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

February 1, 2023

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

RE: Nahcolite Project, File No. M-1983-194 , Technical Revision (TR-50) Adequacy Review #1

Dear Mr. Daehling:

On February 1, 2023, the Division of Reclamation, Mining and Safety (Division) received and filed your Technical Revision request TR-50 for the Nahcolite Project, Permit No. M-1983-194. During review of the material submitted, the Division determined that the following issue(s) of concern shall be adequately addressed before the Technical Revision can be considered for approval. Please provide the following:

1. Please specify the plugging and abandonment measures to be utilized for the proposed wells 18H-1V and 18H-IR-W
2. The Well location and proposed utilities (map 2) depicts additional features not discussed in the narrative portion of this TR. Are the following additional features being requested at this time?
    a. New well pads for 18H-IR-E and alternate proposed 18/20-IR-E
    b. Three additional surface subsidence monitoring wells; SSM18, SSM19 and SSM20. Note the SSM18 is also depicted on the Locations (map 1).
3. The Well location and proposed utilities (map 2) states “Remove and Replace (2) 8” production pipelines”. Are the removal and replacement pipelines identical lengths and material types and thus not a factor for bonding purposes?
4. Provide an updated table tracking the amount of pipeline by size located on site. Specifically address the following changes;
    a. What is the total length of additional pipe by size to be added for access to the 18H-1V well/pad?
    b. What is the total length of additional pipe by size to be added for access to the 18H-IR-W well?
    c. Has any pipe been removed in conjunction with recently abandoned wells?
5. Will the construction of the new pipeline road require any significant contouring? If so please provide the details for construction as well as for removal. Historically the Division has only bonded for ripping, topsoil and reveg of roads.
6. Are the disturbed acreages for proposed well pad access roads accounted for under the “proposed area of disturbance” acreages listed on each pad map?

7. Please provide an updated "Well pad & Road Acreage Analysis" spreadsheet which includes the TR-50 proposed changes highlighted. Include both the addition of new well pads and the change of status pad for reclaimed areas.
8. For bonding the Division is providing a list of all open wells which will require abandonment. Please review this table to ensure that all recent changes (abandoned wells) have been accounted for and that the information presented is accurate.

Please submit your response(s) to the above listed issue(s) by Monday, February 20, 2023 in order to allow the Division sufficient time for review A decision due date of March 3, 2023 has been set. If any adequacy issues remain by the decision due date the Division may deny your request. The Division will continue to review your Technical Revision and will contact you if additional information is needed.

If you require additional information, or have questions or concerns, please feel free to contact me.

Sincerely,

Amy Yeldell

Amy Yeldell
Environmental Protection Specialist

Ec:
Travis Marshall, Senior EPS, Grand Junction DRMS
James Roberts, White River Field Office, BLM
Nathan Fisk, EH&S Manager, Natural Soda
Gerald Daub, Consultant, Daub and Associates, Inc.

CIRCES Order	Borehole Description	Sealing/Item Method	Diam (in)	CIRCIES Diam (in)[1]	Length (ft)[2]	BP Size (in)	BP Depth (ft)	Comments
1	89-1	Portland cement grout	4	4	1627	N/A	N/A	
2	89-2	Portland cement grout	4	4	1417	N/A	N/A	
3	89-3	Portland cement grout	4	4	347	N/A	N/A	
4	90-4	Portland cement grout	4	4	1627	N/A	N/A	
5	90-4	Portland cement grout	4	4	1417	N/A	N/A	
6	BG-4	Portland cement grout	4	4	1627	N/A	N/A	
7	DS-3	Portland cement grout	4	4	1876	N/A	N/A	
8	IRI-1	Portland cement grout	4	4	347	N/A	N/A	
9	IRI-4	Portland cement grout	4	4	1417	N/A	N/A	
10	IRI-5	Portland cement grout	4.1	6	347	N/A	N/A	
11	IRI-6	Portland cement grout	4	4	1627	N/A	N/A	
12	IRI-7	Portland cement grout	4	4	1876	N/A	N/A	
13	12H-I	Portland cement grout	7	8	2100	8	2100	
14	12H-R	Portland cement grout	7	8	2100	8	2010	2022 Plug back with CIBP at 2650
15	BG-6	Portland cement grout	4	4	1639	N/A	N/A	
16	WSW-2	Portland cement grout	7	8	1460	N/A	N/A	
17	DVPW-1(B)	Portland cement grout	6.4	8	1900	6	1900	
18	13H-RI-E (13H-R)	Portland cement grout	7	8	2100	8	2100	
19	14H-RI-E (14H-R)	Portland cement grout	7	8	2110	8	2110	
20	WSW-3	Portland cement grout	7	8	1420	N/A	N/A	
21	WSW-4	Portland cement grout	7	8	1431	N/A	N/A	
22	DS-8 (I) (Phase 1)	Portland cement grout	4	4	1882	N/A	N/A	
23	AG-1 (J) (Phase 1)	Portland cement grout	4	4	1487	N/A	N/A	
24	BG-7 (K)(Phase 1)	Portland cement grout	4	4	1593	N/A	N/A	
25	DS-9 (M) (Phase 1)	Portland cement grout	4	4	1917	N/A	N/A	
26	DS-7	Portland cement grout	4	4	1897	N/A	N/A	
27	O-GWM-A (O) (Phase 2)	Portland cement grout	7	8	1294	N/A	N/A	
28	DS-6	Portland cement grout	4	4	1882	N/A	N/A	
29	IRI-11	Portland cement grout	4	4	1550	N/A	N/A	
30	15H-I	Portland cement grout	6.4	8	1960	6	1960	
31	15H-RI (15H-R)	Portland cement grout	6.4	8	1960	6	1960	
32	16H-I	Portland cement grout	6.4	8	1960	6	1960	
33	17H-I	Portland cement grout	6.4	8	1960	6	1960	
34	17H-R (17-R-I)	Portland cement grout	9	10	2000	10	2000	
35	12H-IR	Portland cement grout	9	10	2100	10	2010	
36	13H-IR	Portland cement grout	9	10	2100	10	2010	
37	15H-SSMW	Portland cement grout	4	4	1760	N/A	N/A	
38	17H-SSMW	Portland cement grout	4	4	1720	N/A	N/A	
39	DS-10	Portland cement grout	4	4	1882	N/A	N/A	
40	14H-1V	Portland cement grout	8.9	10	2130	8	2130	
41	15H-1V	Portland cement grout	8.9	10	1898	N/A	N/A	
42	16H-1V	Portland cement grout	8.9	10	1976	N/A	N/A	
43	17H-1V	Portland cement grout	8.9	10	2100	N/A	N/A	
44	15H-IR-E	Portland cement grout	8.9	10	2135	8	2135	
45	16H-IR-E	Portland cement grout	8.9	10	2131	8	2131	
46	17H-IR-E	Portland cement grout	8.9	10	2138	8	2138	
47	BG-11	Portland cement grout	7.63	8	1677	N/A	N/A	Replacement monitoring well for BG-5 and BG-9
48	PA-1	Portland cement grout	6.75	8	490	N/A	N/A	
49	AG-2	Portland cement grout	6.75	8	1230	N/A	N/A	
50	BG-10	Portland cement grout	6.75	8	1420	N/A	N/A	
51	17H-E SSMW	Portland cement grout	4.5	6	1828	N/A	N/A	
52	18H-1V	Portland cement grout	8.9	10				Proposed TR-50
53	18H-IR-W	Portland cement grout	8.9	10				Proposed TR-50

[1]Actual well diameter may be different than avalible in CIRCES, must round up

[2] cement interval used