



FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: CLARK COUNTY WATER RECLAMATION DISTRICT
5857 EAST FLAMINGO ROAD
LAS VEGAS, NV - 89122

Permit Number: NS0040038

Location: SEARCHLIGHT WASTEWATER TREATMENT FACILITY, CLARK
0.75 MILES SOUTHEAST OF THE TOWN OF SEARCHLIGHT, SEARCHLIGHT,
NV - 89046
LATITUDE: 35.457587, LONGITUDE: -114.908876
TOWNSHIP: 29 S, RANGE: 63 E, SECTION: 2 MDB&M

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Outfall City	Outfall State	Outfall Zip	Outfall County	Latitude	Longitude	Receiving Water
001	POND #1	Internal Outfall		SEARCHLIGHT	NV	89046	CLARK	35.457199	-114.908436	GROUNDWATER
002	POND #2	Internal Outfall		SEARCHLIGHT	NV	89046	CLARK	35.457170	-114.907464	GROUNDWATER
003	POND #3	Internal Outfall		SEARCHLIGHT	NV	89046	CLARK	35.456320	-114.908334	GROUNDWATER
004	POND #4	Internal Outfall		SEARCHLIGHT	NV	89046	CLARK	35.456343	-114.907188	GROUNDWATER
005	POND #5	Internal Outfall		SEARCHLIGHT	NV	89046	CLARK	35.455533	-114.908115	GROUNDWATER
EFF	EFFLUENT TO POND #5	External Outfall		SEARCHLIGHT	NV	89046	CLARK	35.455778	-114.908011	GROUNDWATER
INF	INFLUENT	Intake Structure		SEARCHLIGHT	NV	89046	CLARK	35.457602	-114.908597	GROUNDWATER

General:

The Permittee has applied for renewal of existing permit NS0040038. The Searchlight Wastewater Treatment Facility (WWTF), owned and operated by the Clark County Water Reclamation District (CCWRD), provides sewer service to 198 residential and 21 commercial connections. According to recent documentation from CCWRD, the commercial connections account for approximately 51% of the influent to the WWTF.

The headworks consists of a main lift station, which serves the commercial connections and residences east of US Highway 95. There is a flow meter at the plant to determine total flows to the pond system. A number of residences and businesses on the west side of US highway 95 discharge via a 4-inch gravity line to the lift station.

The WWTF is located approximately 0.75 miles south-southeast of Searchlight. Wastewater is transported to the treatment pond system via an 8-inch line. Primary treatment ponds 1 and 2 are twin 1.2-acre, asphalt-lined facultative ponds operated in series. Effluent from the primary treatment ponds is discharged to two asphalt-lined, 1.8-acre, 3-foot deep aerobic secondary treatment/evaporation ponds, Ponds 3 and 4. During periods of low evaporation, Ponds 3 and 4 discharge to Pond 5, a 2.8-acre percolation basin with Hypalon lined sides and a scarified bottom.

Discharge Characteristics:

Searchlight WWTF discharges secondary-treated domestic and commercial wastewater. In the past, samples have been submitted that were taken from the lined ponds, per the permit. This has caused multiple permit violations; however, this is not indicative of the plant discharging effluent that exceeds the intended effluent limits for effluent being discharged to groundwater. Therefore, this permit will clarify that the samples should be taken from the effluent leaving the final pond going into the infiltration basin, not from the treatment pond itself.

The Permittee is in substantial compliance with the permit.

Receiving Water:

The receiving water is groundwater of the state of Nevada. Reported depth to groundwater in the area near the WWTF is approximately 180 feet below ground surface. The soils underlying the ponds are reported to be impervious caliches and cemented sand and gravel horizons. There are currently no monitoring wells associated with this permit.

Summary of Changes From Previous Permit:

In conformance with similar permits issued by the Division, the influent BOD in pounds per day monitoring requirement has been removed.

In accordance with the request by the Permittee, the minimum freeboard has been reduced from three feet to two feet. Calculations for wind fetch submitted by the permittee show that a freeboard of at least 2 feet will prevent overtopping of the ponds. Freeboard monitoring has been added for each of the four treatment ponds.

At the request of the Permittee, and with approval from NDEP, the option for composite sampling instead of mandatory discrete sampling has been added.

Due to a new permit naming convention at NDEP, Bureau of Water Pollution Control, the permit ID has been changed from NEV40038 to NS0040038. This change does not reflect a change in the type of permit being issued. NEV and NS permits are for discharges to the groundwater of the state of Nevada. These are not to be confused with "NV" permits, which are reserved for NPDES permitting.

Proposed Effluent Limitations:

Because the discharge is to Rapid Infiltration Basins (RIBs), there is no limit on the TDS being discharged; however, this may require an increase in the maintenance required on the RIBs by the Permittee as solids build up and prevent percolation of the effluent into the ground.

WWTP Discharge Limitations Table for Sample Location Eff (External Outfall) To Be Reported Quarterly

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Solids, total suspended	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	EFF	Quarterly	DISCRT ^[1]
BOD, 5-day	Quarterly Maximum		<= 45.0 Milligrams per Liter (mg/L)	Effluent Gross	EFF	Quarterly	DISCRT ^[1]
pH, minimum	Quarterly Minimum		>= 6.0 Standard Units (SU)	Effluent Gross	EFF	Quarterly	DISCRT ^[1]
pH, maximum	Quarterly Maximum		<= 9.0 Standard Units (SU)	Effluent Gross	EFF	Quarterly	DISCRT ^[1]

Notes (WWTP Discharge Limitations Table):

1. Permittee may also submit a composite sample.

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

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Quarterly Average	<= .09 Million Gallons per Day (Mgal/d)		Raw Sewage Influent ^[1]	001	Continuous	METER
Solids, total suspended	Quarterly Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	INF	Quarterly	DISCRT
BOD, 5-day	Quarterly Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	INF	Quarterly	DISCRT

Notes (WWTP Discharge Limitations Table):

1. Palmer Bowlus flume.

Ponds / Rapid Infiltration Basins for Sample Location 001 (Internal Outfall) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Freeboard	Quarterly Minimum		>= 2.0 Feet (ft)	Internal Monitoring Point	001	Quarterly	DISCRT

Ponds / Rapid Infiltration Basins for Sample Location 002 (Internal Outfall) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Freeboard	Quarterly Minimum		>= 2.0 Feet (ft)	Internal Monitoring Point	002	Quarterly	DISCRT

Ponds / Rapid Infiltration Basins for Sample Location 003 (Internal Outfall) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Freeboard	Quarterly Minimum		>= 2.0 Feet (ft)	Internal Monitoring Point	003	Quarterly	DISCRT

Ponds / Rapid Infiltration Basins for Sample Location 004 (Internal Outfall) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Freeboard	Quarterly Minimum		>= 2.0 Feet (ft)	Internal Monitoring Point	004	Quarterly	DISCRT

Rationale for Permit Requirements:

Monitoring and reporting are required to assess the level of treatment being provided by the WWTF and to ensure that groundwaters of the state are not degraded.

Fecal Coliform:

Fecal coliform is not limited or monitored in this permit; therefore, reuse using Searchlight WWTF effluent is not authorized.

Special Conditions:

Because the WWTF is not manned all of the time, the Permittee will be required to keep the O&M Manuals, operators logs, and a copy of this permit at the CCWRD office at the Laughlin Wastewater Reclamation Facility.

The ponds do not have a leak detection system, so section B.PB.13 does not apply to this permit.

SA – Special Approvals / Conditions Table

Item #	Description
1	The Permittee shall keep the O&M Manuals, operator logs, and a copy of this permit at the Laughlin Wastewater Reclamation Facility rather than at the Searchlight Wastewater Treatment Plant.
2	Section B.PB.13 does not apply to this permit.

Reasonable Potential Analysis and Antidegradation Review:

Discharges in accordance with the permit are not anticipated to degrade waters of the state.

Flow:

The flow is limited to 0.090 million gallons per day (MGD), as requested by the Permittee.

Corrective Action Sites:

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

Wellhead Protection Program:

The Searchlight Wastewater Treatment Facility is not within a Drinking Water Protection Area or a Wellhead Protection Area.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit for review two copies of a new Operations and Maintenance (O&M) Manual, prepared in accordance with the Division's WTS-2 guidance: Minimum Information Required for an Operations and Maintenance Manual. The O&M Manual shall be prepared by a Nevada-registered Professional Engineer or other qualified person.	3/1/2017

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	4/28/2017
2	Annual Report	Annually	1/28/2018

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. **10/14/2016**, 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: **Robert E. Wimer, Jr.**

Date: **9/6/2016**

Title: **P.E.**