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: CITY OF LOVELOCK

815 S. MERIDIAN ROAD
LOVELOCK, NV 89419

Permit Number: NV0020311

Permit Type: NEW & EXISTING PUBLICLY OWNED TREATMENT WORKS

Designation: MINOR NPDES

New/Existing: EXISTING

Location: LOVELOCK WASTEWATER TREATMENT FACILITY, PERSHING
815 SOUTH MERIDIAN ROAD, LOVELOCK, NV 89419
LATITUDE: 40.165833, LONGITUDE: -118.475833
TOWNSHIP: 27 N, RANGE: 31 E, SECTION: 34

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	TREATED EFFLUENT DISCHARGE	External Outfall		40.16678610	-118.477710	HUMBOLDT SINK VIA THE LOVELOCK DRAIN
INF	INFLUENT TO PLANT	Influent Structure		40.16678610	-118.477710	INFLUENT

Permit History/Description of Proposed Action

The Permittee, City of Lovelock, has applied for the renewal of their National Pollutant Discharge Elimination System (NPDES) Permit NV0020311, for the Lovelock Wastewater Treatment Facility (WWTF) located at 815 South Meridian Road, in Lovelock, within Pershing County, Nevada. The Permittee proposes to continue to discharge treated wastewater to the Humboldt Sink via the Lovelock Drain.

This permit was first issued on May 27, 1997. The most recent permit was issued on August 1, 2019, and expired on July 31, 2024; the permit has been administratively continued since.

Facility Overview

The Lovelock WWTF is located approximately 1/2 mile south of the city limits of Lovelock, Pershing County, Nevada. The Lovelock WWTF services approximately 2,200 people residing within the city limits. Most of the town's influent is received by gravity flow, except for a small number of commercial connections at the south end of the city, which are served by a lift station located below the WWTF.

The Lovelock WWTF consists of an influent lift station, two sequencing batch reactors (SBRs) that operate in parallel, a chlorine contact tank to disinfect treated effluent before discharge to the Lovelock Drain, an aerobic digester to treat sludge, and a high-density polylethylene (HDPE)-lined biosolids polishing pond.

After treatment, effluent is discharged from the Lovelock WWTF to the Lovelock Drain that flows to the southwest along Interstate 80 (I-80). This canal/ditch eventually becomes the Toulon Drain which flows into Toulon Lake. Toulon Lake is considered part of the Humboldt Sink.

Outfall Summary
Outfall INF – This internal outfall is for monitoring and the measurement of incoming domestic sewage to the Lovelock WWTF.

Outfall 001 – This external outfall is for the discharge of treated effluent to the Lovelock Drain from the Lovelock WWTF.

Facility Upgrades since last issued permit
There have not been any facility updates done since the last issued permit.

Solids Handling
Waste activated sludge from the digester, during normal operation, and SBRs (digester downtime) has been stored in a lined lagoon in facultative mode since 1999.

Effluent Management and Reuse
After treatment, effluent is discharged from the Lovelock WWTF to the Lovelock Drain that appears to flow to the southwest along I-80. This canal/ditch eventually becomes the Toulon Drain that flows into Toulon Lake. Toulon Lake is considered part of the Humboldt Sink. There is no reuse.

Design Flow (and basis) and Measurement & Current Capacity
The Lovelock WWTF was originally designed for an average day flow rate of 0.60 millon gallons per day (Mgal/d) and a daily maximum flow rate of 0.90 Mgal/d.

The average daily maximum flow rate reported for Outfall 001 (Effluent) was 0.35 Mgal/d. The permitted daily maximum flow rate for Outfall 001 is limited to 0.60 Mgal/d. There were no reported exceedances to this limit.

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

Operations & Maintenance (O&M) Manual status
Lovelock WWTF's Operation and Maintenance (O&M) Manual was last reviewed and approved on October 11, 2011. The Technical, Compliance, and Enforcement Branch of the Bureau of Water Pollution Control requires O&M Manuals be updated every ten (10) years. Lovelock WWTF's O&M Manual will be due three (3) months from the date of permit issuance.

Effluent Characterization
Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from the years 2019 to 2025, was reviewed as part of this permit renewal process. The long-term average discharge flow rate was 0.27 Mgal/d. The average daily maximum flow rate was 0.35 Mgal/d. Based on design criteria flow limits, there were no exceedances.

Notes:
C = Centrigrade (Celsius)
mg/L = Milligrams per Liter
Mgal/d = Million Gallons per Day
N = Nitrogen
S.U.= Standard Units
BOD = Biochemical Oxygen Demand, 5-day

DO = Dissolved Oxygen
E. coli = *Escherichia coli*
TSS = Total Suspended Solids

Outfall INF (Influent):
BOD, 5-day: 242.86 mg/L
TSS: 236.69 mg/L

Outfall 001 (Effluent):
Ammonia (as N): 0.96 mg/L
BOD, 5-day: 8.83 mg/L
BOD, 5- day Percent Removal: 94%
DO: 4.24 mg/L
E. Coli: 77.30 Colony Forming Units per 100ml
Flow Rate (Discharge): 0.31 Mgal/d
pH: 7.74 S.U.
Temperature: 15.75° C
TSS: 10.19 mg/L
TSS Percent Removal: 91.63%

Outfall AQL (Aquatic Life Levels from Outfall 001):
Ammonia (as N): 0.08 Ratio

The remaining VOCs, heavy metals, pesticides, and toxic materials were below detection during the period reviewed.

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 are D.O., Ammonia as N, and *E. coli.*

Receiving Water
The receiving water is the Lovelock Drain, which becomes Toulon Drain. These drains flow into Toulon Lake, which is part of the Humboldt Sink.

Applicable Water Quality Standards/Beneficial Uses
The water quality standards (WQSs) for the Humboldt Region: The Humboldt Sink (Nevada Administrative Code (NAC) 445A.1455) apply. WQSs for Humboldt Sink includes beneficial uses for watering livestock, irrigation, aquatic life, recreation activities not involving contact with the water, industrial use, and propagation of wildlife. Additional WQSs applicable to the Humboldt Sink system include toxic materials (NAC 445A.1236). Furthermore, water quality narrative standards applicable to all surface waters (NAC 445A.121) apply along with the water quality criteria for total ammonia (NAC 445A.118).

303 (d) Listing Status
Lovelock Drain and Toulon Drain were not assessed in Nevada's 2020 – 2022 Water Quality Integrated Report. The Humboldt Sink, including Toulon Lake, is Category 3 - Insufficient or no data and information to determine if any use is attained.

TMDL
There are no applicable Total Maximum Daily Loads (TMDLs) for the Lovelock Drain, Toulon Drain, Toulon Lake, or the Humboldt Sink.

Waste Load Allocation
There are no waste load allocations (WLA) associated with this permit.

Compliance History

The facility has been in compliance during the time of review with the exception of the Division's receipt of an updated Operation and Maintenance Manual (O&M Manual), which shall be required 90 days from the date of issuance of the proposed permit.

Proposed Effluent Limitations

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

Discharge Limitations Table for Sample Location 001 (External Outfall) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	001	Monthly	METER
Flow rate	Daily Maximum	<= 0.600 Million Gallons per Day (Mgal/d)		Effluent Gross	001	Monthly	METER
BOD, 5-day	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly	COMPOS
BOD, 5-day	30 Day Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly	COMPOS
BOD, 5-day, percent removal	Monthly Average Minimum	>= 85 Percent (%)		Effluent Gross	001	Monthly	CALCTD
E. coli	Daily Maximum		M&R Colony Forming Units per 100ml T (CFU/100mL)[1]	Effluent Gross	001	Monthly	DISCRT
E. coli	30 Day Geometric Mean		<= 630 Colony Forming Units per 100ml T (CFU/100mL)[1]	Effluent Gross	001	Monthly	DISCRT
Nitrogen, ammonia total (as N)	Daily Maximum		<= 0.179 Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly	DISCRT
Oxygen, dissolved (DO)	Daily Minimum		>= 3.0 Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly	DISCRT
pH, maximum	Daily Maximum		<= 9.0 Standard Units (SU)	Effluent Gross	001	Monthly	DISCRT
pH, minimum	Daily Minimum		>= 6.0 Standard Units (SU)	Effluent Gross	001	Monthly	DISCRT
Solids, total suspended	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly	COMPOS
Solids, total suspended	30 Day Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly	COMPOS

Discharge Limitations Table for Sample Location 001 (External Outfall) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Solids, suspended percent removal	Monthly Average Minimum	>= 85 Percent (%)		Effluent Gross	001	Monthly	CALCTD
Temperature, water deg. centigrade	Daily Maximum	M&R Degrees Centigrade (deg C)		Effluent Gross	001	Monthly	DISCRT

Notes (Discharge Limitations Table):

1. MPN or CFU per 100mL

Discharge Limitations Table for Sample Location 001 (External Outfall) To Be Reported Once During The Permit Term[1]

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Arsenic, dissolved (as As)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Beryllium, total recoverable (as Be)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Boron, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Cadmium, dissolved (as Cd)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chromium, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chromium, Hexavalent [As CR] (Chromium (VI))[2]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chromium, Trivalent [As CR] (Chromium (III))[2]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Copper, dissolved (as Cu)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Cyanide, total (as CN)[3]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Fluoride, total (as F)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Iron, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
			M&R				

Discharge Limitations Table for Sample Location 001 (External Outfall) To Be Reported Once During The Permit Term[1]

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Lead, dissolved (as Pb)	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Manganese, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Mercury, dissolved (as Hg)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Molybdenum, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Nickel, total (as Ni)[2]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Selenium, dissolved [as Se]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Silver, dissolved (as Ag)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Sulfide, total (as S)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Zinc, dissolved (as Zn)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Acrolein	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Aldrin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
			M&R				

Discharge Limitations Table for Sample Location 001 (External Outfall) To Be Reported Once During The Permit Term[1]

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
.alpha.-Endosulfan	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
.beta.-Endosulfan	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chlordane (tech mix. and metabolites)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chlorpyrifos	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
4,4-DDT	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Demeton	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Diazinon	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Dieldrin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Endrin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Azinphos-Methyl (Guthion)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Heptachlor	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
			M&R				

Discharge Limitations Table for Sample Location 001 (External Outfall) To Be Reported Once During The Permit Term[1]

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Heptachlor epoxide	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Lindane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Malathion	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Methoxychlor	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Mirex	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Nonylphenol	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Parathion	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Pentachlorophenol	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Polychlorinated biphenyls (PCBs)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Toxaphene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Tributyltin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT

Notes (Discharge Limitations Table):

1. Sample parameters once during the permit term and report with the fourth quarter 2031 report due 1/28/2032.
2. To be sampled to the dissolved fraction.
3. Free cyanide.

Discharge Limitations Table for Sample Location Inf (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	INF	Continuous	CALCTD
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Raw Sewage Influent	INF	Continuous	CALCTD
BOD, 5-day	Daily Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	INF	Monthly	DISCRT
BOD, 5-day	30 Day Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	INF	Monthly	DISCRT
Solids, total suspended	Daily Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	INF	Monthly	DISCRT
Solids, total suspended	30 Day Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	INF	Monthly	DISCRT

Summary of Changes From Previous Permit
CHANGED: Coordinates for Lovelock WWTF to Lat. 40.1667861, Long. 118.4777105.

Under Outfall 001, To Be Reported Monthly, the following parameters were either added, changed, or deleted:

DELETED – Ammonia nitrogen, total, (as N), 30-day, with a “Daily Maximum Base”.

DELETED - Ammonia nitrogen, total, (as N), 30-day, with a “30-Day Average”.

ADDED – Nitrogen, ammonia total (as N), with a “Daily Maximum” Base, an “0.176 Milligrams per Liter (mg/L)” Concentration, a “Effluent Gross” Monitoring Location, a “001” Sample Location, a “Monthly” Measurement Frequency, and a “Discrt” Sample Type, as per NAC 445A.1455 water quality standards.

CHANGED - Dissolved Oxygen, with a "Daily Maximum" Base to a "Daily Minimum" Base along with changing the concentration from a "<=3.0 Milligrams per Liter (mg/L)" to a ">=3.0 Milligrams per Liter (mg/L)", the remaining discharge limitations remained unchanged.

DELETED – BOD, 5-day, percent removal, with a “Daily Maximum” Base.

DELETED – pH, maximum, with a “Monthly Maximum” Base.

DELETED – pH, minimum, with a “Monthly Maximum” Base.

DELETED – Solids, suspended percent removal, with a “Daily Maximum” Base.

DELETED – Temperature, water deg. centigrade, with a “Monthly Average” Base.

Under Outfall 001, To Be Reported Once a Permit Term, the following parameters were either added or changed:

ADDED - Any applicable parameter listed in the toxic materials list (NAC 445A.1236) which was not included in the prior permit, has been added to this proposed permit.

DELETED - Priority Pollutant parameters, with a "Daily Maximum" Base.

DELETED - Outfall AQL, Aquatic Life Limits for Discharge to Outfall 001, To Be Reported Monthly and it's associated parameters.

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, suspended solids in the effluent, and ensuring pH remains within regulatory limits. Federal secondary treatment standards are defined under 40 CFR 133 for maximum BOD5 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 BOD5 and TSS shall not be less than 85%. The Division has adopted these standards for discharges from treatment facilities, and has applied the same 7-day average thresholds as daily maximum effluent limits for BOD5 and TSS.

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

BOD5: 30-Day 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:

BOD5 Percent removal: >= 85 percent.

TSS: Percent removal: >= 85 percent.

Limits Based on Facility's Design Criteria Review:

30-day average flow rate for effluent is limited to <=M&R Mgal/d.

Daily maximum flow rate for effluent is limited to <=0.60 Mgal/d.

Water Quality Based Effluent Limitations
State regulations require that point source discharges not cause a violation of any applicable WQSs in the receiving water, nor interfere with the attainment or maintenance of beneficial uses. The following water quality based effluent limit (WQBEL) requirements, based on NAC 445A.1455, are included in the proposed permit to ensure that the discharge does not cause WQS violations. In addition, the proposed permit requires monitoring and reporting of constituents that are subject of WQSs and may be present in the discharge.

The proposed permit retains a daily maximum limit of 9.0 standard units (S.U.) and a daily minimum limit of 6 S.U. for pH, with a monthly reporting requirement, as prescribed at NAC 445A.1455 to protect the aquatic life designated beneficial use.

The proposed permit retains a 30-day geometric mean of 630 Colony Forming Units per 100ml (CFU/100ml), with a monthly reporting requirement, as prescribed under under NAC 445A.1455.

The proposed permit establishes a daily minimum of 3.0 milligrams per liter (mg/L) for Dissolved Oxygen (D.O.) as prescribed under NAC 445A.1455.

Reasonable Potential Analysis (RPA)
Section 301(b)(1)(c) of the CWA requires effluent limitations necessary to meet WQSs, and Title 40 of the Code of Federal Regulation (CFR) section 122.44(d) requires permits to include conditions that are necessary to achieve WQSs established under section 303 of the CWA, including state narrative criteria for water quality. Federal regulations at 40 CFR 122.44(d)(1)(i) state, “Limitations must control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level that will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality.” The process to determine whether a WQBEL is required as described in 40 CFR 122.44(d)(1)(i) is referred to as a reasonable potential analysis, or RPA. Furthermore, NAC 445A.243 requires the Division to consider the establishment of effluent limitations necessary to meet WQSs.

The RPA was based on data collected from January 2019 to October 2025 which includes effluent data submitted in DMRs and the Permittee’s monitoring laboratory reports. Based on the RPA, the discharge exhibits reasonable potential to cause, or contribute to, instream excursions above the applicable water quality criteria for Ammonia (as N). Therefore, a daily maximum limit for Ammonia (as N) has been established for the proposed permit.

Proposed Water Quality Based Effluent Limits (monthly/weekly/daily)
The proposed permit establishes an "<=0.179 milligrams per liter (mg/L)" limit concentration for Ammonia (as N), with a monthly reporting requirement, in accordance with WQSs for beneficial uses listed at NAC 445A.1455, with reference to the Ammonia criteria for the propagation of aquatic life beneficial use listed at NAC 445A.118, with this limit being more stringent based on findings from the Reasonable Potential Analysis (RPA). The limit is based on maximum pH for cold-water fisheries for chronic aquatic life criterion.

Any applicable parameter listed in the toxic materials list (NAC 445A.1236) which was not included in the prior permit, has been added to this proposed permit.

Basis for Effluent Limitations
Other Required Water Quality Monitoring:

The proposed permit retains the listed pesticides constituents, with a daily maximum, with a once during the permit term reporting requirement to ensure human health and the environment are protected.

Based on water quality standards applicable to designated waters, under NAC 445A.1236, the standards

for toxic materials apply. Most of the toxic materials listed only have water quality criteria to protect the municipal or domestic supply beneficial uses which are not applicable to the section of the Humboldt Sink receiving the discharge. Therefore, only the toxic materials with water quality criteria to protect the aquatic life, irrigation, and watering of livestock beneficial uses apply. If, during the next renewal review process, the water quality data shows a reasonable potential (via a Reasonable Potential Analysis) for any constituent, the Division will retain that constituent, and may increase the associated sampling frequency, during the next permit renewal cycle.

The proposed permit maintains the daily maximum limit of a "M&R degrees Celsius" for Temperature, which is used to perform the toxicity assessment and ensure compliance with environmental regulations at both the state and federal levels for determining concentrations, along with applicable state and federal limits for ammonia.

Anti-backsliding
Sections 303(d) and 402(o) of the CWA and federal regulations of 40 CFR 122.44(i) prohibit backsliding and require effluent limitations in a reissued permit to be as stringent as 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 565 and is consistent with the federal antidegradation policy found at Title 40 in the CFR section 131.12. The objective of the Division's antidegradation regulation is to prevent degradation of Nevada's surface water and maintain the unique attributes and special characteristics and water quality associated with high-quality waters. This objective is achieved through the implementation of procedures to ensure that water is protected from regulated activities that have the potential to degrade the water quality.

The regulation uses four (4) tiers of antidegradation protection. Tier 1 protects water quality for beneficial uses of the water on a parameter-by-parameter basis. Tier 2 protects high-quality waters where data show the water quality is better than levels needed to protect beneficial uses (on a parameter-by-parameter basis). Tier 2.5 and Tier 3 protect water quality and the special characteristics of waterbodies designated with the beneficial uses of "extraordinary, ecological, aesthetic or recreation value" (NAC 445A.122). The Division will conduct an antidegradation review only when a permit application is submitted for a new or expanding point source discharge to a surface water or for a new or altered zone of mixing.

Since the proposed renewal of this permit does not include a new, or expanding, point source discharge; or, a new or altered zone of mixing, an antidegradation review is not required.

Special Conditions
See the Special Approvals / Conditions Table of this permit.

SA – Special Approvals / Conditions Table

Item #	Description
1	All critical spare parts shall be kept on site or be readily available within two days.

Discharges From Future Outfalls/ Planned Facility Changes
There are no planned future outfalls or facility changes.

Corrective Action Sites
There is one (1) active Bureau of Corrective Actions (BCA) remediation site located within a one-mile radius of the permitted facility. The site, E-000047, is for the confirmed release of an oil-based product to the groundwater. BCA does not anticipate any impact(s) between the remediation site and the permitted facility.

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 supply (PWS) well.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit for review two copies, one digital and one hard copy, of an updated 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.	10/1/2026

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	7/28/2026

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. **6/5/2026,** 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: **Melissa Hanson**
Date: **5/1/2026**
Title: **Staff II Engineer**

Summary of Reasonable Potential Analysis

Parameter	Units	No. of Effluent Samples	Critical Effluent Concentration	Most Stringent Criterion	Criterion Basis	Does RP Exist?
Copper, Total Recoverable	ug/L	1	0.1	32	Chronic Aquatic Life	No
Zinc, Total Recoverable	ug/L	1	0.8	401	Acute Aquatic Life	No
Ammonia, Total (as N)	mg/L	59	34.19	0.179	Chronic Aquatic Life	**Yes**