

STATE OF ARIZONA
AQUIFER PROTECTION PERMIT NO. P-512778
PLACE ID 13272, LTF 71003

1.0 AUTHORIZATION

This authorization shall close a discharging facility in a manner such that current and reasonably foreseeable future uses of the aquifer are protected.

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 close the Desert Basin Generating Station – Spoils Pile Area located approximately 2.5 miles northwest of the main site at 1872 North Burriss Road, Casa Grande, Pinal County, Arizona, over groundwater of the Pinal Active Management Area (AMA) in Township 06S, Range 05E, Section 03 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: Desert Basin Generating Station – Spoils Pile Area
Facility Address: 1872 North Burriss Road
Casa Grande, Arizona 85193
County: Pinal
Permittee: Salt River Project Agriculture Improvement and Power District (SRP)
Permittee Address: P.O. Box 52025, Mail Station DBS100
Phoenix, Arizona 85072
Permitted Flow Rate: APP to close a discharging facility – no permitted flows
Facility Contact: Plant Manager
Emergency Phone No.: (602) 236-3452
Latitude/Longitude: 32° 55' 41.92" N / 111° 49' 10.69" W
Legal Description: Southwest quarter of Section 03, Township 06S, Range 05E, of the Gila and Salt River Base Line and Meridian. EXCEPTING therefrom the West 215 feet; and EXCEPTING therefrom the North 247.5 feet.

1.2 AUTHORIZING SIGNATURE

Trevor Baggio, Director, Water Quality Division
Water Quality Division
Arizona Department of Environmental Quality

Signed this _____ day of _____, 2018

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 Spoils Pile Area is located in the northeastern quadrant of Pinal County Parcel No. 50369004A.

On April 6, 2018, SRP notified ADEQ of a potential APP violation at the SRP- Desert Basin Generating Station facility. Evaporation sediments from the evaporation impoundments permitted under APP P-501832, had been removed and deposited on top of the adjacent approximately 1100 X 1100 square foot (ft²) spoils pile area (the spoils pile is the soil from the initial excavation of the pond at the time of construction) located east of the northwest evaporation impoundment. The transportation of the evaporation sediments (approximately 1,500 cubic yard) to the spoils pile area occurred between July 2015 and March 2017. Approximately 3,588 tons of solid waste materials (sediments and underlying soil) was removed from the spoils pile area during the remediation activities from June 10, 2018 thru July 10, 2018.

The site includes the following discharging facility:

| Facility | Latitude | Longitude |
|------------------|------------------|-------------------|
| Spoils Pile Area | 32° 55' 41.92" N | 111° 49' 10.69" W |

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

No annual registration fee no permitted flows.

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

The permittee has demonstrated financial capability under A.R.S. § 49-243(N) and A.A.C. R18-9-A203 (B) in current APP Permit #501832, the SRP-Desert Basin Generating Station. The permittee shall maintain financial capability throughout the life of the facility.

2.2 Best Available Demonstrated Control Technology (BADCT)

[A.R.S. § 49-243(B) and A.A.C. R18-9-A202(A)(5)]

BADCT employed in closing this facility included the removal approximately 3,588 tons of solid waste materials. After the materials was removed, 25 confirmation soil sample were collected from eight (8) areas within spoils pile area for laboratory analysis.

2.2.1 Closure Design and Site Characterization

Approximately 3,588 tons of solid waste materials was removed and disposed to the Butterfield Station Landfill. The exposed underlying native soil was sampled. Following the sampling activities the area was regraded and 4,990 tons of #57 sized rock was brought in and spread to cap the spoils pile area to prevent erosion and for dust control. Future changes in use of the spoils pile area shall be addressed through an amendment to the Salt River Project Agriculture Improvement and Power District (SRP) - Desert Basin Generating Station P-501832.

2.2.2 Applicable Remediation or Institutional Control

1. One composite background sample for every 500 cubic yards of material was sampled required by the disposal facility. Based on the distribution on material on the spoils pile, five (5) composite samples were taken, one from each area, with the composite consisting of two (2) to six (6) individual samples. The background samples were taken to ensure that the material removal was complete, by comparing the composite sampling results to the confirmation sampling results.
2. 25 confirmation soil samples were collected from eight (8) areas within the spoils pile area and one composite background sample was taken from various different locations within the spoils pile (locations where no salts or other solid waste is visually present). Background

samples were taken from approximately 6” below ground surface (bgs). Soil samples were collected from approximately 0 to 12 inches, 12 to 24 inches and 24 to 36 inches below the underlying native soil of the spoils pile area on June 20, 2018 and submitted the same day to a Test America Laboratories, licensed by the Arizona Department of Health Services, Office of Laboratory Licensure and Certification.

3. The samples were analyzed using USEPA SW-846 Method 6010 for eight total Resource Conservation and Recovery Act (RCRA) metals (Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, and Silver) and USEPA Methods 200.7, 6010, or 300 for the additional constituents as requested by ADEQ (potassium, magnesium, fluoride and chloride). The soil sample results for Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, and Nickel showed no exceedance of the GPLs or non-residential Regional Screening Levels (RSLs). Potassium, magnesium, fluoride, and chloride have no calculated GPLs. SPLP extracts of samples were analyzed. Maximum Chloride concentration was 530 mg/l with an average concentration of 213 mg/l. Secondary MCL for Chloride is 250 mg/l. Maximum Fluoride concentration was 1.3 mg/l with an average concentration of 1 mg/l. Secondary MCL for Fluoride is 2mg/l. Maximum concentration of Potassium was 39 mg/l. Maximum concentration of magnesium was 63 mg/l.
4. Based on the soil sample test results, the soil does not contain pollutants in concentrations that could cause or contribute to an exceedance of AWQS at the POC.

The closure activities and changes in operations shall prevent the spoils pile area from causing or contributing to a violation of the AWQS at the POC in the future. The closure investigation has met the clean closure criteria as defined in A.R.S. §49-201(5). No post closure monitoring is required.

2.3 Point of Compliance (POC) [A.R.S. § 49-244]

The POC location is within the footprint of the spoils pile area.

| POC # | Latitude | Longitude |
|-------------------|------------------|-------------------|
| 1 (Conceptual) | 32° 55' 41.92" N | 111° 49' 10.69" W |

The POC is conceptual; groundwater monitoring is not required at the POC at permit issuance. The Director may designate additional points of compliance if information on groundwater gradients or groundwater usage indicates the need.

2.4 Other Permit Conditions

- 2.4.1 This closure permit reserves ADEQ’s right to require additional investigation including any necessary remediation if ADEQ becomes aware of new evidence, which would alter its determination.
- 2.4.2 Other permit conditions including monitoring, alert levels, contingency plans, record keeping, and post-closure plans are not required for the closure of the spoils pile area located east of the northwest evaporation impoundment.

2.5 Reporting Requirements

2.5.1 Reporting Locations

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 West Washington Street
Phoenix, Arizona 85007
Phone (602) 771-4999

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

Not required by this permit.

4.0 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 received September 14, 2018.
2. Hydro memo: October 31, 2018
3. Public Notice:

5.0 NOTIFICATION PROVISIONS

5.1 Annual Registration Fees [A.R.S. § 49-242(D)]

Not applicable

5.2 Duty to Comply [A.R.S. §§ 49-221 through 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.

5.3 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.

5.4 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 (AWQS) at the applicable point of compliance (POC) for the facility. Where, at the time of issuance of the permit, an aquifer already exceeds an AWQS 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.

5.5 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(C), shall be in effect prior to any discharge authorized by this permit and shall remain in effect for the duration of the permit.

5.6 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; or
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.

5.7 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.

5.8 Inspection and Entry [A.R.S. §§ 49-1009, 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.

5.9 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 authorized by this permit.

**5.10 Permit Action: Amendment, Transfer, Suspension, and 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, suspended, 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.

6.0 ADDITIONAL PERMIT CONDITIONS

6.1 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.

**6.2 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.

6.3 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).