FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: MOAPA VALLEY WATER DISTRICT

601 N. MOAPA VALLEY BLVD.
OVERTON, NV 89040

Permit Number: NS2008503

Permit Type: GROUNDWATER DISCHARGE

Designation: GROUNDWATER

New/Existing: EXISTING

Location: BALDWIN SPRINGS ARSENIC REMOVAL PLANT, CLARK
KIMBALL ROAD, MOAPA, NV 89025
LATITUDE: 36.720278, LONGITUDE: -114.724167
TOWNSHIP: 14 S, RANGE: 65 E, SECTION: 16

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	EFFLUENT (BACKWASH WATER)	External Outfall		36.720278	-114.724167	EVAPORATION POND
002	EVAPORATION BASIN	External Outfall		36.720278	-114.724167	EVAPORATION POND
003	SLUDGE	External Outfall		36.720278	-114.724167	EVAPORATION POND

Permit History/Description of Proposed Action

The Permittee, Moapa Valley Water District has applied for a permit renewal of the existing permit NS2008503 for Baldwin Springs Arsenic Removal Facility (BSARF). The original permit for the BSARF was to accommodate the Environmental Protection Agency criteria for arsenic level in drinking water issued in January 2006.

This permit was first issued on July 2, 2011. The most recent permit was issued on February 1, 2018, and expired in January 31, 2023; the permit has been administratively continued since.

Facility Overview

The BSARF has the capability to combine and treat flows from both the Baldwin Springs and the Jones Springs, where the waters are treated with a Sorb 33^{tm} media. This process exceeds the treatment requirements of both State and Federal safe drinking standards. The water is pumped directly into the distribution system district storage tanks.

Sorb 33^{tm} media is a granular iron-based medium that functions on the principles of Ion exchange where the iron oxide bonds with dissolved arsenic, removing it from the water. This material is not yet able to be recycled or reused requiring the medium to be disposed of in a municipal landfill. The other waste produced by using this material is rinse water generated during the installation of new media containing high levels of iron, but little to no dissolved arsenic. The last waste produced is the backwash water containing high levels of dissolved solids that were trapped on the material during the filter run and pumped to the evaporation basin. While these materials contain high levels of arsenic it passes the federal hazardous

waste criteria, due to the high-level adsorption bond of the material and arsenic.

The Operation and Maintenance Manual (O&M) was received August 27th 2020 and an updated O&M is required by August 27th 2030.

Outfall Summary
Outfall 001: Effluent (Backwash Water) monitors the average flow rate.

Outfall 002: Evaporation Basin is sampled for Total Dissolved Solids (TDS), Total Recoverable Arsenic (TRA), Total Recoverable Iron (TRI), and Potential of Hydrogen (pH).

Outfall 003: Sludge is monitored by total dry weight.

Effluent Characterization
The permittee has not discharged water from this location in the last 5 years.

Pollutants of Concern
Pollutants of concern are any pollutants or parameters that are believed to be present in the discharge and could affect the physical, chemical, or biological condition of the receiving water. The pollutant of concern for backwash water is arsenic.

Receiving Water
Discharge is contained is a concrete lined evaporation basin; however, in the event of a catastrophic failure, the receiving water will be groundwater of the State. Arsenic is naturally occurring in groundwater and is treated at the BSARF.

Compliance History
The Permittee is in compliance with the permit.

Proposed Effluent Limitations
The discharge shall be limited and monitored by the Permittee as specified below:

NS OTHER - Discharge Limitations Table for Sample Location 003 (Sludge) To Be Reported Annually

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Solids, sludge, tot, dry weight[1]	Total	M&R Tons (ton)		Sludge	003	Annual	CALCTD

Notes (NS OTHER - Discharge Limitations Table):

1. The Permittee shall report the total tons removed per year.

Ponds / Rapid Infiltration Basins for Sample Location 001 (Effluent) To Be Reported Monthly[1]

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	Daily Maximum	<= 0.054 Million Gallons per Day (Mgal/d)		Effluent Gross	001	Continuous	METER
Flow rate	30 Day Average	<= 0.0025 Million Gallons per Day (Mgal/d)		Effluent Gross	001	Continuous	METER

Notes (Ponds / Rapid Infiltration Basins):

1. Flow shall be reported for each discharge event.

Ponds / Rapid Infiltration Basins for Sample Location 002 (Evaporation Basin) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Iron, total (as Fe)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Arsenic, total (as As)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT

Summary of Changes From Previous Permit
The label for Outfall 2 has been changed from a Rapid Infiltration Basin to Evaporation Basin.

Technology Based Effluent Limitations
Technology based effluent limitations are not applicable on this permit.

Water Quality Based Effluent Limitations
Water quality-based effluent limitations are not applicable to this permit.

Proposed Water Quality Based Effluent Limits (monthly/weekly/daily)
Water quality-based limitations are not applicable to this permit.

Basis for Effluent Limitations
The flow is limited to 0.054 million gallons per day (Mgal/d) by the request of the Permittee.

Monitoring for iron, arsenic, and TDS is required to assess the level of treatment provided and to protect the groundwater of the State.

Anti-backsliding
None of the proposed permit limits were changed to a less restrictive limit compared to those in the previous permit.

Antidegradation
The Division has developed an antidegradation regulation that is applied on a statewide basis, and which meets the statutory requirements of Nevada's water pollution control law found at Nevada Revised Statute (NRS) 445A.520 and NRS 445A.565 and is consistent with the federal antidegradation policy found at Title 40 in the Code of Federal Regulations (CFR) § 131.12. The objective of the Division's antidegradation regulation is to prevent degradation of Nevada's surface waters and maintain the unique attributes and special characteristics and water quality associated with high-quality waters.

As this permit is for discharges to groundwater, and not surface water, the new antidegradation rule is not applicable.

Special Conditions

For Special Conditions see table below:

SA – Special Approvals / Conditions Table

Item #	Description
1	The Permittee is required to continue to submit their Discharge Monitoring Reports (DMRs) through the Bureau of Water Pollution Control's Nevada NetDMR system.

Discharges From Future Outfalls/ Planned Facility Changes
This Permittee does not anticipate changes to the outfalls or to the facilities.

Corrective Action Sites
There are no Bureau of Corrective Actions sites within a one mile radius of the BSARF.

Wellhead Protection Program
Jones Spring, which also provides water for the Moapa Valley Water District, is located approximately 2,500 feet southeast and cross gradient of the BSARF. There are two wells, Arrow Canyon Well 1 and 2, which are located approximately 8,600 feet northwest and upgradient of the BSARF. Groundwater flow is to the southeast and along the Muddy River drainage basin. The BSARF will not impact any Public Water Supply Wells based on the construction of the evaporation pond and the distance, as well as the hydraulic gradient, between water sources.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permitted is required to submit 2 copies (one hard copy and one electronic copy) of an updated Operations and Maintenance (O&M) Manual. The O&M shall be prepared and stamped by a Nevada Registered Professional Engineer or other Qualified Person.	8/27/2030

Deliverable Schedule:

DLV– Deliverable Schedule for Reports, Plans, and Other Submittals

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	10/1/2025
2	Annual Report	Annually	1/28/2026
3	Annual DMRs	Annually	1/28/2026

Procedures for Public Comment:

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to groundwater of the State of Nevada subject to the conditions contained within the permit, is being mailed to interested persons on our mailing list and will be posted on our website at https://ndep.nv.gov/posts. Anyone wishing to comment on the proposed permit can do so in writing until 5:00 P.M. **12/19/2025,** a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator of EPA Region IX or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted. Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determined to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Proposed Determination:

The Division has made the tentative determination to issue/re-issue the proposed 5-year permit.

Prepared by: **Jason Reichelt**
Date: **11/18/2025**
Title: **Environmental Scientist 3**