

State of New Mexico
Energy, Minerals and Natural Resources Department

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January 28, 2020

Mr. Skyler Wildenstein
Trustee for Southwest Resources Inc.
4011 Mesa Verde Rd. NE
Albuquerque, NM 87110

Pete Domenici Jr.
Domenici Law Firm
320 Gold Ave. SW Suite # 1000
Albuquerque, NM 87102

Comments on October 11, 2019 Submittals from Southwest Resources Inc., Section 12 Mine, McKinley Co., NM, Permit Tracking No. MK046RE

Greetings:

The New Mexico Mining and Minerals Division (“MMD”) and the New Mexico Environment Dept (“NMED”) has reviewed the October 11, 2019 submittals from Southwest Resources Inc. (“SRI”) regarding reclamation of the Section 12 Mine, McKinley Co., NM Permit Tracking No. MK046RE. The October 11, 2019 Submittals include the following documents:

- Section 12 Mine Reclamation Engineer’s Estimate Rev. A, dated October 04, 2019
- Section 12 Mine Reclamation Work Plan draft, dated October 04, 2019
- Task List-Section 12 Mine Reclamation Plan Rev. 0, dated 8/27/219
- Responses to MMD/NMED Comments on Section 12 Mine Conceptual Reclamation Plan

Section 12 Mine Reclamation Engineer’s Estimate Rev. A, dated October 04, 2019

1. No comments

Task List-Section 12 Mine Reclamation Plan Rev. 0

1. MMD acknowledges and appreciates the Rev. 0 Task List. Many of the items in this version are in process or have already been completed. Timelines and deadlines will be updated in the Final Reclamation Plan for the Section 12 Mine based on the Director’s Order on Consent.

Southwest Resources Inc.

Comments on October 11, 2019 Submittals from Southwest Resources Inc., Section 12 Mine, McKinley Co., NM, Permit Tracking No. MK046RE

January 28, 2020

Page 2 of 3

Section 12 Mine Reclamation Work Plan draft, dated October 04, 2019

MMD Comments

1. Please update the Reference Vegetation Survey Section to reflect the current timeframes.
2. Provide results from the Daniel B. Stephens Associates work described in the Geotechnical Site Investigations Section.
3. Provide the engineering design for earthwork mentioned in the Topographic Mapping Section as part of the Draft Reclamation Plan
4. Provide the Health and Safety Plan as part of the Draft Reclamation Plan.
5. Please update the Shaft Investigation Section to reflect the current information related to the Main Shaft and the information generated by the recent survey. Include how this will affect reclamation of the Shaft.
6. Many of the sections and items in this document are out of date and must be revised to comply with the signed Director's Order on Consent. MMD would like Southwest Resources Inc. to move forward with one over-arching document to be known simply as the Reclamation Plan, with components within that plan. Responses to comments 1-5 above can be reflected in the Reclamation Plan.

Responses to MMD Comments on Section 12 Mine Conceptual Reclamation Plan

MMD Comments

1. MMD Comment #1 Response: The two vent shafts located in the SW 1/4 of Section 12 shall be included in the Reclamation Plan per the Director's Order on Consent.
2. MMD Comment # 2 Response: No comment
3. MMD Comment # 3 Response: No comment
4. MMD Comment # 4 Response: MMD will need to evaluate the above-ground repository design proposed by Southwest Resources Inc. Approval will be dependent on the quality, technical characteristics of the design, and SRI's adherence to the Joint Guidance for Cleanup and Reclamation of Existing Uranium Mining Operations in New Mexico, March 2016.

NMED Comments

1. Please refer to the attached NMED Response to Comment, dated November 20, 2019 and respond to their comments.

Per the *Director's Order of Abatement on Consent Section 12 Mine, McKinley County, New Mexico*, signed January 14, 2020 ("D.O."), SRI shall align all future submittals with the timelines specified in Sections 30 – 36 of the D.O. The Final Draft Reclamation Plan will be due 30 days after SRI's receipt of these comments.

Southwest Resources Inc.

**Comments on October 11, 2019 Submittals from Southwest Resources Inc., Section 12 Mine,
McKinley Co., NM, Permit Tracking No. MK046RE**

January 28, 2020

Page 3 of 3

Should you have any questions, comments, or require additional information concerning this letter or any enclosures, please contact me at (505) 476-3413, or via email at:

clinton.chisler@state.nm.us.

Sincerely,



Clint Chisler – Permit Lead, MK046RE
Mining Act Reclamation Program (“MARP”)
New Mexico Mining and Minerals Division

Cc: Holland Shepherd, Program Manager, MARP/MMD
Dana David, Assistant General Counsel
Jeff Lewellin, Mining Act Team Leader, NMED
Kurt Vollbrecht, MECS Program Manager, NMED
Mine File (MK046RE)

Atch: NMED Response to Comment Letter, dated November 20, 2019



Michelle Lujan Grisham
Governor

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Lieutenant Governor

**NEW MEXICO
ENVIRONMENT DEPARTMENT**

Ground Water Quality Bureau

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James C. Kenney
Cabinet Secretary

Jennifer J. Pruett
Deputy Secretary

MEMORANDUM

Date: November 20, 2019

To: Holland Shepherd, Program Manager, Mining Act Reclamation Program

Through: Jeff Lewellin, Mining Act Team Leader, Mining Environmental Compliance Section

From: Alan Klatt, Surface Water Quality Bureau

Subject: **NMED Comments for Conceptual Reclamation Plan, Southwest Resources, Inc., Section 12 Mine, McKinley County, New Mexico, New Mexico Mining Act Permit No. MK046RE**

The New Mexico Environment Department (NMED) received correspondence from the Mining and Minerals Division (MMD) on October 24, 2019 requesting NMED review and provide comments on what is referenced as a "Conceptual Reclamation Plan" (Plan) associated with the above referenced MMD permitting action.

The purpose of the NMED review is to provide comment related to additional responses associated with the Plan provided by the representatives of Southwest Resources, Inc. (Applicant). This Plan is a continuation of documents submitted by the Applicant for closure of the mine which has not operated since 1982. MMD requested comments on the Plan within 30 days of receipt in accordance with Section 19.10.5.503 C. NMAC. NMED has the following comments.

Background

NMED has been providing comments related to this mine since calendar year 2014. The mine is located in Section 12, T14N, R10W, McKinley County, New Mexico. The mine consists of an underground uranium mine that operated in three time periods: 1959; 1962; and, 1974 to 1982. Mining operations are currently inactive. The underground mine did encounter ground water while advancing the shaft to a total depth of 700 feet below ground surface. It is the understanding of NMED that previous mining operations did not involve dewatering. As the MMD permitting process has progressed, the applicant has been required to characterize soil

contamination from previous mining operations, perform a supplemental hydrologic study, and provide additional information in the closeout plan. This latest revision of the Plan moves the mine toward final closure with no additional mining proposed or anticipated based on the information submitted to MMD.

Surface Water Quality Bureau

The Surface Water Quality Bureau comments are attached under separate letterhead.

Mining Environmental Compliance Section

On August 22, 2019, personnel within the Mining Environmental Compliance Section (MECS) of NMED provided three specific comments related to the Plan. The Applicant responded to MMD including comments and responses from MMD, MECS and the Surface Water Quality Bureau. MECS will respond to the three comments provided by the Applicant in the order in which they were provided in the Applicant's comments associated with the Plan.

- Personnel within MECS are familiar with the term Technically Enhanced Naturally Occurring Radioactive Material (TENORM). The representatives of the Applicant choose to utilize the term TENORM for the uraniferous waste rock. MECS will utilize either term in any future reviews or correspondence.
- On October 17, 2019, representatives and contractors of the Applicant advanced a downhole camera to the bottom of the mine shaft. The bottom of the mine shaft was determined to be 642 feet below ground surface. No ground water was observed infiltrating into the shaft or at the bottom of the shaft rendering any further discussion related to ground water in the shaft concluded.
- The comment related to recycling the hoist, headframe, and other metal components to be demolished during reclamation indicates that MECS did not specify a level of radiological contamination that would require disposal onsite compared to transportation to a recycling facility. It is incumbent upon the representatives of the Applicant to develop a plan for NMED/MECS review that is protective of the public health, safety, and the environment. In the recycling plan, please state the rationale for any selected radiation levels for metal that will be recycled or disposed onsite.

NMED Summary Comment

NMED finds that environmental standards will not be met until the above comments are addressed and the Section 12 Mine is permitted and reclaimed in a manner that is protective of the environment.

If you have any questions, please contact Jeff Lewellin at (505) 827-1049.

Holland Shepherd, Program Manager

November 20, 2019

Page 3 of 3

cc: Shelly Lemon, Bureau Chief, SWQB
Liz Bisbey-Kuehn, Bureau Chief, AQB
Mike Tompson, Interim Division Director, EMNRD-MMD
Clint Chisler, Lead Staff, EMNRD-MMD
Kurt Vollbrecht, Program Manager, MECS



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James C. Kenney
Cabinet Secretary

Jennifer J. Pruett
Deputy Secretary

MEMORANDUM

DATE: November 20, 2019

TO: Jeff Lewellin, Mining Act Team Leader, NMED-GWQB

FROM: Alan Klatt, Watershed Protection Section, NMED-SWQB
Jennifer Foote, Point Source Regulation Section, NMED-SWQB

SUBJECT: Request for Comments, Review of Comments Submitted by the Applicant, Southwest Resources, Inc., Section 12 Mine, McKinley County, MMD Permit No. MK046

The New Mexico Surface Water Quality Bureau (SWQB) has completed its review of the above-mentioned mining project. SWQB provided comments on August 22, 2019 to the Conceptual Reclamation Plan, and NMED was provided with the Applicant’s responses on October 24, 2019. Pursuant to 19.10.5.503 (C) New Mexico Administrative Code (NMAC), SWQB has prepared the following comments which includes the August 22nd comments and the October 24th responses:

1.) SWQB Comment (August 22, 2019)

SWQB provided comments dated October 5, 2018 regarding the “Supplement Documents (3) for the Closeout Plan” that described Ambrosia Lake as a closed depression. The Conceptual Reclamation Plan describes Ambrosia lake with the following statement: “overflow leaves from the southwest corner of Ambrosia Lake via Arroyo del Puerto”. As Ambrosia lake is not a closed depression and has a surface water connection to Arroyo del Puerto, which is a surface water of the state (20.6.4.97 NMAC), Ambrosia Lake would be considered a water of the state subject to 20.6.4.98 NMAC with designated uses that include livestock watering, wildlife habitat, marginal warmwater aquatic life and primary contact.

Applicant’s Response

Ambrosia Lake is a closed depression, as evident on USGS topographic maps and Google Earth imagery. The low point of the depression basin perimeter is at the southwest corner, through which water can flow in from, or out to, Arroyo del Puerto. This is the natural topography that existed before the Section 12 Mine and will be preserved during reclamation. It is apparent that arroyo flood flows that rise above the basin perimeter low point can spill into the Ambrosia Lake basin, but only lake water above the elevation of that low point can flow out of the basin back into the arroyo - there is no natural channel connecting Ambrosia Lake with Arroyo del Puerto, and none will be created during mine reclamation. The mine surface lies completely within the basin and above the lake floodplain, except for some waste rock along the east side of the lake.

That waste rock will be removed from the lake floodplain, and all uses designated for Ambrosia Lake will be preserved or restored; SRI's reclamation activities will not change those uses.

SWQB Comment (November 20, 2019)

Thank you for the clarification that Ambrosia lake is a closed depression that also has a connection to Arroyo del Puerto. A surface or subsurface connection pursuant to 20.6.4.7 S. (5) NMAC, where flows from Ambrosia Lake can be combined with flows from Arroyo del Puerto, establishes Ambrosia lake as a surface water of the state. No further comment.

2.) SWQB Comment (August 22, 2019)

The Conceptual Reclamation Plan has identified two potential areas for the repository, and states that the selected location will be outside of the floodplain. SWQB recommends that a sufficient setback distance be determined, between the floodplain and repository, to ensure consistency with 19.10.5.507 A. NMAC and 20.6.4.98 NMAC.

Applicant's Response

The location of the repository will be selected after the site investigations are completed and will be based primarily on providing the best possible isolation of the waste rock, including setback from the Ambrosia Lake floodplain.

SWQB Comment (November 20, 2019)

No further comment.

3.) SWQB Comment (August 22, 2019)

Furthermore, the Conceptual Reclamation Plan states that the plan will probably include the creation of a shallow swale from the area south of the existing hoist to the west-southwest to reduce the potential for inundation by flooding in Ambrosia Lake and that the diversion berm above Ambrosia Lake will remain. Following SWQB comments from October 5, 2018, the long-term function and restoration of Ambrosia Lake should be discussed in the Final Reclamation Plan.

Applicant's Response

... the reclamation plan will not include a swale or other change in the hydrologic condition or function of Ambrosia Lake that would create a link between runoff from the mine site and Arroyo del Puerto – whatever inflow or overflow that occurs naturally to or from the lake basin and Arroyo del Puerto will be unaffected by mine reclamation.

SWQB Comment (November 20, 2019)

The Applicant did not provide a response to this particular comment, specifically discussing the long-term function and restoration of Ambrosia Lake. The Applicant's response to this comment corresponds more appropriately with SWQB's Comment 4 (August 22, 2019) below, and SWQB's Comment 4 is not included in the Applicant's responses.

SWQB notes that the Applicant's response states that a shallow swale will not be created; however, SWQB recommends that the diversion berm that is above Ambrosia Lake be further discussed in the Reclamation Plan to ensure consistency with 19.10.5.507 A. NMAC. It is not clear that the diversion berm above Ambrosia lake will be self-sustaining or will support the long-term function and restoration of Ambrosia Lake.

4.) SWQB Comment (August 22, 2019)

This project may qualify for coverage under Sector G Metal Mining, of the National Pollutant Discharge Elimination System (NPDES) 2015 Multi-Sector General Permit (MSGP) for storm water discharges. Information on permit coverage requirements can be found at <https://www.epa.gov/npdes/stormwater-discharges-industrial-activities>.

Among other things, the MSGP requires that a Stormwater Pollution Prevention Plan (SWPPP) be prepared for the site and that appropriate Best Management Practices (BMPs) be designed, installed and maintained to prevent, to the extent practicable, pollutants in storm water runoff from entering waters of the U.S. This permit also requires that permanent stabilization measures, and permanent storm water management measures be implemented post construction to minimize, in the long term, pollutants in storm water runoff from entering these waters. Section 9.6.2.2 of the MSGP describes additional New Mexico specific requirements for inspections and stabilization. For additional information, contact:

EPA Region 6
1201 Elm St.
Dallas, Texas 75202
Ph: 800-887-6063 or 214-665-2760 if calling from outside Region 6

or Jennifer Foote, NMED-SWQB, at (505) 827-0596.

Applicant's Response

The nexus for an NPDES permit appears to be discharge of water into the "waters of the state" (or the U.S.). To avoid any action that would trigger additional permitting, including an NPDES MSGP or other regulatory process, the reclamation plan will not include a swale or other change in the hydrologic condition or function of Ambrosia Lake that would create a link between runoff from the mine site and Arroyo del Puerto – whatever inflow or overflow that occurs naturally to or from the lake basin and Arroyo del Puerto will be unaffected by mine reclamation. Because the mine was dry, and there has been, and will not be, pumping or discharge of water as part of reclamation, an NPDES permit should not be required.

SWQB Comment (November 20, 2019)

To clarify, NPDES coverage is a requirement that applies only to waters of the US which is a determination that can only be made by either the U.S. Army Corps of Engineers (USACE) or U.S. Environmental Protection Agency (EPA). By definition, surface waters of the state include all waters of the US. The definition for surface waters of the state is broader than the definition for waters of the US, so not all surface waters of the state are waters of the US.

A dry mine that does not pump and discharge is not reason by itself to rule out the need for NPDES coverage. NPDES coverage may be required for storm water discharges at the project site. Naturally occurring overflows between Ambrosia Lake and Arroyo del Puerto may indicate that Ambrosia Lake is a water of the US. SWQB recommends that the Applicant confirm with EPA Region 6 (contact information noted above) regarding whether or not NPDES coverage is required. Failure to receive and implement proper permit coverage would be a violation of the Clean Water Act. No further comment.

5.) SWQB Comment (August 22, 2019)

Activities within watercourses or wetlands may require coverage under a Clean Water Act Section 404 permit. If you have questions about this permitting, please contact:

Regulatory Division, US Army Corps of Engineers, Albuquerque District
4101 Jefferson Plaza NE
Albuquerque, New Mexico 87109-3435
Ph: 505-342-3678

Applicant's Response

There will be no reclamation activities within watercourses. The reference vegetation surveys to be conducted soon will evaluate whether the lake basin contains wetlands. If any are identified, they will be avoided or mitigated as part of reclamation.

SWQB Comment (November 20, 2019)

SWQB recommends that the applicant confirm with the USACE-Albuquerque District whether or not any jurisdictional wetlands or other waters of the US are present which may require permit coverage. To identify jurisdictional wetlands, the USACE also considers hydrophytic vegetation, hydric soils, and supporting hydrology. Failure to receive and implement proper permit coverage would be a violation of the Clean Water Act. No further comment.

For questions related to these comments, please contact Alan Klatt, SWQB, at 505-827-0388.