

**STATE OF ARIZONA  
INDIVIDUAL INDUSTRIAL RECLAIMED WATER PERMIT NO. R-102439  
PLACE ID 3453, LTF 64613**

**1.0 AUTHORIZATION**

In compliance with the provisions of Arizona Administrative Code (A.A.C.) Title 18, Chapter 9, Article 7 and A.A.C. Title 18, Chapter 11, Article 3, and amendments thereto, and the conditions set forth in this permit, the Saddle Mountain Unified School District #90 is hereby authorized to use industrial wastewater blended with Class A+ reclaimed water for beneficial reuse in accordance with the limitations, monitoring requirements and other conditions set forth in this permit and in the rules cited above, at the Ruth Fisher School, located at 38201 W. Indian School Road, in Tonopah, Arizona, in Maricopa County, over groundwater of the Hassayampa Sub-basin of the Phoenix Active Management Area in Section 28, Township 2 N, Range 6 W of the Gila and Salt River Baseline and Meridian.

This permit becomes effective on the date of the Groundwater Section Manager's signature and will expire five (5) years thereafter, unless suspended or revoked pursuant to A.A.C. R18-9-706(A)(2). Conditions established in this permit are designed to protect public health and safety, prevent contamination of groundwater through consumptive water use, and conserve potable water by using reclaimed resources. Water application rates authorized herein do not supersede the requirements of the Arizona Department of Water Resources.

**1.1 PERMITTEE INFORMATION**

**Facility Name:** Ruth Fisher School - Tonopah  
**Facility Physical Address:** 38201 W. Indian School Road, Tonopah, Arizona, 85345

**Permittee:** Saddle Mountain Unified School District #90  
**Permittee Mailing Address:** 38201 W. Indian School Road  
Tonopah, Arizona, 85345

**Facility Contact:** Angel Tellez, Director of Facilities  
**Emergency Phone No.:** (623) 474-5600

**Latitude/Longitude:** 33° 29' 33" N / 112° 52' 13" W  
**Legal Description:** Township 2 N, Range 6 W, Section 28, of the Gila and Salt River Baseline and Meridian

**1.2 REUSE SITE**

The reuse site consists of 16.43 acres of grass fields within the Ruth Fisher School property. Irrigation will occur on school property in the following areas: two baseball fields, a football field, a soccer field, and 23 grass and trees areas. The specific locations designated for reuse at the site are listed in Section 2.2.

**1.3 AUTHORIZING SIGNATURE**

\_\_\_\_\_  
**Jerry H Smit, Acting Manager**  
**Groundwater Section**  
**Arizona Department of Environmental Quality**

Signed this \_\_\_\_ day of \_\_\_\_\_, 2016

**2.0 RECLAIMED WATER USE**

Up to 63,500 gallons per day (gpd) of a blend of Class A+ reclaimed water produced by the Ruth Fisher School Wastewater Treatment Plant (WWTP) and brine reject water from the water treatment plant may be used for irrigation of 23 acres of turf and landscape (two baseball fields, a football field, a soccer field, and twenty-three grass and tree areas) at Ruth Fisher School. Additionally, the fire loop for the school complex may use the blended reclaimed water for fire suppression. A series of cross connection tests were performed to ensure no cross connections in the fire suppression system.

**2.1 Legal Description**

**Applicant/Permittee:** Saddle Mountain Unified School District #90  
**Mailing Address:** 38201 W. Indian School Road  
 Tonopah, Arizona, 85345  
**Phone:** (623) 474-5110

**Treatment Facility:** Ruth Fisher School WWTP  
**Physical Address:** 38201 W. Indian School Road, Tonopah, Arizona  
**County:** Maricopa County  
**Latitude/Longitude:** 33° 29' 33" N / 112° 52' 13" W  
**Cadastral** Township 2 N, Range 6 W, Section 28  
**Facility Contact Person:** Angel Tellez, Director of Facilities  
**Phone:** (623) 474-5600

**Reuse Site:** Ruth Fisher School  
**Location:** 38201 W. Indian School Road, Tonopah, Arizona  
**County:** Maricopa County  
**Latitude/Longitude:** 33° 29' 33" N / 112° 52' 13" W  
**Cadastral:** Township 2 N, Range 6 W, Section 28

**2.2 Reuse Site Description**

The reuse site consists of 16.43 acres of grass fields at Ruth Fisher School and includes two baseball fields, a football field, a soccer field, and twenty-three grass and trees areas. Irrigation with the blended water may occur within the areas listed in the Table below:

**Reuse Table 2.2-1**

<b>Area</b>	<b>Description</b>	<b>Irrigated Acres</b>
A-1	Baseball field	0.562
A-2	Football field (artificial turf)	0.000
A-3	Baseball field	2.533
A-4	Soccer field	3.358
A-5	Grass and trees area	0.317
A-6	Grass and trees area	0.109
A-7	Grass and trees area	0.230
A-8	Grass and trees area	0.107
A-9	Grass and trees area	0.102
A-10	Grass and trees area	0.117
A-11	Grass and trees area	0.172
A-12	Grass and trees area	0.066
A-13	Grass and trees area	0.011
A-14	Grass and trees area	0.048
A-15	Grass and trees area	0.016
A-16	Grass and trees area	0.022

<b>Area</b>	<b>Description</b>	<b>Irrigated Acres</b>
A-17	Grass and trees area	0.024
A-18	Grass and trees area	0.065
A-19	Grass and trees area	0.428
B-1	Grass and trees area	0.828
B-2	Grass and trees area	0.188
B-3	Grass and trees area	0.089
B-4	Grass and trees area	0.022
B-5	Grass and trees area	0.159
B-6	Grass and trees area	0.828
B-7	Football field	2.203
B-8	Grass and trees area	0.193
B-9	Grass and trees area	1.057
B-10	Grass and trees area	2.573
<b>Total</b>		<b>16.43</b>

**2.3 Contact Information**

**Authorized Contact Person:**

Name: Angel Tellez  
 Title: Director of Facilities, Saddle Mountain School District #90  
 Address: 38201 W. Indian School Road  
 Tonopah, Arizona 85354  
 Phone: (623) 474-5600

### 3.0 ALLOWABLE PERMIT LIMITS AND MONITORING REQUIREMENTS

#### 3.1 Discharge Monitoring

Saddle Mountain Unified School District is authorized to use combined Class A+ reclaimed water and brine reject water as stated in Section 2.0 of this permit, subject to the requirements specified in Table I below. The blended water monitoring requirements for this facility are specified in this permit and the Aquifer Protection Permit (APP) for Ruth Fisher School (APP No. P-102439). A representative sample of the blended water shall be collected from the discharge stream prior to delivery to the irrigation sites. Unless otherwise indicated, allowable permit limits are maximum values, which shall not be exceeded.

**TABLE I  
BLENDED RECLAIMED WATER DISCHARGE MONITORING**

Sampling Point Number	Sampling Point Identification		Latitude	Longitude
1	Effluent pump station		33° 29' 24" N	112° 52' 19" W
Parameter	Discharge Limit	Units	Sampling Frequency	Reporting Frequency
Flow: Daily flow for reuse	0.0635	MGD <sup>1</sup>	Daily	Quarterly
TDS	1,950	mg/l <sup>2</sup>	Monthly	Quarterly
Total Nitrogen <sup>3</sup> : Five-sample geometric mean	Monitor <sup>4</sup>	mg/l	Monthly Calculation	Quarterly
Fecal Coliform: Single sample maximum	23	CFU or MPN <sup>5</sup>	Daily <sup>6</sup>	Quarterly
Fecal Coliform: Four (4) out of seven (7) in a week	Non-detect	CFU or MPN	Weekly Evaluation <sup>7</sup>	Quarterly

<sup>1</sup>MGD = million gallons per day

<sup>2</sup>mg/l = milligrams per liter

<sup>3</sup>Total Nitrogen = Nitrate N, plus Nitrite N, plus Total Kjeldahl Nitrogen (TKN)

<sup>4</sup>Monitor = sampling and analysis required, but no discharge limit established at permit issuance.

<sup>5</sup>CFU = Colony Forming Units / 100 ml sample. MPN = Most Probable Number / 100 ml sample.

For CFU, a value of <1.0 shall be considered to be non-detect. For MPN, a value of <2.2 shall be considered to be non-detect.

<sup>6</sup>Daily means at least four samples per week must be collected and analyzed.

<sup>7</sup>Requires entering "Compliance" or "Non-compliance" on the SMRF for each day of the reporting period. Evaluate the daily fecal coliform result along with the six (6) previous sample results. If four (4) or more of those results are non-detect, report "Compliance" for that day's entry on the SMRF. If four (4) or more of those results have detections of fecal coliform, report "Non-compliance" for that day's entry.

**3.2 Geometric Mean**

Geometric Mean (GM) equals the nth root of the product of n items or values. The GM is calculated using the following formula:

$$GM = \sqrt[n]{X_1 * X_2 * X_3 * \dots * X_n}$$

When the permit requires a sampling frequency of less than five samples per month, the geometric mean is calculated using the five most recent sampling events (the current sampling event and the four previous events). The following table outlines the frequency for calculating the geometric mean and the reporting frequency:

Number of Samples Taken Per Month	Calculation Frequency	Reporting Frequency
5 or more samples/mo <sup>8</sup>	Monthly	Quarterly
2, 3, or 4 samples/mo <sup>9</sup>	Monthly	Quarterly
1 sample/mo <sup>10</sup>	Quarterly	Quarterly

**3.3 Monitoring Requirements [A.A.C. R18-9-706(B)(3) and A.A.C. R18-9-706(B)(5)]**

All monitoring required in this permit shall continue for the duration of the permit, regardless of the status of the facility. 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. The permittee shall consult the most recent version of the ADEQ Quality Assurance Project Plan (QAPP) and EPA 40 CFR PART 136 for guidance in this regard. 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.

**3.4 Analytical Methodology**

All samples collected for compliance monitoring shall be analyzed using Arizona state approved methods. If no state approved method exists, then any appropriate EPA approved method shall be used. Regardless of the method used, the detection limits must be sufficient to determine compliance with the regulatory limits of the parameters specified in this permit. Analyses shall be performed by a laboratory licensed by the Arizona Department of Health Services, Office of Laboratory Licensure and Certification. For results to be considered valid, all analytical work shall meet quality control standards specified in the approved methods. Analytical methods shall be recorded on the Self-monitoring Report Form (SMRF). A list of Arizona state-certified laboratories can be obtained at the address below:

Arizona Department of Health Services  
Office of Laboratory Licensure and Certification  
250 North 17<sup>th</sup> Avenue  
Phoenix, AZ 85007  
Phone: (602) 364-0720

<sup>8</sup>All sampling events during the month shall be used in the calculation of the geometric mean.

<sup>9</sup>All sampling events during the current month and the most recent sampling event(s) during the previous month(s) to total five sampling events shall be used in the calculation of the geometric mean.

<sup>10</sup>The three sampling events within this quarter and the two most recent sampling events from the previous quarter to total five sampling events shall be used in the calculation of the geometric mean.

**3.5 Monitoring and Reporting Schedule [A.A.C. R18-9-706(B)(4)]**

Monitoring under Table I shall commence within the first month following the signature date of this permit. All monitoring results shall be recorded on the self-monitoring report forms (SMRF) provided to the permittee by the ADEQ Water Quality Compliance Section, Data Unit following issuance of this permit.

**3.5.1 Self-Monitoring Report Form (SMRF)**

1. The permittee shall complete the SMRF provided by ADEQ. The completed SMRF shall be submitted to the Groundwater Section. The SMRF shall be submitted to the Department on a quarterly basis regardless of the operational status of the facility.
2. The permittee shall complete the SMRF to the extent that the information reported may be entered on the form. If no information is required during a quarter, the permittee shall enter “not required” on the SMRF and submit the report to ADEQ.
3. The table contained in Section 3.0 lists the parameters to be monitored and the frequency for reporting results for discharge monitoring.

All SMRFs shall be submitted to:

Arizona Department of Environmental Quality  
 Groundwater Section  
 Mail Code: 5415B-3  
 1110 W. Washington Street  
 Phoenix, AZ 85007  
 Phone (602) 771-4449

Or

Through the myDEQ portal accessible on the ADEQ website at:  
<http://www.azdeq.gov/welcome-mydeq>

**3.4.2 Reporting Deadline**

The following table lists the quarterly report due dates:

Monitoring conducted during quarter:	Quarterly Report due by:
January-March	April 30
April-June	July 30
July-September	October 30
October-December	January 30

**3.5 Records Retention [A.A.C. R18-9-706(B)(6)]**

Records of all monitoring activities and results (including all original strip chart recordings for continuous monitoring instrumentation, calibration, electronic recording and maintenance records) shall be retained for five (5) years.

**4.0 MANAGEMENT PRACTICES**

**4.1 Irrigation Practices [A.A.C. R18-9-704(F)]**

Application of industrial wastewater to the reuse areas shall be performed according to the following requirements:

1. Runoff of industrial wastewater from the irrigation areas to any surface water body or wash is prohibited. Application of industrial wastewater for irrigation is limited to specific areas as indicated in the permit

- application and supporting documentation and as listed in Section 2.0 of this permit.
2. Use application methods that reasonably precluded human contact with industrial wastewater.
  3. Prevent industrial wastewater from standing on open access areas during normal periods of use.
  4. Prevent industrial wastewater from coming into contact with drinking fountains, water coolers, or eating areas.
  5. Secure hose bibbs discharging industrial wastewater to prevent use by the public.

#### **4.2 Prohibited Activities [A.A.C. R18-9-704(G)]**

This permit allows the use of industrial wastewater solely for the purposes allowed by this permit. The following activities **are prohibited**:

1. Irrigating with untreated industrial wastewater;
2. Providing or using industrial wastewater for any of the following activities:
  - a. Direct reuse for swimming, wind surfing, water skiing, or other full-immersion water activity with a potential of ingestion; and/or
  - b. Direct reuse for evaporative cooling or misting.
3. Misapplying industrial wastewater for any of the following reasons:
  - a. Application of industrial wastewater to any area other than a direct reuse site; and or
  - b. Allowing runoff of industrial wastewater or industrial wastewater mixed with stormwater from a direct reuse site, except for agricultural return flow that is directed onto an adjacent field or returned to an open water conveyance.

#### **4.3 Public Information [A.A.C. R18-9-704(H)]**

Signs shall be placed and maintained at locations such that employees, visitors and the general public are informed that blended water is in use and that no one may drink from the system.

All hose bibbs that may dispense reclaimed water will be clearly identified as “Non-potable, DO NOT DRINK”. All hose bibbs will also be locked. The areas to be irrigated with reclaimed water will be identified with signs posted on regular intervals of approximately 500 feet. Signs will be posted on all gates. The permittee shall follow the approved irrigation guidelines submitted as part of the application:

1. Use application methods that reasonably preclude contact with blended water;
2. Prevent blended water from standing on open access areas during normal periods of use;
3. Prevent blended water from coming into contact with drinking fountains, water coolers, or eating areas;
4. The sprinklers that use reclaimed water will only be on during the hours that students would not normally attend school. This will be when the facilities are closed or not typically used by the public. Students will only use these areas for special events. Should a school activity require the use of the area, irrigation will be delayed until after the event. The time for percolation should take place prior to normal periods of use; and
5. The sprinklers that use reclaimed water will only be on during the hours that students are not on campus.

## **5.0 COMPLIANCE**

### **5.1 Violations of Discharge Limits and Permit Conditions**

1. The permittee shall notify the ADEQ Groundwater Section in writing within five (5) days of becoming aware of a violation of any permit condition or discharge limitation.
2. The permittee shall submit in a written report to the ADEQ Groundwater Section within 30 days of becoming aware of the violation of any permit condition or discharge limitation. The report shall document all of the following:
  - a. Identification and description of the permit condition for which there has been a violation and a description of the cause;
  - b. The period of violation including exact date(s) and time(s), if known and the anticipated time period during which the violation is expected to continue;
  - c. Description of any malfunction or failure of pollution control devices or other equipment or processes;
  - d. Any corrective action taken or planned to mitigate the effects of the violation, or to eliminate or prevent a recurrence of the violation;
  - e. Any monitoring activity or other information that indicates that any pollutants would be reasonably

expected to cause a violation of an Aquifer Water Quality Standard or cause endangerment to public health and safety;

- f. Proposed changes to the monitoring, which include changes in constituents or increased frequency of monitoring.

### 5.2 Unauthorized Release

The permittee shall notify the ADEQ Groundwater Section and the within 24 hours after becoming aware of an unauthorized release of industrial wastewater to the land surface, surface water bodies, or to the aquifer.

This notification shall include:

1. A description of the release;
2. A description of the cause of the release;
3. The location and duration of the release including exact date(s) and time(s);
4. A plan of action, which addresses remedial or mitigative action.

### 5.3 Reporting Location

Notifications of unauthorized releases and violations of discharge limits and permit conditions shall be submitted to:

Arizona Department of Environmental Quality  
Groundwater Section  
Mail Code: 5415B-3  
1110 W. Washington Street  
Phoenix, AZ 85007  
Phone: (602) 771-4449

## 6.0 GENERAL PROVISIONS

### 6.1 Changes to Facility Information in Section 1.0

The Permittee shall notify the ADEQ Groundwater Section in writing within 30 days of any change of facility information including Facility Name, Permittee Name, Mailing or Street Address, Facility Contact Person or Telephone Number.

### 6.2 Permit Amendment

Permittee shall request ADEQ authorization 90 days in advance of a significant modification to the reuse system, which would require permit amendment. A significant modification to the reuse system includes but is not limited to changes regarding the following: reuse category, methods of disposal of excess industrial wastewater flow and industrial wastewater quality monitoring location(s), monitoring frequency, and wastewater treatment changes which could affect reclaimed water quality. An initial fee, as per A.A.C. R18-9-14-103 must be submitted to the ADEQ Groundwater Section along with the request for permit amendment. If there is a question as to whether something is considered a significant modification, which would require a permit amendment, please contact the following office for a determination:

Arizona Department of Environmental Quality  
Groundwater Section  
Mail Code: 5415B-3  
1110 W. Washington Street  
Phoenix, AZ 85007  
Phone (602) 771-4449

### 6.3 Permit Transfer [A.A.C. R18-9-706(C)]

The permittee may transfer this permit to another person if the following conditions are met:

1. The permittee notifies the Director of the proposed transfer;
2. The permittee submits a written agreement containing a specific date for the transfer of permit

- responsibility and coverage between the current permittee and the proposed new permittee, including an acknowledgment that the existing permittee is liable for violations up to the date of transfer and that the proposed new permittee will be liable for violations from that date forward;
3. The following information for the new proposed permittee shall be provided in the notice:
    - a. name, title, mailing address, and telephone number;
    - b. if applicable, the name, title, mailing address, and telephone number of the authorized contact person for the permittee;
    - c. if applicable, a copy of the certificate of disclosure of violations required under A.R.S. § 49-109.
  4. If the permittee requests to amend the permit document to reflect the change in ownership, the appropriate fee must be submitted along with the permit transfer request (see A.A.C. R18-14-103).
  5. All correspondence regarding permit transfer should be made to the ADEQ address listed in Section 6.2 of this permit.

#### **6.4 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 A.R.S. § Title 49, Chapter 2, Articles 1, 2 and 3, A.A.C. Title 18, Chapter 7 and A.A.C. Title 18, Chapter 11, Article 3. Any permit non-compliance constitutes a violation and is grounds for an enforcement action pursuant to A.R.S. § Title 49, Chapter 2, Article 4 or permit amendment, suspension, or revocation.

#### **6.5 Severability**

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.

#### **6.6 Other Laws and Rules**

The issuance of this permit does not waive any federal, state, county, or local government rules, regulations, or permits with which this facility may have to comply.

#### **6.7 Permit Reissuance [A.A.C. R18-9-706(A)(3)]**

This permit shall expire five (5) years from the date of signature. The permittee shall file an application for reissuance not less than 120 days before the expiration of this permit. The terms and conditions of an expired permit are automatically continued pending issuance of a new permit if:

1. The permitted activity is of a continuing nature;
2. The permittee has submitted a timely (120 days before expiration date of permit) and sufficient application for a new permit; and
3. ADEQ is unable, through no fault of the permittee, to issue a new permit before the expiration date of the previous permit.

### **7.0 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 Individual Industrial Reclaimed Water Permit Application prepared by Fluid Solutions dated August 5, 2009 (original permit)  
Individual Industrial Reclaimed Water Permit Application prepared by Saddle Mountain Unified School District dated August 29, 2016
- 2 Response to a Notice of Administrative Deficiencies dated October 14, 2009 (original permit)
- 3 Response to a Request for Additional Information dated June 24, 2010 (original permit)
- 4 Public Notice, dated March 24, 2011 (original permit)  
Public Notice, dated (to be entered)
- 5 Public Hearing: not applicable
- 6 Responsiveness Summary: not applicable