NEVADA DIVISION OF
ENVIRONMENTAL
PROTECTION

A division of the
Nevada Department of Conservation & Natural Resources

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FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: CLARK COUNTY WATER RECLAMATION DISTRICT

5857 E FLAMINGO RD
LAS VEGAS, NV 89122

Permit Number: NS2001509

Permit Type: GROUNDWATER DISCHARGE

Designation: GROUNDWATER

New/Existing: EXISTING

Location: DESERT BREEZE WATER RESOURCE CENTER (DBWRC), CLARK
8320 W. FLAMINGO ROAD, LAS VEGAS, NV 89149
LATITUDE: 36.114722, LONGITUDE: -115.272222
TOWNSHIP: 21S, RANGE: 60E, SECTION: 16

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	HEADWORKS WEIRS	Influent Structure		36.115705	-115.275456	GROUNDWATER OF THE STATE
002	SAMPLING POINT BETWEEN UV SYSTEM AND DISCHARGE TO WET WELL/RESERVOIR	Internal Outfall		36.115714	-115.273108	GROUNDWATER OF THE STATE

Permit History/Description of Proposed Action

The Permittee, Clark County Water Reclamation District, operates the Desert Breeze Water Resource Center (DBWRC), located at 8320 W. Flamingo Road, Las Vegas, Nevada has applied to renew their discharge permit NS2001509. The DBWRC produces tertiary treated Category A reclaimed water, pursuant to Nevada Administrative Code (NAC) 445A.2762 for beneficial reuse which may be distributed to golf courses, parks, and other reuse application sites for irrigation.

This permit was first issued on January 29, 2002. The most recent permit was issued on January 22, 2013, and expired on January 21, 2018; the permit has been administratively continued since.

Facility Overview

The DBWRC facility utilized a full treatment process including preliminary treatment with bar screens, grit removal and flow equalization, secondary treatment with activated sludge and secondary clarifiers, and tertiary treatment with traveling bridge filters and ultraviolet (UV) treatmeant. The plant provided Category A reclaimed water having a total coliform 30-day maximum geometric mean of 2.2 colony forming units (CFU), and a daily maximum of 23 CFU, to golf courses and parks. Sludge previously generated by the facility was discharged to the Clark County Water Reclamation District (CCWRD) sanitary sewer for treatment at the CCWRD Flamingo Water Resource Facility.

The DBWRC has not been in operation since January 2018. Its former reuse sites now use potable water for irrigation. Although the plant no longer receives an influent and does not generate an effluent the CCWRD will maintain its discharge permit until a decision is made regarding the future of the plant.

Outfall Summary
Outfall 001 (Headworks Weirs): an internal outfall that monitors Flow Rate in million gallons per day (MGD) for both a daily maximum and a 30-day average, Biological Oxygen Demand 5-Day (BOD-5) daily maximum, 30-day average, Total suspended solids (TSS) daily maximum, and 30-day average.

Outfall 002 (Sampling Point Between UV System and Discharge to Wet Well/Reservoir): an external Outfall that monitors Flow Rate in million gallons per day (MGD), Biological Oxygen Demand 5-Day (BOD-5) daily maximum, 30-day average, and percent removal, Coliform total, daily maximum, and 30-day geometric mean, Nitrogen total daily maximum and 30-day average, Total suspended solids (TSS) daily maximum, 30-day average, and percent removal, and the weekly maximum and minimum pH.

Facility Upgrades since last issued permit
There have been no upgrades to the DBWRC since the last permit.

Solids Handling
Waste Activated Sludge (WAS) and grit was discharged to a center sump and pumped to the sanitary sewer system for conveyance to the CCWRD Flamingo WRF.

Effluent Management and Reuse
The DBWRC previously sent Category A reuse water to golf courses and parks; however, the facility does not currently receive water from or discharge water to external sources.

Design Flow (and basis) and Measurement & Current Capacity
The DBWRC was designed to treat five (5) MGD with a provision to expand to 10 MGD.

Pretreatment Program
The DBWRC does not have a pretreatment program.

Operations & Maintenance (O&M) Manual status
The DBWRC's Operation and Maintenance (O&M) Manual was last reviewed and approved in 2014, The Technical, Compliance, and Enforcement Branch of the Bureau of Water Pollution Control requires O&M Manuals to be updated every ten (10) years. An Operation and Maintenance (O&M) manual Addendums Submittal Letter with a copy of the last O&M may be sent in place of an updated O&M manual due to the condition of the facility. An updated O&M manual is require prior to any discharge from the facility

Effluent Characterization
Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from 2020 to 2026, was reviewed as part of this permit renewal process.

The DBWRC reported no discharge for both Outfalls 001 and 002.

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 are BOD5, Chloride, Nitrogen, pH, Fecal Coliform, along with potential inorganic chemicals and analytes.

Receiving Water
The receiving water is groundwater of the State. The depth to groundwater in this area is approximately between 200 and 500 feet ground surface (bgs) and impacts from effluent reuse are not expected.

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:

WWTP Discharge Limitations Table for Sample Location 001 (Influent Structure) 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)		Raw Sewage Influent	001	Continuous	METER
Flow rate	30 Day Average	<= 4.9 Million Gallons per Day (Mgal/d)		Raw Sewage Influent	001	Continuous	METER
BOD, 5-day[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001	Three Per Week	COMPOS
BOD, 5-day[1]	30 Day Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001	Three Per Week	COMPOS
Solids, total suspended[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001	Three Per Week	COMPOS
Solids, total suspended[1]	30 Day Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001	Three Per Week	COMPOS

Notes (WWTP Discharge Limitations Table):

1. Sampling for BOD, 5-day and total suspended solids (TSS) should be done concurrently when the influent is sampled to determine exact percentages of removal achieved.

WWTP Discharge Limitations Table for Sample Location 002 (Effluent Outfall) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
BOD, 5-day[1]	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	002	Three Per Week	COMPOS
BOD, 5-day[1]	30 Day Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	002	Three Per Week	COMPOS
BOD, 5-day, percent removal[2]	Monthly Average Minimum		>= 85 Percent (%)	Effluent Gross	002	Three Per Week	CALCTD
Coliform, total general	Daily Maximum		<= 23 Most Probable Number per 100ml (MPN/100mL)	Effluent Gross	002	Three Per Week	DISCRT
Coliform, total general	30 Day Geometric Mean		<= 2.2 Most Probable Number per 100ml (MPN/100mL)	Effluent Gross	002	Three Per Week	DISCRT
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Weekly	COMPOS
Nitrogen, total	30 Day Average		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Weekly	COMPOS
Solids, total suspended	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	002	Three Per Week	COMPOS
Solids, total suspended	30 Day Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	002	Three Per Week	COMPOS
Solids, suspended percent removal[2]	Monthly Average Minimum		>= 85 Percent (%)	Effluent Gross	002	Three Per Week	CALCTD
pH, minimum	Weekly Minimum		>= 6 Standard Units (SU)	Effluent Gross	002	Three Per Week	DISCRT
pH, maximum	Weekly Maximum		<= 9 Standard Units (SU)	Effluent Gross	002	Three Per Week	DISCRT
Flow, total	Daily Maximum	M&R Million Gallons (Mgal)		Effluent Gross	002	Continuous	METER
		M&R					

WWTP Discharge Limitations Table for Sample Location 002 (Effluent Outfall) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow, total	30 Day Average	Million Gallons (Mgal)		Effluent Gross	002	Continuous	METER

Notes (WWTP Discharge Limitations Table):

1. Measurements derived from TOC analysis, using approved EPA methods, to predict BOD values
2. Sampling for BOD, 5-day and total suspended solids (TSS) should be done concurrently when the influent is sampled to determine exact percentages of removal achieved.

WWTP Discharge Limitations Table for Sample Location 002 (Effluent Outfall) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Alkalinity, bicarbonate (as CaCO3)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Alkalinity, total (as CaCO3)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Aluminum, dissolved (as Al)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Antimony, dissolved (as Sb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Arsenic, dissolved (as As)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Barium, dissolved (as Ba)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Beryllium, dissolved (as Be)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Cadmium, dissolved (as Cd)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Calcium, dissolved (as Ca)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Chromium, dissolved (as Cr)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
			M&R				

WWTP Discharge Limitations Table for Sample Location 002 (Effluent Outfall) To Be Reported Once During The Permit Term

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	002	Once Per Permit Term	DISCRT
Fluoride, total (as F)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Iron, dissolved (as Fe)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Lead, dissolved (as Pb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Magnesium, dissolved (as Mg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Manganese, dissolved (as Mn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Mercury, dissolved (as Hg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Nitrite plus nitrate total 1 det. (as N)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Potassium, dissolved (as K)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Selenium, dissolved [as Se]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Silver, dissolved (as Ag)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
			M&R				

WWTP Discharge Limitations Table for Sample Location 002 (Effluent Outfall) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Sodium, dissolved (as Na)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Sulfate, total (as SO4)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Thallium, dissolved (as Tl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Cyanide, free available	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Zinc, dissolved (as Zn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT

Notes (WWTP Discharge Limitations Table):

1. Sampling and analysis shall be conducted on dissolved fraction.

Summary of Changes From Previous Permit
Added - to Outfall 002

BOD, 5-day, percent removal, being a "Monthly Average Minimum" base, a "Greater than or equal to 85 Percent (%)", an "Effluent Gross" monitoring location, a "Monthly when discharging" measurement frequency, and a "Calctd" sample type.

TSS, percent removal, being a "Monthly Average Minimum" base, a "Greater than or equal to 85 Percent (%)", an "Effluent Gross" monitoring location, a "Monthly when discharging" measurement frequency, and a "Calctd" sample type.

Along with the footnote: Sampling for BOD, 5-day and TSS should be done concurrently when the influent is sampled to determine exact percentages of removal achieved.

Pollutants of Concern were added to the Sampling Point Between UV System and Discharge to Wet Well/Reservoir for Outfall 002.

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 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.

U.S. EPA published federal secondary treatment standards at 40 CFR 133, based on an evaluation of performance data for POTWs practicing a combination of physical and biological treatment. Performance is measured by monitoring biodegradable organics and suspended solids in the effluent, and the ability to maintain pH. Federal secondary treatment standards are defined under 40 CFR 133 for maximum BOD, 5-day as a 30-day average of 30 mg/L and a 7-day average of 45 mg/L and for maximum TSS as a 30-day average of 30 mg/L and a 7-day average of 45 mg/L. In addition to describing the minimum levels of effluent quality attainable by secondary treatment, 40 CFR 133.102 states that the 30-day average percent removal of BOD, 5-day and TSS shall not be less than 85%. The Division has adopted these standards for groundwater dischargers and applied the 7-day average thresholds as daily maximum effluent limits for BOD, 5-day and TSS.

The following performance standards for POTWs with secondary treatment standards have been included in the permit:

BOD, 5-day: 30day average limit: <= 30 mg/L; Daily maximum limit: <= 45 mg/L.

TSS: 30-day average limit: <= 30 mg/L; Daily maximum limit: <= 45 mg/L.

pH: Daily Maximum: <= 9.0 Standard Units pH:Daily Minimum >=6.0 Standard Units

Limits Based on Secondary Treatment Standards:

BOD, 5-day Percent removal: >= 85 percent.

TSS: Percent removal: >= 85 percent.

Limits Based on Facility's Design Criteria Review:

30-day average flow rate for influent is limited to <= M&R MGD.

Daily maximum flow rate for influent is limited to <= 4.9 MGD.

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.

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 pollutants of Concern 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.”

The requirement to monitor the effluent for pollutants of concern once per permit term is included to evaluate the quality of the effluent and determine whether the effluent has potential to impact the receiving

water.

The flow is limited to 4.9 MGD by request of the Permittee.

The requirement to sample the effluent for fecal coliform prior to irrigation is for the protection of the environment and human health. The proposed permit maintains effluent limits for nitrogen for the protection of the environment and human health. The proposed permit maintains effluent limits for fecal coliform in accordance with NAC 445A.276.

Influent and Effluent Monitoring Requirements:

Tri-weekly influent and effluent monitoring for BOD5 and TSS are included to assess the treatment performance of DBWRC. A tri-weekly sampling frequency for BOD5 and TSS is sufficient for determining compliance with the applicable effluent limitations. The recent removal requirements for BOD, 5-day and TSS are established in the permit as monthly average minimums of 85%, based on secondary treatment standards.

Some wastewater treatment processes can increase or decrease wastewater pH; therefore, weekly monitoring for pH is included in assessing compliance with effluent limits of 6.0 S.U. as a daily minimum and 9.0 S.U. as a daily maximum.

Monitoring is required to ensure that the treatment plant capacity is not exceeded, to assess the quality of the effluent being discharged, to monitor the amount of treated effluent delivered to the approved reuse sites, and to monitor groundwater quality.

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 antidegradation rule is not applicable.

Special Conditions
See the Special Approvals/Conditions table below.

SA – Special Approvals / Conditions Table

Item #	Description
1	The Permittee shall notify the Division of any new facility/reuse site that is to receive effluent within 14 days of effluent delivery to that site. Prior to effluent delivery each site shall have a discharge permit, reclaimed Water Management Plan.
2	With Division approval, the Permittee may add reuse sites to this permit as a minor modification. Prior to effluent delivery each site shall have a discharge permit, reclaimed Water Management Plan. Fees are subject to change as a result of additional discharge flow, in accordance with NAC 445A.232.
3	Section C.9. is not applicable and any additional solids, sludge, filter backwash or other pollutant management shall be addressed under the O&M Manual and/or through the acquiring of the applicable permit.
4	Item C.16.8 is not applicable to this permit as the site is not subject to a waste load allocation.

Item #	Description
5	An Operation and Maintenance (O&M) manual Addendums Submittal Letter with a copy of the last O&M may be sent in place of an updated O&M manual due to the condition of the facility. An updated O&M manual is require prior to any discharge from the facility.

Discharges From Future Outfalls/ Planned Facility Changes
The Permittee does not anticipate discharges from future outfalls or changes to the facility.

The Permittee may request a modification to the permit to add any additional reuse site. All sites that receive reclaimed water from this facility should be listed as an outfall in this permit; hence the need for modifications to add additional sites.

Corrective Action Sites
There is one (1) active Bureau of Corrective Actions (BCA) remediation site located within a one-mile radius of the discharge location. BCA remediation site 8-001817 is located at 4150 S Durango Dr. Las Vegas NV, the site is contaminated by petroleum hydrocarbons. BCA does not expect this discharge to impact the BCA remediation site.

Wellhead Protection Program
The outfalls are 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	Monthly 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. **12/6/2026,** 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: **8/14/2026**
Title: **Environmental Scientist 3**