



FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: LAS VEGAS VALLEY WATER DISTRICT
1001 S. VALLEY VIEW BLVD
LAS VEGAS, NV - 89153

Permit Number: NS2009503

Location: COYOTE SPRINGS/MOAPA ARSENIC TREATMENT FACILITY, CLARK
4949 COMMUNICATIONS DRIVE, COYOTE SPRINGS, NV - 89067
LATITUDE: 36.795297, LONGITUDE: -114.891542
TOWNSHIP: 13 S, RANGE: 63 E, SECTION: 23, 26

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Outfall City	Outfall State	Outfall Zip	Outfall County	Latitude	Longitude	Receiving Water
001	DRYING BEDS	External Outfall		MOAPA	NV	89067	CLARK	36.795028	-114.892719	GROUNDWATER
002	COYOTE SPRINGS WWTF	External Outfall	22449	MOAPA	NV	89067	CLARK	36.7970	-114.893258	PAHRANAGAT WASH

General:

Las Vegas Valley Water District (LVVWD) has applied for a renewal permit to discharge backwash water from the Moapa Water Treatment Facility to on-site concrete-lined solar drying beds, or to the nearby Coyote Springs Wastewater Treatment Facility (WWTF) (Permit NS2007501).

The Moapa Water Treatment Facility treats water from the on-site water supply well, MX-5 which has arsenic levels above the MCL of 0.01 mg/L. The facility removes arsenic from the well water using oxidation, coagulation and filtration. Ferric chloride is used as the coagulant. When the thickened backwash waste is discharged to the two drying beds, the supernatant is decanted and returned by the filter backwash pumps to the backwash holding tanks. After clarification, it will be recycled upstream of the sodium hypochlorite feed for re-treatment. Liquid left in the sludge evaporates leaving a sludge with a solids concentration of approximately 30%.

The total drying bed size was based on the wet solids volume with a six-day drying time and a maximum sludge depth in the drying beds of 13-inches. A concrete runway is provided to each drying bed and spaced to accommodate mechanical equipment access. The entrance ramps lead down to the level of the drying surface. Based on the drying bed sizing calculation, dewatered residuals in the drying beds will need to be removed periodically. When the sludge dries completely, the sludge will be loaded into bins or a dump truck using a front-end loader and hauled to an approved landfill.

The sludge in the drying beds will not be allowed to become dry enough to form airborne particulates prior to disposal at an approved landfill. Therefore, no fugitive dust pollution issue needs to be considered. Nuisance odor is not anticipated to be an issue.

Discharge Characteristics:

Arsenic-containing solids in the thickened backwash water will be discharged from a Lamella clarifier either to on-site concrete-lined solar drying beds, or to the Coyote Springs WWTF . Dried sludge residual will be disposed of at approved landfill.

Receiving Water:

The receiving water is groundwater of the State.

Summary of Changes From Previous Permit:

There have been no substantive changes from the previous permit. The only change is the naming of the discharge permit from NEV2009503 to NS2009503. This change does not reflect a change in the type of permit being issued.

Proposed Effluent Limitations:

The Permittee is authorized to discharge in accordance with the limitations, requirements and conditions of this permit. The flow rate shall be limited, sampled and monitored by the Permittee as specified below:

WWTP Discharge Limitations Table for Sample Location 001 (Drying Beds) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Solids, sludge, tot, dry weight ^[1]	Event Total	M&R Tons (ton)		Sludge	001	Once Per Batch	CALCTD

Notes (WWTP Discharge Limitations Table):

1. The Permittee shall report the number of tons removed from the drying beds and hauled to the landfill.

WWTP Discharge Limitations Table for Sample Location 002 (Coyote Springs Wwtf) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Quarterly Maximum	<= 0.03 Million Gallons per Day (Mgal/d)		See Footnote ^[1]	002	Quarterly	TOTALZ
Flow rate	30 Day Average	<= 0.025 Million Gallons per Day (Mgal/d)		See Footnote ^[1]	002	Quarterly	TOTALZ

Notes (WWTP Discharge Limitations Table):

1. The Permittee shall measure the flow rate through a totalizing meter prior to discharge to the Coyote Springs WWTF.

Rationale for Permit Requirements:

Groundwater monitoring is not required for this facility since this is a zero-discharge permit. Regular and routine inspections and maintenance coupled with concrete evaporation basins used for sludge drying, with residuals sent to a landfill, preclude the need for other monitoring requirements. The Permittee is in substantial compliance with its current discharge permit.

Special Conditions:

SA – Special Approvals / Conditions Table

There are no Special Approval / Condition items

Flow:

30-day average: 0.025 MGD

Daily maximum: 0.030 MGD

Corrective Action Sites:

There are no Bureau of Corrective Actions remediation sites within a one-mile radius of the facility.

Wellhead Protection Program:

The facility is not within a drinking water protection area of any public drinking water supply, nor within an established Wellhead Protection Area or capture zone.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit two copies to NDEP for review of an updated copy of an Operations & Maintenance (O&M) Manual prepared in accordance with the NDEP's WTS-2 Guidance: <i>Minimum Information Required for an Operations and Maintenance Manual</i> .	10/1/2016

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	10/28/2016
2	Annual Report	Annually	1/28/2017

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 sent to the **Las Vegas Review Journal** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing until 5:00 P.M. **5/20/2016**, 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 to 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: **Steve McGoff, P.E.**

Date: **5/2/2013**

Title: **Professional Engineer**