



FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: NEVADA DEPARTMENT OF CORRECTIONS

3855 W. RUSSELL ROAD
LAS VEGAS, NV 891182316

Permit Number: NS0080002

Permit Type: GROUNDWATER DISCHARGE

Designation: GROUNDWATER

New/Existing: EXISTING

Location: SOUTHERN NEVADA CORRECTIONAL CENTER & JEAN CONSERVATION
CAMP, CLARK
3 PRISON ROAD, JEAN, NV 89070
LATITUDE: 35.769167, LONGITUDE: -115.322778
TOWNSHIP: 25 S, RANGE: 59 E, SECTION: 13

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	POND #1	External Outfall		35.771757	-115.322929	GROUNDWATER
002	POND #2	External Outfall		35.770925	-115.322881	GROUNDWATER
003	POND #3	External Outfall		35.769889	-115.322908	GROUNDWATER
004	POND #4	External Outfall		35.768978	-115.323129	GROUNDWATER
005	EFFLUENT	External Outfall		35.771099	-115.324059	GROUNDWATER
006	CONNECTION TO NS0087006	External Outfall		35.772215	-115.322267	GROUNDWATER
INF	INFLUENT	Internal Outfall		35.772232	-115.322049	GROUNDWATER
SUM	TOTAL OF OUTFALLS 005 & 006	Sum		35.772215	-115.322267	GROUNDWATER

Permit History/Description of Proposed Action

The Permittee, Nevada Department of Corrections, has applied for the renewal of groundwater discharge permit NS0080002 for the Southern Nevada Correctional Center and Jean Conservation Camp wastewater treatment facility (WWTF), which are co-located at 3 Prison Rd, Jean, Clark County, Nevada. The Permittee proposes to continue to discharge secondary treated wastewater to groundwater of the State. The permit was last issued on 10/8/2012 and expired on 10/7/2017. The permit has been administratively continued since.

Facility Overview

Influent wastewater first passes through a grinder unit before flowing to a Parshall flume with an ultrasonic flow meter. Treatment consists of four HDPE-lined ponds, operated in parallel pairs of primary ponds (Pond #1 and Pond #3, each 1.76 acres) and secondary ponds (Pond #2 and Pond #4, 1.76 and 1.3 acres, respectively). Ponds #1 and #3 are each aerated, while Ponds #2 and #4 are facultative. The treated wastewater can be discharged to four rapid infiltration basins (RIBs); however, a 1/2-mile-long force-main was installed to transport the secondary treated wastewater to the Terrible's WWTF, which is permitted under permit NS0087006. During the past five years, the influent flow has been too low to discharge into the RIBs or into the Terrible's connection, rather it has been evaporating from Ponds #2 and #4. Groundwater

monitoring wells are not installed at this site due to the groundwater depth in excess of 200 ft. below ground surface. The depth to groundwater in Jean has been previously reported as 365 ft. below ground surface. The nearest domestic drinking water well is located upgradient of the ponds and is operated by the Las Vegas Valley Water District. This well supplies potable water to the correctional center and conservation camp.

Outfall Summary

Outfall INF - Influent

Outfall 001 - Pond #1

Outfall 002 - Pond #2

Outfall 003 - Pond #3

Outfall 004 - Pond #4

Outfall 005 - Effluent to RIBs

Outfall 006 - Connection to NS0087006 (Terrible's WWTF)

Outfall SUM - Total of Outfalls 005 and 006

Facility Upgrades since last issued permit

There have been no facility upgrades since the permit was last issued.

Solids Handling

Solids are removed from the grinder vault and treatment ponds and disposed of in accordance with applicable rules and regulations.

Effluent Management and Reuse

The treated effluent is not currently reused as reclaimed water at this facility, though the treated effluent that flows to Terrible's WWTF for further treatment can be used as reclaimed water as permitted under permit NS0087006.

Design Flow (and basis) and Measurement & Current Capacity

The permit has a designed treatment capacity of 0.144 million gallons per day (MGD) for a 30-day average and 0.216 MGD for a daily maximum. The average flow from 2019 through July 2024 was 0.02 MGD.

Pretreatment Program

The facility does not meet federal Environmental Protection Agency's (EPA) guidelines requiring them to have a pretreatment program.

Operations & Maintenance (O&M) Manual status

The Permittee will need to submit an updated O&M Manual by July 28, 2025.

Effluent Characterization

Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from the years 2019 to 2024, was reviewed as part of this permit renewal process. The influent flow has not been high enough to cause Ponds #2 and #4 to discharge to the RIBs or to Terrible's WWTF before it evaporates; therefore, there is no effluent data to characterize.

Pollutants of Concern

Pollutants of concern are any pollutant, or parameters, that are believed to be present in the discharge and could affect or alter the physical, chemical, or biological conditions of the receiving water. Common pollutants of concern for wastewater treatment plants that use waste stabilization ponds include biochemical oxygen demand (BOD5), total suspended solids (TSS), and pH.

Receiving Water

The receiving water for the treated effluent is groundwater of the State via percolation in four RIBs. The depth to groundwater in Jean has been reported to be 365 ft. below ground surface.

Compliance History

There were no discharge discrepancies noted during the previous permit term.

Proposed Effluent Limitations

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

WWTP Discharge Limitations Table for Sample Location 005 (Effluent) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	005	Continuous	METER
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	005	Continuous	METER

WWTP Discharge Limitations Table for Sample Location 005 (Effluent) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
pH, maximum	Daily Maximum		<= 9.0 Standard Units (SU)	Effluent Gross	005	Quarterly	DISCRT
pH, minimum	Daily Minimum		>= 6.0 Standard Units (SU)	Effluent Gross	005	Quarterly	DISCRT
Solids, total suspended	Quarterly Average		<= 90 Milligrams per Liter (mg/L)	Effluent Gross	005	Quarterly	DISCRT
Solids, suspended percent removal	Quarterly Minimum ^[1]		>= 65 Percent (%)	Effluent Gross	005	Quarterly	DISCRT
BOD, 5-day	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	005	Quarterly	DISCRT
BOD, 5-day	Quarterly Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	005	Quarterly	DISCRT
BOD, 5-day, percent removal	Quarterly Minimum ^[1]		>= 85 Percent (%)	Effluent Gross	005	Quarterly	DISCRT

Notes (WWTP Discharge Limitations Table):

1. Quarterly Average Minimum

WWTP Discharge Limitations Table for Sample Location 006 (Connection To Ns0087006) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	006	Continuous	METER
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	006	Continuous	METER

WWTP Discharge Limitations Table for Sample Location Inf (Influent) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Daily Maximum	<= 0.216 Million Gallons per Day (Mgal/d)		Raw Sewage Influent	INF	Continuous	METER
Flow rate	30 Day Average	<= 0.144 Million Gallons per Day (Mgal/d)		Raw Sewage Influent	INF	Continuous	METER

WWTP Discharge Limitations Table for Sample Location Inf (Influent) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
BOD, 5-day	Daily Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	INF	Quarterly	DISCRT
Solids, total suspended	Daily Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	INF	Quarterly	DISCRT
Flow rate	Rolling Average ^[1]	M&R Million Gallons per Day (Mgal/d)		Raw Sewage Influent	INF	Continuous	CALCTD

Notes (WWTP Discharge Limitations Table):

1. The rolling average flow rate shall be calculated using the 12 previous months' 30-day average flow rates.

WWTP Discharge Limitations Table for Sample Location Sum (Sum Of Outfalls 005 And 006) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	SUM	Continuous	METER
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	SUM	Continuous	METER

Ponds / Rapid Infiltration Basins for Sample Location 001 (Pond #1) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Freeboard	Daily Minimum	>= 3 Feet (ft)		Effluent Gross	001	Quarterly	VISUAL

Ponds / Rapid Infiltration Basins for Sample Location 002 (Pond #2) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Freeboard	Daily Minimum	>= 3 Feet (ft)		Effluent Gross	002	Quarterly	VISUAL

Ponds / Rapid Infiltration Basins for Sample Location 003 (Pond #3) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Freeboard	Daily Minimum	>= 3 Feet (ft)		Effluent Gross	003	Quarterly	VISUAL

Ponds / Rapid Infiltration Basins for Sample Location 004 (Pond #4) To Be Reported Quarterly

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Freeboard	Daily Minimum	>= 3 Feet (ft)		Effluent Gross	004	Quarterly	VISUAL

Summary of Changes From Previous Permit

The previous Outfall 001 was renamed Outfall 005.

The previous Outfall 002 was renamed Outfall 006.

New outfalls, Outfall 001, 002, 003, and 004 have been added. These represent treatment ponds #1, #2, #3, and #4, respectively. They each have freeboard monitoring requirements.

The requirement to sample the influent for BOD5 and TSS has been added.

The effluent limit of greater than 85% removal of BOD5 has been added to conform to secondary treatment standards.

The effluent limit of greater than 65% removal of TSS has been added to conform to the equivalent to secondary treatment standards.

Technology Based Effluent Limitations

Technology based effluent limitations (TBELs) are required as promulgated by the United States (U.S) EPA for Publicly Owned Treatment Works (POTWs). The following limits are based on the secondary treatment standards and equivalent to secondary treatment standards as allowed by the Code of Federal Regulation (CFR) Title 40, Section 133, and which has been adopted by the state of Nevada:

- BOD5 - The daily maximum is limited to 45 mg/L; the quarterly average is limited to 30 mg/L; and the percent removal is limited to greater than 85%.
- TSS - The quarterly average is limited to 90 mg/L and the percent removal is limited to greater than 65%.
- pH - pH is limited to a daily maximum of 9.0 S.U. and a daily minimum of 6.0 S.U.

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 effluent limitations are not applicable to this permit.

Anti-backsliding

To prevent backsliding, effluent limitations in this permit are as stringent as those in the previous permit, except where they have been updated to conform to standards.

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 NRS 445A.520 and NRS 445A.565 and is consistent with the federal antidegradation policy found at Title 40 in the 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. There are currently no specific water quality standards that have been formally adopted by the State for groundwater, however, data reviewed during the renewal process does not indicate the potential for degradation of the groundwater from the effluent discharged within the compliance limits of the proposed permit.

Special Conditions

There are no special conditions for this permit.

SA – Special Approvals / Conditions Table

There are no Special Approval / Condition items

Discharges From Future Outfalls/ Planned Facility Changes

There are no planned future outfalls or planned facility changes.

Corrective Action Sites

There are no Bureau of Corrective Actions remediation sites within one mile of this facility.

Wellhead Protection Program

The facility is not located within a Wellhead Protection Area, which represents an approximate 10-year capture zone of a well, or within a Drinking Water Protection Area, which is defined by a 3,000-foot radius around a PWS well.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit two copies (one electronic and one hard copy) of an updated Operation and Maintenance (O&M) Manual to the Division for review and approval. The manual shall be prepared in accordance with the Division's WTS-2 guidance document: Minimum Information Required for an Operation and Maintenance Manual.	7/28/2025
2	Staff gauges shall be installed in Ponds 1, 2, 3, and 4.	7/28/2025

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	7/28/2025
2	Annual Report	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. **3/21/2025**, 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: **Peter Lassaline**

Date: **2/11/2025**

Title: **Environmental Scientist**