

FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: NEVADA DEPARTMENT OF TRANSPORTATION
4615 W SUNSET ROAD
LAS VEGAS, NV 89118

Permit Number: NS2021504

Permit Type: GROUNDWATER DISCHARGE

Designation: GROUNDWATER

New/Existing: EXISTING

Location: NEVADA DEPARTMENT OF TRANSPORTATION - PANACA, LINCOLN
SR 319 MILEPOST 2.00, PANACA, NV 89042
LATITUDE: 37.790620, LONGITUDE: -114.375870
TOWNSHIP: T2S, RANGE: R68E, SECTION: S09N

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	DECANT BASIN	External Outfall		37.791306	-114.376667	GROUND WATERS OF THE STATE

Permit History/Description of Proposed Action

The Permittee Nevada Department of Transportation (NDOT), operator of the Nevada Department of Transportation Panaca Maintenance Station (NDOT Panaca MS), located at 1703 Main St, in Panaca, Nevada is renewing their Groundwater Discharge Permit. Permittee is authorized to discharge wastewater, collected from culverts and roadway utility drainage areas, via their hydro service equipment trucks, into the concrete-lined decant basin located at their Panaca maintenance station. The hydro cleaning VAC trucks use a water-and-suction-reclaim system to clean culverts and roadway utility drainage areas that are a part of the NDOT highway maintenance system. The truck reclaims the water and debris through suction into a holding tank, then transported and discharged into the decant basin. The waste debris are removed from the decant basin and transported to a landfill for disposal.

This permit was first issued on November 1, 2021, and expired on October 31, 2026.

Facility Overview

The NDOT Panaca MS is a small fenced and gated yard with a shop building, support storage structures within a parking area comprised of gravel and asphalt. The decant basin is designed to store up to 50,000 gallons of VAC truck discharge water per day. Only NDOT employees and authorized contractors have access to or utilize the facility.

The decant basin is sized to accommodate the maximum volume of wastewater that can be received from the VAC truck collections plus a 25-year storm event. This amount is calculated with the planned

maintenance activity per the regional area served plus the recommended precipitation events calculated for the area. The calculated maximum volume includes the planned maintenance and schedule (to not coincide with the area's "wet season") needed for the decant basin upkeep.

The permit is for the decant basin that is 22 feet wide, 32 feet long with a sloping depth from two (2) feet to six (6) feet. The decant basin was constructed with reinforced concrete over a rock aggregate base and compacted granular backfill. The concrete was poured in place with water-stop embedded gaskets at the cold joints. The construction of decant basin functions for evaporative loss of stored water with minimal loss to the ground below with a design life span of 25 years. Construction with poured in place concrete and construction joints set to restrict water, the structure is expected to meet the evaporation method goals of the decant basin. Construction of the basin was completed in 2019.

The NDOT Panaca MS, Operation and Maintenance (O&M) Manual was last reviewed and approved on January 13, 2022. The Technical, Compliance, and Enforcement Branch of the Bureau of Water Pollution Control require O&M Manuals to be updated every ten (10) years and being due on or before January 13, 2032.

Outfall Summary

Outfall 001: Decant Basin, an External Outfall that monitors and reports Profile 1 contaminants, Total Petroleum Hydrocarbons (TPH), Oil and Grease, Freeboard Height, limited to greater than or equal to 12 inches, Volume, total, measured in gallons, Daily Volume measured in gallons per day and is limited to less than 50,000 gallons per day.

Effluent Characterization

Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from January 2020 to December 2025, was reviewed as part of this permit renewal process.

The averages for the reported values for the 5-year period are listed below:

Outfall 001 (Decant Basin):

There was insufficient flow to sample.

Discharge Monitoring Reports (DMRs) shall be received by the 28th day of the month following the third month of each quarter (reporting period). Quarterly and annual reporting periods are based on the standard annual cycle, January 1 through December 31st. Annual reports should be completed in the fourth quarter whenever possible. The reports shall be submitted electronically through the Nevada NetDMR system.

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. Pollutants of concern include Profile 1 contaminants, TPH, and Oil and Grease.

Receiving Water

The receiving water is groundwater of the State via percolation. Monitoring wells are not required at this time due to the minimal amount of seepage of water expected to pass through the concrete basin. Groundwater is found at a depth ranging from approximately 9 feet to 50 feet below ground surface.

Compliance History

The Permittee is currently in compliance with the permit.

Proposed Effluent Limitations

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

Ponds / Rapid Infiltration Basins for Decant Basin 001 (External Outfall) To Be Reported Monthly^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Volume, total	Monthly Total	M&R Gallons per Day (gal/d)		Effluent Gross (Supplementary)	001	Monthly	CALCTD
Freeboard	Daily Minimum	>= 12 Inches (in)		Effluent Gross	001	Monthly	VISUAL
Volume, total	Daily Maximum	<= 50000 Gallons per Day (gal/d)		Effluent Gross	001	Once Per Batch ^[1]	ESTIMA

Notes (Ponds / Rapid Infiltration Basins):

1. For purposes of reporting, each delivery into the basin is considered a batch.

Ponds / Rapid Infiltration Basins for Decant Basin 001 (External Outfall) To Be Reported Quarterly^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Hydrocarbons, total petroleum	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Oil & grease	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT

Notes (Ponds / Rapid Infiltration Basins):

1. When the sampling conditions cannot be met in a full quarter, the Permittee will note conditions as such for the scheduled reporting.

Ponds / Rapid Infiltration Basins for Decant Basin 001 (External Outfall) To Be Reported Annually

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Alkalinity, bicarbonate (as CaCO ₃)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Alkalinity, total (as CaCO ₃)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Aluminum, dissolved (as Al)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Antimony, dissolved (as Sb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Arsenic, dissolved (as As)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Barium, dissolved (as Ba)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Beryllium, dissolved (as Be)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Cadmium, dissolved (as Cd)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Calcium, dissolved (as Ca)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Chromium, dissolved (as Cr)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
			M&R				

Ponds / Rapid Infiltration Basins for Decant Basin 001 (External Outfall) To Be Reported Annually

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Copper, dissolved (as Cu)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Fluoride, total (as F)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Iron, dissolved (as Fe)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Lead, dissolved (as Pb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Magnesium, dissolved (as Mg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Manganese, dissolved (as Mn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Mercury, dissolved (as Hg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Nitrite plus nitrate total 1 det. (as N)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
pH, maximum	Daily Maximum		<= 9.0 Standard Units (SU)	Effluent Gross	001	Annual	DISCRT
pH, minimum	Daily Minimum		>= 6.5 Standard Units (SU)	Effluent Gross	001	Annual	DISCRT
Potassium, dissolved (as K)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
			M&R				

Ponds / Rapid Infiltration Basins for Decant Basin 001 (External Outfall) To Be Reported Annually

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Selenium, dissolved [as Se]	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Silver, dissolved (as Ag)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Sodium, dissolved (as Na)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Sulfate, total (as SO ₄)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Thallium, dissolved (as Tl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Uranium, natural, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Cyanide, weak acid, dissociable	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Zinc, dissolved (as Zn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT

Summary of Changes From Previous Permit

The Profile 1 list was changed to reflect the Dissolved Profile 1 Pollutants, not listed on the 2021 permit, with a "Daily Maximum" Base, an "M&R Milligrams per Liter (mg/L)" Concentration, an "Effluent Gross" Monitoring Location, an "001" Sample Location, an "Annual" Measurement Frequency and a "DisCRT" Sample Type.

The Parameter "Reservoir Storage" has been changed to "Volume, total", and the monitoring frequency has been changed from "Effluent Gross" to "Effluent Gross Supplementary" for clarity. This change does not change the way the parameter is reported.

Technology Based Effluent Limitations

Technology based effluent limitations are not applicable to this permit.

Water Quality Based Effluent Limitations

Water quality based effluent limitations are not applicable to this permit.

Basis for Effluent Limitations

There are currently no specific water quality standards that have been formally adopted by the State for groundwater. However, the Division has the discretion to implement effluent limitations outside water quality standards per NAC 445A.243, which states, "In establishing an effluent limitation to carry out the policy of this State set forth in Nevada Revised Statutes (NRS) 445A.305, consideration must be given to, but is not limited by, the following: ... (2) the need for standards that specify by chemical, physical, biological or other characteristics the extent to which pollution by various substances will not be tolerated." The constituents listed in Profile 1 have been vetted by the Division and have been included in groundwater discharge permits for many years as a means of regulating groundwater quality. Per NRS 445A.490, "No permit may be issued which authorizes any discharge or injection of fluids through a well into any waters of the State: (3) which would result in the degradation of existing or potential underground sources of drinking water."

Permittee is authorized to discharge wastewater as collected by the hydro service equipment trucks into the decant basin.

Freeboard daily minimum value is greater than or equal to 12 inches.

The total volume of discharge to the decant basin is limited to less than or equal to 50,000 gallons per day, due to the designed capacity of the basin.

Some wastewater processes can increase or decrease wastewater pH; therefore, annually monitoring for pH is included in assessing compliance with the pH being limited to less than or equal to 9.0 standard units (S.U.), and greater than or equal to 6.5 S.U.

Industrial, manufacturing, and construction sites generate runoff that transports toxic TPH, Oil and Grease. Routine sampling ensures facilities manage these discharges. TPH discharge is expected due to nature of the discharge wastewater.

The requirement to monitor the effluent for Profile 1 pollutants once per year is included to evaluate the quality of the effluent and determine whether the effluent has potential to impact the receiving water.

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 potential discharges to groundwater, and not surface water, the new antidegradation rule is not applicable.

Special Conditions

See the Special Approvals/Conditions table below. Special conditions are outlined per the special conditions table.

SA – Special Approvals / Conditions Table

Item #	Description
1	Annual sampling by the Permittee will build a data record for the decant basin. The annual testing is preferred during the fourth quarter for reporting. Given the highly variable NDOT water collection schedule for the facility, this annual testing requirement may occur at the Permittee's discretion for appropriate sampling conditions when and if such conditions do not occur in the fourth quarter.
2	Monthly reporting will include the following information: date, time, quantity of water delivered per batch/truck, region(s) where hydro maintenance occurred per batch/truck, source water used to fill truck tank, environmental conditions including precipitation events, wildlife/fowl impacts, daily temperatures with estimated rate of evaporation from the basin, plus record events of effluent or debris removal in the concurrent monthly DMR.
3	Permittee is responsible to ensure hazardous waste does not enter the holding basin, and solid waste and/or debris are fully removed per the O&M Manual. Permittee shall comply with hazardous waste regulations on all wastes generated associated with this permit. Compliance will be as noted in the permit body and per Nevada State regulation.
4	Permittee will include copies of any profile testing of solid material waste removed from the decant basin and transferred to a landfill location when and where profile testing occurs. Profile testing report copies will be included with DMR submittals concurrent with month testing occurred.
5	Sampling will be conducted when: 1) there is sufficient water in the basin to obtain a representative sample of the water held without debris, 2) samples shall be obtained from the body of basin water and not directly from the truck discharge location so the sample represents a mix of truck discharges and not an individual truck decant delivery, 3) sampling shall occur from the deepest end of the basin, 4) sampling shall not occur during precipitation events. When the sampling conditions cannot be met in a full quarter, the Permittee will note conditions as such for the scheduled reporting.

Discharges From Future Outfalls/ Planned Facility Changes

The Permittee does not anticipate discharges from future outfalls or changes to the facility.

Corrective Action Sites

There are no active Bureau of Corrective Actions sites located within a one-mile radius of the discharge location.

Wellhead Protection Program

The outfall 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 public water system (PWS) well.

Schedule of Compliance:

SOC – Schedule of Compliance Table

There are no Schedule of Compliance items

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly Report	Quarterly	1/28/2027
2	Annual Report	Annually	1/28/2027

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. **10/15/2026**, 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: **9/14/2026**

Title: **Environmental Scientist 3**