

**AQUIFER PROTECTION PERMIT NO. P-101344
PLACE ID 22841, LTF 34457**

1.0 Authorization

In compliance with the provisions of Arizona Revised Statutes (A.R.S.) Title 49, Chapter 2, Articles 1, 2 and 3, Arizona Administrative Code (A.A.C.) Title 18, Chapter 9, Articles 1 and 2, A. A. C. Title 18, Chapter 11, Article 4 and amendments thereto, and the conditions set forth in this permit, the Arizona Department of Environmental Quality (ADEQ) hereby authorizes The Franciscan Friars of California, Inc. to operate Former Gibson Mine 500-foot In-situ Leach Adit located in Gila County Arizona, over groundwater of the Lower San Pedro basin, in Section 21, Township 1 South, Range 14 East of the Gila and Salt River Base Line and Meridian.

This permit becomes effective on the date of the Water Quality Division Director's signature and shall be valid for the life of the facility (operational, closure, and post-closure periods), unless suspended or revoked pursuant to A.A.C. R18-9-A213. The permittee shall construct, operate and maintain the permitted facilities:

1. Following all the conditions of this permit including the design and operational information documented or referenced below, and
2. Such that Aquifer Water Quality Standards (AWQS) are not violated at the applicable point(s) of compliance (POC) set forth below, or if an AWQS for a pollutant has been exceeded in an aquifer at the time of permit issuance, that no additional degradation of the aquifer relative to that pollutant, and as determined at the applicable POC, occurs as a result of the discharge from the facility.

1.1 Permittee Information

Facility Name: Former Gibson Mine 500-foot In-situ Leach Adit
Facility Address: Seven miles west of Miami on U.S. Highway 60, south on Forest Road 347 across from Castle Dome Road for approximately 3.5 miles

Annual Registration Fee Flow Rate: Closed Facility (no flow for the purpose of annual fees)

Permittee: The Franciscan Friars of California, Inc.
Permittee Address: 1500-34th Avenue
Oakland, California 94601

Facility Contact: Father Tom Nichols
Emergency Phone No.: (510) 536-3722

Latitude/Longitude: 33°19' 39" N/ 110°56' 47" W

Legal Description: T1S, R14E, 21, NW1/4, NE1/4

1.2 Authorizing Signature

Trevor Baggione, Director, Water Quality Division
Arizona Department of Environmental Quality
Signed this ____ day of _____, 2019

2.0 SPECIFIC CONDITIONS [A.R.S. §§ 49-203(4), 49-241(A)]

2.1 Facility / Site Description [A.R.S. § 49-243(K)(8)]

The Gibson Mine underground workings include a series of vertical shafts advanced into the Pasquale and Summit veins and horizontal tunnels (adits) extending from the vertical shafts into the veins. According to available historical information, the 500-level adits, located on the Summit vein, were used to collect pregnant leach solution (PLS) from an in-situ leaching operation through leach pads located above the adits. In-situ leaching operations were conducted from 1969 through 1990. Based on historical reports and site observations, only one of the two in-situ leaching adits contributed surface flow to a wash located at the base of the adits.

The purpose of this permit is to describe post-closure monitoring requirements.

The site includes the following permitted discharging facilities:

Facility	Latitude	Longitude
500-foot Summit In-situ Adit	33°19' 39" N	110°56' 47" W

2.1.1 Annual Registration Fee [A.R.S. § 49-242 and A.A.C. R18-14-104]

There is no annual fee for this closed facility.

2.1.2 Financial Capability [A.R.S. § 49-243(N) and A.A.C. R18-9-A203]

Closure has been completed for this facility. Post-closure costs are minimal based on annual inspections of the facilities. Therefore, no financial assurance mechanism is required under this permit as approved under A.A.C. R18-9-A203.C.9.

2.2 Best Available Demonstrated Control Technology [A.R.S. § 49-243(B) and A.A.C. R18-9-A202(A)(5)]

Not Applicable – Closed Facility

2.2.1 Engineering Design

The following closure activities were conducted for the in-situ leach adit:

1. Between February and March 1994, the injection holes were plugged, and the leach basins were graded and topped with a low permeability soil cover to minimize future infiltration.
2. Between September and November of 2008, the in-situ adit was partially filled with a mixture of concrete and limestone to approximately 12 feet within the adits (other adits that are not part of this permit were also filled).

2.2.2 Site-specific Characteristics

Not applicable.

2.2.3 Pre-operational Requirements

Not applicable

2.2.4 Operational Requirements

Not applicable

2.3 Discharge Limitations [A.R.S. §§ 49-201(14), 49-243 and A.A.C. R18-9-A205(B)]

Not applicable – closed facility

2.4 Point(s) of Compliance [A.R.S. § 49-244]

The POC is established by the following monitoring location(s):

POC #	POC Locations	Latitude	Longitude
POC # 2	Conceptual location in the dry wash alluvium immediately downstream from the 500 foot in-situ adit	33°19' 39" N	110°56' 47" W

POC # 2 is a conceptual location, a well is not required to be installed. No groundwater monitoring is required under this permit. The Director may amend this permit to designate additional POC wells, if information on groundwater gradients or groundwater usage indicates the need.

2.5 Monitoring Requirements [A.R.S. § 49-243(B) and (K)(1), A.A.C. R18-9-A206(A)]

Unless otherwise specified in this permit, all monitoring required in this permit shall continue for the duration of the permit, regardless of the status of the facility. Monitoring shall commence the first full monitoring period following permit issuance. All sampling, preservation and holding times shall be in accordance with currently accepted standards of professional practice. Trip blanks, equipment blanks and duplicate samples shall also be obtained, and Chain-of-Custody procedures shall be followed, in accordance with currently accepted standards of professional practice. Copies of laboratory analyses and Chain-of-Custody forms shall be maintained at the permitted facility. Upon request, these documents shall be made immediately available for review by ADEQ personnel.

2.5.1 Discharge Monitoring

No discharge monitoring is required under this permit.

2.5.2 Facility / Operational Monitoring

See Section 2.10.1

2.5.3 Groundwater Monitoring and Sampling Protocols

Routine groundwater monitoring is not required by this permit.

2.5.4 Surface Water Monitoring and Sampling Protocols

Surface water monitoring is not required by this permit.

2.6 Contingency Plan Requirements

[A.R.S. § 49-243(K)(3), (K)(7) and A.A.C. R18-9-A204 and R18-9-A205]

2.6.1 General Contingency Plan Requirements

Not applicable – Facilities are closed.

2.6.2 Exceeding of Alert Levels and Performance Levels

Not applicable – Facilities are closed.

2.6.3 Discharge Limitations Violations

Not applicable – Facilities are closed.

2.6.5 Emergency Response and Contingency Requirements for Unauthorized Discharges pursuant to A.R.S. §49-201(12) and pursuant to A.R.S. § 49-241 That Are Not Addressed Elsewhere in Section 2.6

2.6.5.1 Duty to Respond

The permittee shall act immediately to correct any condition resulting from a discharge pursuant to A.R.S. § 49-201(12) if that condition could pose an imminent and substantial endangerment to public health or the environment.

2.6.5.2 Discharge of Hazardous Substances or Toxic Pollutants

In the event of any unauthorized discharge pursuant to A.R.S. § 49-201(12) of suspected hazardous substances (A.R.S. § 49-201(19)) or toxic pollutants (A.R.S. § 49-243(I)) on the facility site, the permittee shall promptly isolate the area and attempt to identify the discharged material. The permittee shall record information, including name, nature of exposure and follow-up medical treatment, if necessary, on persons who may have been exposed during the incident. The permittee shall notify the Groundwater Protection Value Stream within 24 hours upon discovering the discharge of hazardous material which could pose an endangerment to public health or the environment.

2.6.5.3 Discharge of Non-hazardous Materials

In the event of any unauthorized discharge pursuant to A.R.S. § 49-201(12) of non-hazardous materials from the facility, the permittee shall promptly attempt to cease the discharge and isolate the discharged material. Discharged material shall be removed and the site cleaned up as soon as possible. The permittee shall notify the Groundwater Protection Value Stream within 24 hours upon discovering the discharge of non-hazardous material which could pose an endangerment to public health or the environment.

2.6.5.4 Reporting Requirements

The permittee shall submit a written report for any unauthorized discharges reported under Sections 2.6.5.2 and 2.6.5.3 to Groundwater Protection Value Stream within 30 days of the discharge or as required by subsequent ADEQ action. The report shall summarize the event, including any human exposure, and facility response activities. If a notice is issued by ADEQ subsequent to the discharge notification, any additional information requested in the notice shall also be submitted within the time frame specified in that notice. Upon review of the submitted report, ADEQ may require additional monitoring or corrective actions.

2.7 Reporting and Recordkeeping Requirements

[A.R.S. § 49-243(K)(2) and A.A.C. R18-9-A206(B) and R18-9-A207]

2.7.1 Self-monitoring Report Form

Groundwater monitoring is not required under this permit; therefore, self-monitoring Report Forms are not required to be submitted.

2.7.2 Operational, Other or Miscellaneous Reporting

The permittee shall submit an annual letter report documenting the inspection and maintenance requirements described in Section 2.10.1.

2.7.3 Reporting Location

All documents required by this permit to be submitted to the Groundwater Protection Value Stream shall be directed to:

Arizona Department of Environmental Quality
Groundwater Protection Value Stream
Mail Code: 5415B-3

1110 W. Washington Street
Phoenix, AZ 85007
Phone (602) 771-4999

2.7.4 Reporting Deadline

No SMRF reporting deadlines for this permit.

2.7.5 Changes to Facility Information in Section 1.0

The Groundwater Protection Value Stream shall be notified within 15 days of any change of facility information including Facility Name, Permittee Name, Mailing or Street Address, Facility Contact Person or Emergency Telephone Number.

2.8 Temporary Cessation [A.R.S. § 49-243(K)(8) and A.A.C. R18-9-A209(A)]

The facility has been closed.

2.9 Closure [A.R.S. §§ 49-243(K)(6), 49-252 and A.A.C. R18-9-A209(B)]

The facility has been closed.

2.10 Post-closure [A.R.S. §§ 49-243(K)(6), 49-252 and A.A.C. R18-9-A209(C)]

2.10.1 Post-closure Plan

The in-situ leach adit shall be inspected once each year to determine that the mixture of concrete and limestone backfilled into the adit is in place and has not been eroded. If the in-situ adit show erosion or removal of the material, permittee shall make repairs to the infilled material.

The three in-situ leach pads located above the 500-foot adit shall be inspected once each year to determine that the pad soil cover materials are competent to promote run-off and prevent infiltration and have not been eroded. If erosion has occurred, permittee will make repairs to maintain the convex shape of the leach pad covers and replace the low permeability soil cover.

The permittee shall submit an annual letter report documenting the inspection, the findings of the inspection, and providing a narrative description of any maintenance or repair.

2.10.2 Post-closure Completion

Post-closure completion to terminate this permit and obtain clean closure will require submittal of reports demonstrating that:

- 1) Additional water quality data from the dry wash drainage to which the adit discharges, obtained at least one year after the issuance date of this permit, demonstrates that discharge from the in-situ adit continues to be similar to concentration levels measured in 2018 and 2019 for all measured constituents. The data must demonstrate that there are no signs of acid generation or acid consumption based on no decrease in concentrations of pH or alkalinity, and no increase of manganese, iron or copper in water samples obtained in the dry wash directly below the 500 ft. in-situ adit.
- 2) A report, prepared and sealed by a Registered Geologist or Professional Engineer, that documents no further inspections or maintenance are required for the three in-situ leach pad covers, or for the concrete and limestone mixture placed in the 500 ft. in-situ adit.

3.0 COMPLIANCE SCHEDULE [A.R.S. § 49-243(K)(5) and A.A.C. R18-9-A208]

There are no compliance schedule items under this permit.

4.0 TABLES

No groundwater or BADCT monitoring is required under this permit

5.0 REFERENCES AND PERTINENT INFORMATION

The terms and conditions set forth in this permit have been developed based upon the information contained in the following, which are on file with the Department:

1. APP Application dated November 1, 2004.
2. Public Notice dated _____.
3. Public Hearing dated _____.
4. Responsiveness Summary dated _____.

6.0 NOTIFICATION PROVISIONS

6.1 Annual Registration Fees

The permittee is notified of the obligation to pay an Annual Registration Fee to ADEQ. The Annual Registration Fee is based upon the amount of daily influent or discharge of pollutants in gallons per day as established by A.R.S. § 49-242. No annual fees are required under this permit.

6.2 Duty to Comply [A.R.S. §§ 49-221 through 49-263]

The permittee is notified of the obligation to comply with all conditions of this permit and all applicable provisions of Title 49, Chapter 2, Articles 1, 2 and 3 of the Arizona Revised Statutes, Title 18, Chapter 9, Articles 1 through 4, and Title 18, Chapter 11, Article 4 of the Arizona Administrative Code. Any permit non-compliance constitutes a violation and is grounds for an enforcement action pursuant to Title 49, Chapter 2, Article 4 or permit amendment, suspension, or revocation.

6.3 Duty to Provide Information [A.R.S. §§ 49-243(K)(2) and 49-243(K)(8)]

The permittee shall furnish to the Director, or an authorized representative, within a time specified, any information which the Director may request to determine whether cause exists for amending or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

6.4 Compliance with Aquifer Water Quality Standards [A.R.S. §§ 49-243(B)(2) and 49-243(B)(3)]

The permittee shall not cause or contribute to a violation of an aquifer water quality standard at the applicable point of compliance for the facility. Where, at the time of issuance of the permit, an aquifer already exceeds an aquifer water quality standard for a pollutant, the permittee shall not discharge that pollutant so as to further degrade, at the applicable point of compliance for the facility, the water quality of any aquifer for that pollutant.

6.5 Technical and Financial Capability

[A.R.S. §§ 49-243(K)(8) and 49-243(N) and A.A.C. R18-9-A202(B) and R18-9-A203(E) and (F)]

The permittee shall have and maintain the technical and financial capability necessary to fully carry out the terms and conditions of this permit. Any bond, insurance policy, trust fund, or other financial assurance mechanism provided as a demonstration of financial capability in the permit application, pursuant to A.A.C. R18-9-A203(D), shall be in effect prior to any discharge authorized by this permit and shall remain in effect for the duration of the permit.

6.6 Reporting of Bankruptcy or Environmental Enforcement [A.A.C. R18-9-A207(C)]

The permittee shall notify the Director within five days after the occurrence of any one of the following:

1. The filing of bankruptcy by the permittee.
2. The entry of any order or judgment not issued by the Director against the permittee for the enforcement of any environmental protection statute or rule.

6.7 Monitoring and Records [A.R.S. § 49-243(K)(8) and A.A.C. R18-9-A206]

The permittee shall conduct any monitoring activity necessary to assure compliance with this permit, with the applicable water quality standards established pursuant to A.R.S. §§ 49-221 and 49-223 and §§ 49-241 through 49-252.

6.8 Inspection and Entry [A.R.S. §§ 41-1009, 49-203(B) and 49-243(K)(8)]

In accordance with A.R.S. §§ 41-1009 and 49-203(B), the permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to enter and inspect the facility as reasonably necessary to ensure compliance with Title 49, Chapter 2, Article 3 of the Arizona Revised Statutes, and Title 18, Chapter 9, Articles 1 through 4 of the Arizona Administrative Code and the terms and conditions of this permit.

6.9 Duty to Modify [A.R.S. § 49-243(K)(8) and A.A.C. R18-9-A211]

The permittee shall apply for and receive a written amendment before deviating from any of the designs or operational practices specified by this permit.

6.10 Permit Action: Amendment, Transfer, Suspension & Revocation

[A.R.S. §§ 49-201, 49-241 through 251, A.A.C. R18-9-A211, R18-9-A212 and R18-9-A213]

This permit may be amended, transferred, renewed, or revoked for cause, under the rules of the Department.

The permittee shall notify the Groundwater Protection Value Stream in writing within 15 days after any change in the owner or operator of the facility. The notification shall state the permit number, the name of the facility, the date of property transfer, and the name, address, and phone number where the new owner or operator can be reached. The operator shall advise the new owner or operators of the terms of this permit and the need for permit transfer in accordance with the rules.

7.0 ADDITIONAL PERMIT CONDITIONS

7.1 Other Information [A.R.S. § 49-243(K)(8)]

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, the permittee shall promptly submit the correct facts or information.

7.2 Severability

[A.R.S. §§ 49-201, 49-241 through 251, A.A.C. R18-9-A211, R18-9-A212 and R18-9-A213]

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby. The filing of a request by the permittee for a permit action does not stay or suspend the effectiveness of any existing permit condition.

7.3 Permit Transfer

This permit may not be transferred to any other person except after notice to and approval of the transfer by the Department. No transfer shall be approved until the applicant complies with all transfer requirements as specified in A.A.C. R18-9-A212(B) and (C).