

State of New Mexico
Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham
Governor

Melanie A. Kenderdine
Cabinet Secretary

Ben Shelton
Acting Deputy Secretary

Albert C. S. Chang, Director
Mining and Minerals Division



October 10, 2024

Carol Ness
American Magnesium
P.O. Box 1013
Elephant Butte, NM 87935

RE: Agency Review Comments and Request for Additional Information, Little Mountain Project, Modification 24-1, Luna County, New Mexico, Permit Tracking No. LU047EM

Dear Ms. Ness,

The New Mexico Mining and Minerals Division ("MMD") has reviewed the Permit Application Package ("PAP") submitted by American Magnesium ("AmMg") for a permit modification to the Part 3 Minimal Impact exploration project American Magnesium - Little Mountain (Permit No. LU047EM) located in Luna County, New Mexico. In accordance with 19.10.3.302.G NMAC, MMD requested comments on the PAP from cooperating state and federal agencies.

Enclosed with this letter are the reviewing agency comment letters submitted by the following state agencies: the New Mexico Environment Department ("NMED"), the New Mexico Department of Game and Fish ("NMDG&F"), the New Mexico Forestry Division ("Forestry"), the New Mexico Department of Cultural Affairs - Historic Preservation Division ("NMDCA/HPD"), and the Bureau of Land Management ("BLM"). Additionally, please find general comments from MMD based on review of this application.

General Comments:

MMD has reviewed the PAP and has found it to be *technically incomplete* pending receipt of acceptable supplemental information identified in this letter. **Please respond no later than 30 days from receipt of this letter to the information requested.** MMD has conducted a review of the PAP and has the following comments to be addressed in writing:

- During the August 15, 2024, site visit, heavy gully and rill erosion features were noted on the constructed access roads leading to drill pads BV2 and BV3-5, as well as a gully feature forming off the side of the BV3-5 access road across the hillside to the west. MMD will require the construction of berms alongside the access road to prevent further erosional features from forming off the access road, as well as the design of adequate stormwater controls during reclamation at the conclusion of the project. Please submit a design for berms to be constructed during drilling activities as well as a plan for stormwater controls to be implemented alongside reclamation activities.
- Due to the noted gully and rill erosion features, MMD anticipates that AmMg will need to conduct repair activities on the access roads to allow for access by drilling equipment and personnel. Any necessary road repairs should be conducted within the current existing road

Page 2 of 2

prism and should not expand the width of the roads or generate additional soil or gravel that would need to be staged on the edges of the road or elsewhere onsite. Please note, this does not include material that would be used for the construction of stormwater control berms.

BLM Comments

Please review the comment letter received from BLM and respond to any concerns.

NMED Mining Environmental Compliance Section, Ground Water Quality Bureau Comments (“MECS”)

Please review the comment letter received from NMED MECS Ground Water Quality and respond to any concerns.

NMED Surface Water Quality Bureau Comments:

Please review the comment letter received from NMED Surface Water Quality Bureau and respond to any concerns.

NMED Air Quality Bureau Comments:

Please review the comment letter received from NMED Air Quality Bureau and respond to any concerns.

NMDG&F Comments:

Please review the comment letter received from NMDG&F and respond to any concerns.

Forestry Comments:

Please review the comment letter received from NMOSE and respond to any concerns.

NMDCA/HPD Comments:

Please review the comment letter received from NMDCA/HPD and respond to any concerns.

If you have any questions, please contact me at (505) 470-5354, or via email at kevin.barnes@emnrd.nm.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Kevin Barnes', with a long horizontal flourish extending to the right.

Kevin Barnes, Permit Lead
Mining Act Reclamation Program (“MARF”)

Enclosures: Agency Letters

Cc w/o enclosures: David “DJ” Ennis, Program Manager, MARF/MMD
Corey Durr, BLM
File (LU047EM)



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
Las Cruces District Office
1800 Marquess Street
Las Cruces, New Mexico 88005
<https://www.blm.gov/new-mexico>

In Reply Refer to:
NMNM 136678
3809 (NM030)

State of New Mexico
Energy, Minerals and Natural Resources Department
Mining and Minerals Division
1220 South St. Francis Drive
Santa Fe, NM 87505

**Comments for MMD Permit No. LU047EM - American Magnesium Little Mountain -
Modification 24-1 application**

BLM and MMD had a site inspection on August 15, 2024 to inspect alleged unauthorized surface disturbance. The location of surface disturbance associated with the American Magnesium Little Mountain Drilling (NMNM 136678) project is within the boundaries authorized by BLM for this project under. All disturbance remains within resource survey boundaries (cultural, biological, paleontological). However, the level of disturbance exceeds that which was authorized by BLM.

- The south access road on BLM land was originally authorized as temporary overland travel. This access route has been bladed to make a road surface.
- Surface clearing of other project features has exceeded what was authorized by BLM.

BLM has reviewed the MMD permit LU047EM - American Magnesium Little Mountain - Modification 24-1 application. BLM finds Permit No. LU047EM adequate to address the additional surface disturbance. BLM agrees with MMD's evaluation of the new disturbance and increase of the joint BLM and MMD financial assurance, totaling \$71,490.00

If you have any questions, please contact Corey Durr at (575) 525-4345 or at the above address.

Sincerely,

Anthony Hom,
Branch Chief, Lands and Minerals
Acting for ADM, Multi Resources



Electronic Transmission

MEMORANDUM

Date: August 23, 2024

To: David Ennis, Program Manager, Mining Act Reclamation Program

Through: Amber Rheubottom, Acting Mining Act Coordinator, Mining Environmental Compliance Section (MECS)

From: Davena Crosley, Surface Water Quality Bureau (SWQB)
Sufi Mustafa, Air Quality Bureau (aqb)
Sean Madden (MECS)

Subject: **New Mexico Environment Department (NMED) Comments, American Magnesium, Exploration Permit Application, Luna County, New Mexico, Mining Act Permit No. LU047EM**

The New Mexico Environment Department (NMED) received correspondence from the Mining and Minerals Division (MMD) on July 19, 2024, requesting that NMED review and provide comments on the above-referenced MMD permitting action. Pursuant to the Mining Act, there is a minimal impact exploration project. MMD requested comments on the application within 20 days of receipt of the request for comments.

Background

American Magnesium (Applicant) proposes to disturb up to 1.15 acres of the Bureau of Land Management land. The applicant proposes the change to accommodate additional access roads for drilling. This site is located approximately 13 miles southeast of Deming, New Mexico.

Air Quality Bureau

The AQB comments are attached.

Surface Water Quality Bureau

The SWQB comments are attached.

SCIENCE | INNOVATION | COLLABORATION | COMPLIANCE

Ground Water Quality Bureau | 1190 Saint Francis Drive, PO Box 5469, Santa Fe, New Mexico 87502-5469

Telephone (505) 827-2900 | www.env.nm.gov/gwqb/

Mr. David Ennis
American Magnesium Exploration Project
August 23, 2024
Page 2 of 2

Mining Environmental Compliance Section

The MECS has no comments.

NMED Summary Comment

NMED has determined the proposed exploration activities will be protective of the environment if done in accordance with the approved permits and pollution controls as presented.

If you have any questions, please contact Amber Rheubottom at (505) 660-2379.

cc: Joseph Fox, Program Manager, NMED-MECS
Shelly Lemon, Bureau Chief, NMED-SWQB
Cindy Hollenberg , Acting Bureau Chief, NMED-AQB
Kevin Barnes, EMNRD-MARP



MEMORANDUM

August 20, 2024

To: Amber Rheubottom, Mining Act Team Coordinator
Mining Environmental Compliance Section
Groundwater Quality Bureau (GWQB)

From: Davena Crosley
Watershed Protection Section
Surface Water Quality Bureau

Subject: **Request for Review and Comment, Minimal Impact Exploration Permit Modification, American Magnesium Little Mountain, Luna County, New Mexico, Mining Act Permit No. LU047EM, Modification 24-1**

On August 1, 2023, NMED received a request for comments regarding a new exploration permit application submitted by American Magnesium ("Applicant"). The mine is in Luna County, approximately 13 miles southeast of Deming on Bureau of Land Management lands with an access road cutting through private land.

Summary of Proposed Action

The Applicant proposes to modify the permit to increase the total disturbance from 0.87 acres to 1.15 acres to allow a change in the routing and length of access roads to the five permitted drill pads. Existing roads will be utilized where feasible, but new access roads will be needed to access the site. The additional disturbance is due to changes in drilling equipment and the addition of a switchback due to the steepness of the Little Mountain topography. Total disturbance is now estimated at 1.15 acres. Access roads will intersect at least two ephemeral drainages.

Relevant State and Federal Water Quality Regulations

This project will disturb one or more acres and storm water discharges may be covered under both/either the U.S. Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) or under the Multi-Sector General Permit (MSGP) under Sector G Metal Mining. The Applicant must contact the EPA to determine whether this project is subject to NPDES permitting. For the MSGP, contact Nasim Jahan (jahan.nasim@epa.gov), (214) 665-7522. For the CGP, contact Suzanna Perea (perea.suzanna@epa.gov), (214) 665-7217. Additional information about the NPDES program for EPA Region 6 is available online: <https://www.epa.gov/npdes-permits/npdes-stormwater-program-region-6>.

Mine activities may affect Surface Waters of the State and are subject to New Mexico surface water quality standards at 20.6.4.13 NMAC and 20.6.4.98 NMAC and have designated uses for livestock watering, wildlife habitat, marginal warmwater aquatic life, and primary contact. Surface waters of the state shall be free of any water contaminant in such quantity and of such duration as may with reasonable probability injure human health, animal or plant life or property, or unreasonably interfere with the public welfare or the use of property (20.6.4.13 NMAC). Any discharge of a water contaminant, in such quantity as may with reasonable probability

injure or be detrimental to human health, animal or plant life, or property, or unreasonably interfere with the public welfare or the use of property, must be reported to the Environment Department within twenty-four hours (20.6.2.1203 NMAC). Mine exploration activities that have the potential to contribute pollutants to waters of the state must be implemented with appropriate and reasonable Best Management Practices (BMPs) in order to prevent impacts to water quality.

Appropriate and reasonable BMPs include, but are not limited to, the following:

- Spill clean-up materials such as absorbent pads must be available on-site at all times during road construction, site preparations, and drilling activities to address potential spills. Report all spills immediately to the NMED as required by the New Mexico Water Quality Control Commission Regulations (20.6.2.1203 NMAC). For non-emergencies during normal business hours, call 505-428-2500. For non-emergencies after hours, call 866-428-6535. For emergencies only, call 505-827-9329 twenty-four hours a day (New Mexico Department of Public Safety).
- Fuel, oil, hydraulic fluid, lubricants, and other petrochemicals must have a secondary containment system to prevent spills. Store these materials outside of the flood-prone zone.
- Pressure wash and/or steam clean all mobile equipment used in the project area before the start of the project and inspect daily for leaks. A written log of inspections and maintenance should be completed.
- The use of overland travel and site selection, design, and construction of drill pads, reserve pits, and roads should comply with the guidelines described in the Bureau of Land Management “Gold Book”¹. Suspend construction, maintenance activities, or off-road travel during periods when the soil is too wet to adequately support heavy equipment without causing surface disturbance. The operator should commit to repair any surface disturbance they caused.
- Structures and culverts at stream crossings must allow for the passage of sediment, bedload, woody debris, aquatic life, and prevent erosion problems such as headcuts, incision, bank erosion, and the diversion of the stream from its natural channel during flood events. Structures and culverts at stream crossings may require a Clean Water Act Section 404 Permit from the U.S. Army Corps of Engineers (Corps). The Applicant must contact the Corps to determine whether this project is subject to Clean Water Act Section 404. The Corps can be contacted at *SPA-RD-NM@usace.army.mil* or (505) 342-3419.
- Implement Best Management Practices to prevent direct impacts to watercourses, including springs, wetlands, and arroyos. For temporary surface disturbances during exploration and reclamation activities, the operator should implement erosion control measures that are designed, constructed and maintained using professionally recognized standards (e.g., Natural Resource Conservation Service standards, the Bureau of Land Management “Gold Book”, or the National Best Management Practices for Water Quality on National Forest System Lands).
- The applicant should ensure that stormwater entering the project area (“run-on”) is diverted from soil storage piles and should place piles uphill of excavations when possible.

¹ <https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/operations-and-production/the-gold-book>

- Roads, pads, and other facility structures should be set back a minimum of 100 feet from any watercourses, including springs, wetlands, and arroyos.

If you have any questions, please contact Davena Crosley at (575) 636-3425 or davena.crosley@env.nm.gov.



MICHELLE LUJAN GRISHAM
GOVERNOR

JAMES C. KENNEY
CABINET SECRETARY

MEMORANDUM

DATE: August 22, 2024

TO: Amber Rheubottom, Acting Mining Act Team Leader, Mining Environmental Compliance Section, NMED

FROM: Sufi Mustafa, Staff Manager, Air Dispersion Modeling and Emission Inventory Section, Air Quality Bureau.

Request for Review and Comment, American Magnesium Little Mountain, Modification for a Minimal Impact Exploration Permit Application, Luna County, New Mexico Mining Act Permit No. LU047EM

The New Mexico Air Quality Bureau (aqb) has completed its review of the above-mentioned mining project. Pursuant to the New Mexico Mining Act Rules, the aqb provides the following comments.

Details

American Magnesium, LLC has requested a modification to their existing minimum impact exploration permit. The modification was necessary because of changes in access roads, size of drill pads and size of staging area. Total land disturbance is estimated now at 1.15 acres instead of 0.71 acres.

Air Quality Requirements

The New Mexico Mining Act of 1993 states that "Nothing in the New Mexico Mining Act shall supersede current or future requirements and standards of any other applicable federal or state law." Thus, the applicant is expected to comply with all requirements of federal and state laws pertaining to air quality.

20.2.15 NMAC, *Pumice, Mica and Perlite Processing*. Including 20.2.15.110 NMAC, *Other*

Particulate Control: "The owner or operator of pumice, mica or perlite process equipment shall

Request for Review and Comment, American Magnesium Little Mountain, Modification for a Minimal Impact Exploration Permit Application, Luna County, New Mexico Mining Act Permit No. LU047EM

Page 2

not permit, cause, suffer or allow any material to be handled, transported, stored or disposed of or a building or road to be used, constructed, altered or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne."

Paragraph (1) of Subsection A of 20.2.72.200 NMAC, *Application for Construction, Modification, NSPS, and NESHAP - Permits and Revisions*, states that air quality permits must be obtained by:

"Any person constructing a stationary source which has a potential emission rate greater than 10 pounds per hour or 25 tons per year of any regulated air contaminant for which there is a National or New Mexico Ambient Air Quality Standard. If the specified threshold in this subsection is exceeded for any one regulated air contaminant, all regulated air contaminants with National or New Mexico Ambient Air Quality Standards emitted are subject to permit review."

Further, Paragraph (3) of this subsection states that air quality permits must be obtained by:

"Any person constructing or modifying any source or installing any equipment which is subject to 20.2.77 NMAC, *New Source Performance Standards*, 20.2.78 NMAC, *Emission Standards for Hazardous Air Pollutants*, or any other New Mexico Air Quality Control Regulation which contains emission limitations for any regulated air contaminant."

Also, Paragraph (1) of Subsection A of 20.2.73.200 NMAC, *Notice of Intent*, states that:

"Any owner or operator intending to construct a new stationary source which has a potential emission rate greater than 10 tons per year of any regulated air contaminant or 1 ton per year of lead shall file a notice of intent with the department."

The above is not intended to be an exhaustive list of all requirements that could apply. The applicant should be aware that this evaluation does not supersede the requirements of any current federal or state air quality requirement.

Fugitive Dust

Air emissions from this project should be evaluated to determine if an air quality permit is required pursuant to 20.2.72.200.A NMAC (e.g. 10 lb/hour or 25 TPY). Fugitive dust is a

Request for Review and Comment, American Magnesium Little Mountain, Modification for a Minimal Impact Exploration Permit Application, Luna County, New Mexico Mining Act Permit No. LU047EM

Page 3

common problem at mining sites and this project will temporarily impact air quality as a result of these emissions. However, with the appropriate dust control measures in place, the increased levels should be minimal. Disturbed surface areas, within and adjacent to the project area, should be reclaimed to avoid long-term problems with erosion and fugitive dust. EPA's *Compilation of Air Pollutant Emission Factors, AP-42, "Miscellaneous Sources"* lists a variety of control strategies that can be included in a comprehensive facility dust control plan. A few possible control strategies are listed below:

Paved roads: covering of loads in trucks to eliminate truck spillage, paving of access areas to sites, vacuum sweeping, water flushing, and broom sweeping and flushing.

Material handling: wind speed reduction and wet suppression, including watering and application of surfactants (wet suppression should not confound track out problems).

Bulldozing: wet suppression of materials to "optimum moisture" for compaction.

Scraping: wet suppression of scraper travel routes.

Storage piles: enclosure or covering of piles, application of surfactants.

Miscellaneous fugitive dust sources: watering, application of surfactants or reduction of surface wind speed with windbreaks or source enclosures.

Recommendation

The Air Quality Bureau does not have any objection to this project.

This written evaluation does not supersede the applicability of any forthcoming state or federal regulations.

If you have any questions, please contact me at 505 629 6186.



DIRECTOR AND SECRETARY
TO THE COMMISSION
Michael B. Sloane

STATE OF NEW MEXICO
DEPARTMENT OF GAME & FISH

One Wildlife Way, Santa Fe, NM 87507
Tel: (505) 476-8000 | Fax: (505) 476-8180
For information call: (888) 248-6866

wildlife.dgf.nm.gov

STATE GAME COMMISSION

RICHARD STUMP
Chair
Santa Fe

SHARON SALAZAR HICKEY
Vice Chair
Santa Fe

FERNANDO CLEMENTE, JR.
Sunland Park

GREGG FULFER
Jal

EDWARD T. GARCIA
Los Ranchos

TIRZIO J. LOPEZ
Cebolla

DR. SABRINA PACK
Silver City

23 August 2024

Kevin Barnes, Permit Lead
Mining Act Reclamation Program
Mining and Minerals Division (MMD)
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: Modification 24-1 Minimal Impact Exploration Permit Application, American Magnesium Little Mountain Project, Permit No. LU047EM; NMDGF Project No. NMERT-3694.

Dear Mr. Barnes,

The New Mexico Department of Game and Fish (Department) has reviewed the above referenced minimal impact exploration project submitted by American Magnesium, LLC (AML). AML is proposing a permit modification that includes (1) changes in the routing and length of the access and overland roads, (2) the size of the staging area, and (3) the size and location of five drill pad sites. The exploration site is located approximately 13 miles southeast of Deming, New Mexico in Luna County. The total acreage that would be disturbed by the project is approximately 1.15 acres. Staff from the Department, MMD, New Mexico Environment Department, U.S. Bureau of Land Management, and AML conducted a site inspection on 15 August 2024.

The switchback road that accesses drill pads BV3 and BV4, created in violation of the original Minimal Impact Exploration Permit issued by MMD, is already showing significant signs of erosion and downcutting. The lower portion of the road below the switchback contains the most highly-eroded areas. On the less steep section of road above the switchback, water has channeled off the roadcut and has begun eroding previously undisturbed habitat. The Department recommends that AML repair all the eroded areas prior to reinstating any drilling operations. It also recommends that the roadcut be redesigned to include water bars and berms to adequately control water flows and prevent excessive erosion from reoccurring.

Thank you for the opportunity to review and comment on the exploration permit modification. If you have any questions, please contact Ron Kellermueller, Mining and Energy Habitat Specialist, at (505) 270-6612 or ronald.kellermueller@dgf.nm.gov.

Sincerely,

Virginia Seamster, Ph.D.
Assistant Chief for Technical Guidance, Ecological and Environmental Planning Section
cc: USFWS NMES Field Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham
Governor

Melanie A. Kenderdine
Cabinet Secretary Designate

Benjamin Shelton
Acting Deputy Cabinet Secretary

Laura McCarthy, State Forester
Forestry Division



August 13, 2024

Kevin Barnes, Permit Lead
Mining and Minerals Division
Energy, Minerals and Natural Resources Department (EMNRD)
1220 S. St. Francis Drive
Santa Fe, NM 87505

**RE: Request for Agency Comments, Minimal Impact Exploration Permit Modification
Application, American Magnesium Little Mountain Project, Luna County, New Mexico,
Permit Tracking No. LU047EM**

Thank you for the opportunity to comment on the above referenced project. There may be potential impacts to the State Endangered plant species *Peniocereus greggii* var. *greggii* (Night-blooming cereus) as a result of this project, as described in the application.

If new disturbance occurs outside of biological survey areas done in August 2020, there is the potential for impacts to *Peniocereus greggii* var. *greggii* (Night-blooming cereus), a State Endangered plant species listed in Section 75-6-1 NMSA 1978. Although no occurrences of *P. greggii* var. *greggii* are currently known from within project boundaries, the site occurs within 5 miles of known populations and contains suitable habitat for the species: Sandy to silty gravelly soils in gently broken to level terrain in desert grassland or Chihuahuan desert scrub. This species is typically found growing within or adjacent to creosote (*Larrea divaricata*) or honey mesquite (*Prosopis glandulosa*) and other associated Chihuahuan desert shrubs so can easily be overlooked.

As such, a plant survey conducted by an experienced biologist, botanist or other appropriate consultant is recommended to determine if the species listed above is present. If night-blooming cereus is found within the project boundaries and project activities are determined to potentially impact individuals, an incidental take permit from the New Mexico Forestry Division may be required. More information on permits and State Endangered plant species can be found at the following website: <https://www.emnrd.nm.gov/sfd/rare-plants/request-a-collection-permit/>.

Please let me know if I can be of further help.

Sincerely,

Erika Rowe



Endangered Plant Program Coordinator
EMNRD-Forestry Division
1220 S. St. Francis Dr.
Santa Fe, NM 87505
erika.rowe@emnrd.nm.gov
(505)699-6371 (Phone)
<http://www.emnrd.state.nm.us/SFD/>



Michelle Lujan Grisham,
Governor

STATE OF NEW MEXICO
DEPARTMENT OF CULTURAL AFFAIRS
HISTORIC PRESERVATION DIVISION

BATAAN MEMORIAL BUILDING
407 GALISTEO STREET, SUITE 236
SANTA FE, NEW MEXICO 87501
PHONE (505) 827-6320 NM.SHPO@dca.nm.gov

August 16, 2024

Kevin Barnes
Permit Lead
Mining Act Reclamation Program (MARF)
kevin.barnes@emnrd.nm.gov

Via Email Only

RE: HPD Log # 123029 Minimal Impact Exploration Permit Modification Application,
American Magnesium Little Mountain, Luna County, New Mexico, Permit No. LU047EM,
Modification 24-1

Dear Mr. Barnes:

Thank you for submitting the Minimal Impact Exploration Permit Modification Application, American Magnesium Little Mountain, Luna County, New Mexico, Permit No. LU047EM, Modification 24-1 to the New Mexico State Historic Preservation Office (SHPO) for review and comment. We received the information on August 1, 2024, via email. The project was reviewed under 19.10.3.302 NMAC, Minimal Impact Exploration Operations.

Pursuant to 19.10.3.302 NMAC, Minimal Impact Exploration Operations, the Director shall determine whether a permit would have an adverse impact on cultural resources listed on either the National Register of Historic Places (NRHP) or the State Register of Cultural Properties (SRCP) or be located in a known cemetery or other burial ground.

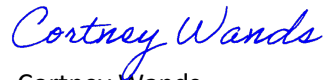
According to our files, the project area has been previously surveyed. A single site, determined Not Eligible to the NRHP, is in the proposed permit area. There are no known cemeteries, burial grounds, or cultural resources listed on, or eligible to, either the NRHP or the SRCP within the proposed project permit area. As such, the SHPO has no comment.

However, 19.10.3.302 NMAC also states, that "if the permit area includes state or federally owned lands, no permit will be issued unless the appropriate land management agency has approved or acknowledged the proposed operation..."

The permit application indicates the project permit area is situated on lands owned by the Bureau of Land Management (BLM). The BLM should be contacted regarding this project.

If you have any questions or concerns, please contact me cortney.wands@dca.nm.gov.

Sincerely,

A handwritten signature in blue ink that reads "Cortney Wands". The signature is written in a cursive, flowing style.

Cortney Wands

Archaeological Reviewer