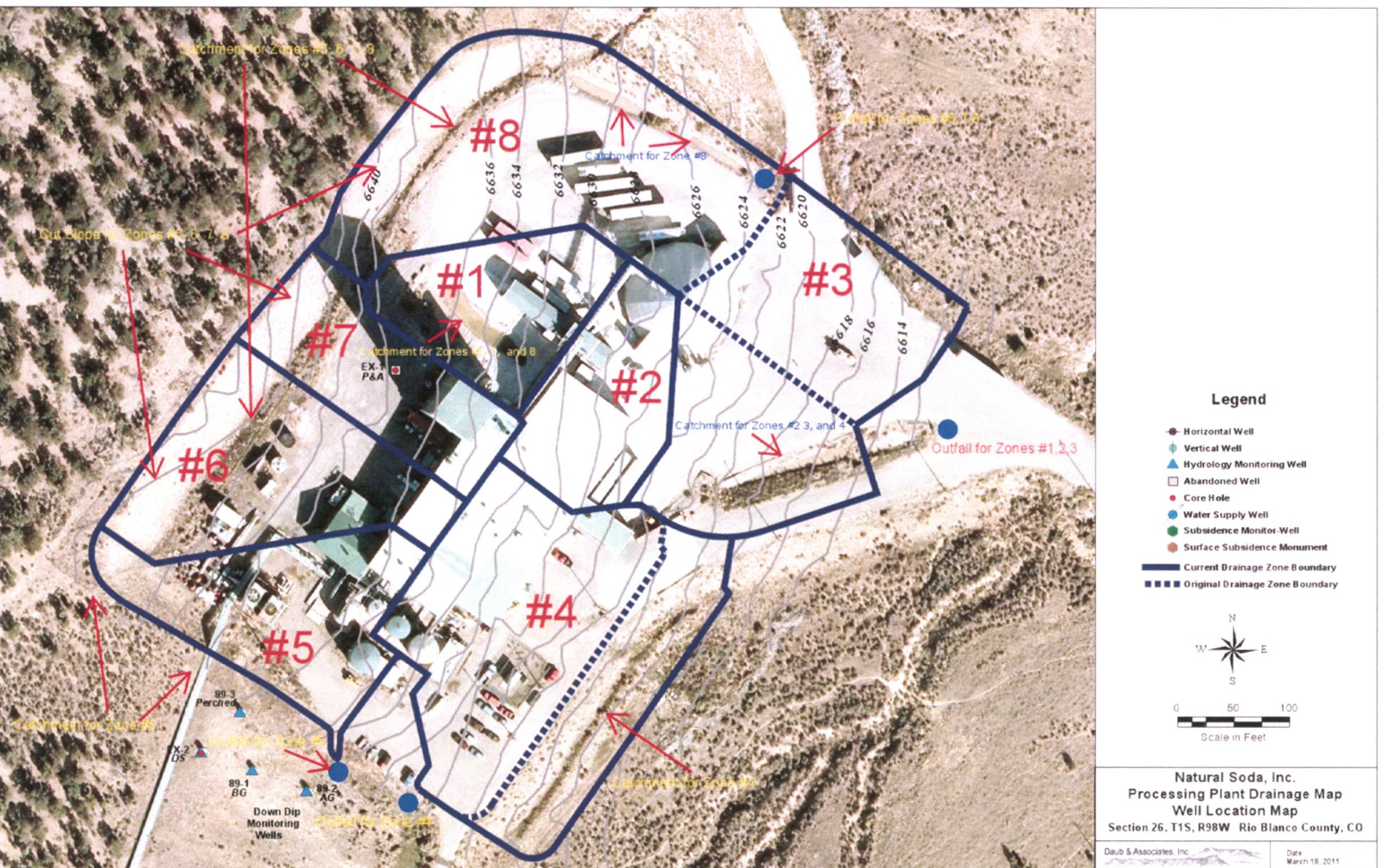


Photo 10: Erosion and sedimentation to Outfall 002-A



Photo 11: berm between catchment Zone 2, 3, and 4 so that water flows along the ditch and out into the driveway entrance





COLORADO

Department of Public
Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

CERTIFICATION TO DISCHARGE UNDER CDPS GENERAL PERMIT COG500000 DISCHARGES ASSOCIATED WITH SAND & GRAVEL MINING AND PROCESSING (and other Nonmetallic Minerals except fuel)

Certification Number: **COG501736**

This Certification to Discharge specifically authorizes:

Natural Soda LLC
to discharge from the facility identified as

Natural Soda
to:
Unnamed tributary - Yellow Creek

Facility Located at:	3200 CR 31, Rifle, Rio Blanco County, CO 81650
	Center Point Latitude 39.9333, Longitude -108.4

Defined Discharge Outfall(s) to Surface Water	Outfall(s) Lat, Long	Discharge Outfall(s) Description	Receiving Stream
Outfall Number 001-A	39.9357, -108.3584	Stormwater runoff from zones 1, 2, 3	Unnamed tributary Yellow Creek
Outfall Number 002-A	39.9363, -108.3589	Stormwater runoff from zones 6, 7, 8	Unnamed tributary Yellow Creek
Outfall Number 003-A	39.9347, -108.3599	Stormwater runoff from zone 4	Unnamed tributary Yellow Creek
Outfall Number 004-A	39.9348, -108.3602	Stormwater runoff from zone 5	Unnamed tributary Yellow Creek

All discharges must comply with the lawful requirements of federal agencies, municipalities, counties, drainage districts and other local agencies regarding any discharges to storm drain systems, conveyances, or other water courses under their jurisdiction.

Stormwater Monitoring Requirements

Permit Limitations and/or Monitoring Requirements apply to outfalls 001A, 002A, 003A and 004A as outlined in the Permit in Part I.C.2 and Parts I.G through I.Q.

On the effective date of this certification, the Natural Soda is subject to the monitoring requirements identified below at each discharge point of stormwater from the facility.

A. *Visual monitoring, Part I.I.1*

Per Part I.I.1 of the permit, the permittee must collect a stormwater sample from each outfall (or a substantially identical outfall pursuant to Part I.H.1 of the permit) and conduct a visual assessment of each of these samples once each **quarter** for the entire permit term.

B. *WQBEL/Water Quality Standards, Part I.I.4*

Discharges authorized under this permit must be controlled as necessary to meet applicable water quality standards.



Stormwater Reporting Requirements

ICIS Code	Description	Due date	Frequency
00308	The permittee shall submit an annual report to the division for the reporting period January 1 through December 31.	February 28	Annual(10)

Certification issued: 4/7/2017

Effective: 7/1/2017

Expiration Date: 12/31/2021

This certification under the permit requires that specific actions be performed at designated times. The certification holder is legally obligated to comply with all terms and conditions of the permit.

Approved by
Kathleen Rosow
Permits Unit 3 Work Group Leader
Water Quality Control Division

