FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: STERLING/SQUIRE/CRESCENDO HOA

8020 W SAHARA AVE, #260
LAS VEGAS, NV 89117

Permit Number: NV0022772

Permit Type: MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURAL FACILITY THAT DISCHARGES NON-PROCESS WASTEWATER

Designation: MINOR NPDES

New/Existing: EXISTING

Location: CRESCENDO,STERLING AND SQUIRE VILLAGE HOAS, CLARK
5288-5236 BROADBENT BLVD, LAS VEGAS, NV 89122
LATITUDE: 36.093903, LONGITUDE: -115.025161
TOWNSHIP: 21S, RANGE: 62E, SECTION: 26

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	WEST - UNIT C CRESCENDO	External Outfall		36.093903	-115.025161	LAS VEGAS WASH VIA MUNICIPAL STORM DRAIN AND DUCK CREEK
002	EAST - UNIT B STERLING/SQUIRE	External Outfall		36.094117	-115.024964	LAS VEGAS WASH VIA MUNICIPAL STORM DRAIN AND DUCK CREEK
SUM	SUM OF DISCHARGES (OUTFALL 001 + OUTFALL 002)	External Outfall		36.091978	-115.022353	LAS VEGAS WASH VIA MUNICIPAL STORM DRAIN AND DUCK CREEK

Permit History/Description of Proposed Action

The Permittees, Crescendo, Sterling, and Squire Village Homeowners Associations, have applied for the renewal of National Pollutant Discharge Elimination System (NPDES) permit NV0022772 for the discharge of intercepted groundwater from under the three (3) communities (i.e., Crescendo, Sterling, and Squire communities), to the Las Vegas Wash via Duck Creek and the Clark County storm drain system.

This permit was first issued on July 1, 2014, and expired on June 30, 2019; the permit has been administratively continued since.

Facility Overview

There are two (2) dewatering vaults (i.e., wet wells), one located on the west and the other on the east side along Broadbent Boulevard at the south end of the communities. The Crescendo community is responsible for the wet well located on the west side of Broadbent Boulevard while the Sterling and Squire communities are responsible for the wet well on the east side.

The wet wells are identical in design and are equipped with a submersible pump, two outflow discharge lines, a winch and hoist system, a fiber-reinforced polymer rail system, and a float control. In the event the submersible pump malfunctions, the wet wells also include an emergency overflow discharge line. Each wet well is also equipped with a control panel. During a site inspection conducted on August 22, 2024, the Permittee stated that the submersible pump in the east wet well, as well as the discharge piping, was

replaced in 2022.

Groundwater under the communities is first intercepted by a tile drain which directs the water to the wet wells. When the water reaches a specific level, the float control is activated, and the submersible pump turns on. The water is then pumped out of the wet well and discharged to the Clark County storm drain system which then discharges into Duck Creek where it eventually discharges into the Las Vegas Wash.

The Permittees' Operation and Maintenance (O&M) Manual was approved by the Division on November 14, 2014. The Bureau of Water Pollution Control's Technical, Compliance, and Enforcement Branch requires O&M Manuals to be updated every two (2) permit cycles which equates to every ten (10) years. Therefore, an updated O&M Manual will be due to the Division within 90 days of the date of permit issuance.

Outfall Summary

Outfall 001 – This outfall is for the discharge of untreated intercepted groundwater from the wet well located on the west side of Broadbent Boulevard, which is the responsibility of the Crescendo community.

Outfall 002 – This outfall is for the discharge of untreated intercepted groundwater from the wet well located on the east side of Broadbent Boulevard, which is the responsibility of the Sterling and Squire communities.

Outfall SUM – This outfall is for the summation of combined flow for Outfall 001 and Outfall 002.

Effluent Characterization

Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from 2020 to 2024, was reviewed as part of this permit renewal process. From February 2020 to June 2022, the long-term daily average flow rate for Outfall 001 was 0.28 million gallons per day (MGD). From July 2022 to December 2024, the flow meter at Outfall 001 failed; therefore, there was no flow data reported. From March 2020 to April 2021, the long-term daily average flow rate for Outfall 002 was 0.49 MGD. From May 2021 to December 2024, the flow meter at Outfall 002 failed; therefore, there was no flow data reported. There was no permitted flow limit in the previous permit; therefore, there were no exceedances for the flow rate.

There were no exceedances of any permit limits from 2020 to 2024. Additionally, data reviewed during the drafting process does not indicate the potential for degradation of the receiving water body from the intercepted groundwater discharged within the compliance limits of the proposed permit.

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. According to the Reasonable Potential Analysis (RPA) that was conducted, pollutants of concern associated with discharges authorized by this permit include selenium, boron, total dissolved solids (TDS), total suspended solids (TSS), arsenic, and copper.

Receiving Water

The receiving water is the Las Vegas Wash via Duck Creek.

Applicable Water Quality Standards/Beneficial Uses

The water quality standards (WQSs) for the nearest downstream control point, "Las Vegas Wash at the Historic Lateral" (Nevada Administrative Code (NAC) 445A.2156) apply. WQSs for the Las Vegas Wash from the confluence of the Sloan Channel and the Historic Lateral includes beneficial uses for watering of livestock, irrigation, aquatic life, recreation not involving contact with the water, propagation of wildlife, and maintenance of a freshwater marsh. Additional WQSs applicable to this section of the Las Vegas Wash include toxic materials (NAC 445A.1236). Furthermore, water quality narrative standards applicable to all surface waters (NAC 445A.121) apply.

303 (d) Listing Status

Section 305(b) of the Clean Water Act (CWA) requires states to report on the overall condition of aquatic resources. Section 303(d) of the CWA requires states to develop lists of all impaired waterbodies and create a priority listing of waterbodies for which plans are needed to restore water quality. Combining the requirements of these two sections produces the integrated report, which provides an overall assessment of the quality of surface water resources within the state. This report, required biennially by the CWA, also describes the extent to which current conditions are protecting the designated beneficial uses of Nevada's surface waters. The Division's most recent integrated report is the Nevada 2020 – 2022 Water Quality Integrated Report (published February 2022).

According to the report, the following beneficial uses for Duck Creek are not supported:

- The aquatic life beneficial use is impaired by selenium 1-hour, selenium 96-hour, and temperature (single value (SV)).
- The irrigation beneficial use is impaired by boron, fluoride, and selenium.
- The watering of livestock beneficial use is impaired by TDS (SV).

Additionally, per the report, none of the designated beneficial uses are currently impaired for the Las Vegas Wash from the confluence of the Sloan Channel and the Las Vegas Wash to the Historic Lateral.

TMDL

Per section 303(d)(1)(C) of the CWA, states are required to develop Total Maximum Daily Loads (TMDLs) for parameters that do not meet water quality standards for a waterbody. TMDLs are implemented during the permitting process by limiting the load of that parameter that may be discharged to the receiving water. According to the Las Vegas Wash TMDL Evaluation dated October 2003, the current total phosphorus and total ammonia (as N) TMDLs on the Las Vegas Wash were established in 1989 and became fully effective in 1994 and 1995, respectively. The TMDL applies to the downstream segment: Las Vegas Wash at Lake Mead (NAC 445A.2158).

Waste Load Allocation

The Las Vegas Wash at Lake Mead (NAC 445A.2158) has established TMDLs for total ammonia (as N) and total phosphorus. Per a Bureau of Water Quality Planning (BWQP) memo dated May 16, 2024, "For NPDES permitting purposes, total phosphorus discharge loads associated with groundwater dewatering activities in the Las Vegas area can be assumed to be part of the base phosphorus load recognized in the 1989 Las Vegas Wash Total Phosphorous TMDL Load Allocation." Thus, total phosphorus, both concentration and mass, will be monitored and reported. Using the same rational, total ammonia (as N), both concentration and mass, will be monitored and reported. An annual sampling frequency is deemed appropriate to monitor the load to the Las Vegas Wash.

Compliance History

Other than the Permittees' flow meters being non-operational for two (2) years for Outfall 001 and three (3) years for Outfall 002, the facility was considered to be in compliance during the 2020 to 2024 reporting period.

Proposed Effluent Limitations

The discharge shall be limited and monitored as specified below:

Discharge Limitations Table for Sample Location 001 (West - Unit C Crescendo) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	Daily Average	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	001	Continuous	METER
Flow rate	Monthly Total	M&R Million Gallons per Day (Mgal/d)[1]		Effluent Gross	001	Continuous	METER

Notes (Discharge Limitations Table):

1. To be reported as million gallons per month.

Discharge Limitations Table for Sample Location 001 (West - Unit C Crescendo) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Arsenic, total recoverable	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Arsenic, total recoverable	Quarterly Average		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Boron, total recoverable	Daily Maximum		<= 750 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Boron, total recoverable	Quarterly Average		<= 750 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Copper, dissolved (as Cu)	Daily Maximum		<= 29 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Copper, dissolved (as Cu)	Quarterly Average		<= 29 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Fluoride, total (as F)[1]	Daily Maximum		<= 1000 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Fluoride, total (as F)[1]	Quarterly Average		<= 1000 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Nitrogen, inorganic total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Nitrogen, nitrate total (as N)	Daily Maximum		<= 90 Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Nitrogen, nitrate total (as N)	Quarterly Average		<= 90 Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
			<= 5				

Discharge Limitations Table for Sample Location 001 (West - Unit C Crescendo) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Nitrogen, nitrite total (as N)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Nitrogen, nitrite total (as N)	Quarterly Average		<= 5 Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Selenium, dissolved [as Se]	Daily Maximum		<= 6.3 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Selenium, dissolved [as Se]	Quarterly Average		<= 6.3 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum	M&R Pounds per Day (lb/d)[2]	M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Solids, total suspended	Daily Maximum		<= 135 Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Solids, total suspended	Quarterly Average		<= 135 Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
pH, maximum	Daily Maximum		<= 9.0 Standard Units (SU)	Effluent Gross	001	Quarterly	DISCRT
pH, minimum	Daily Minimum		>= 6.5 Standard Units (SU)	Effluent Gross	001	Quarterly	DISCRT

Notes (Discharge Limitations Table):

1. Total recoverable.
2. To calculate the pounds per day (lbs/d) of TDS, the following formula shall be used: 8.34 x TDS concentration (mg/L) x effluent flow (MGD).

Discharge Limitations Table for Sample Location 001 (West - Unit C Crescendo) To Be Reported Annually

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Phosphorus, total (as P)	Daily Maximum	M&R Pounds per Day (lb/d)[1]	M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Nitrogen, ammonia total (as N)	Daily Maximum	M&R Pounds per Day (lb/d)[2]	M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT

Notes (Discharge Limitations Table):

1. To calculate the pounds per day (lbs/d) of total phosphorus, the following formula shall be used: 8.34 x total phosphorus concentration (mg/L) x effluent flow (MGD).
2. To calculate the pounds per day (lbs/d) of total ammonia, the following formula shall be used: 8.34 x total ammonia concentration (mg/L) x effluent flow (MGD).

Discharge Limitations Table for Sample Location 001 (West - Unit C Crescendo) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Antimony, total (as Sb)	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
Cadmium, total recoverable	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))	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chromium, Trivalent [As CR] (Chromium (III))	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Cyanide, total (as CN)	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
Lead, total recoverable	Daily Maximum		M&R 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, 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 (West - Unit C Crescendo) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Molybdenum, total recoverable	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Nickel, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Silver total recoverable	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
Thallium, total (as Tl)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Zinc, total recoverable	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
.alpha.-Endosulfan	Daily Maximum		M&R 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
			M&R				

Discharge Limitations Table for Sample Location 001 (West - Unit C Crescendo) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Chlorpyrifos	Daily Maximum		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
Heptachlor epoxide	Daily Maximum		M&R 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
			M&R				

Discharge Limitations Table for Sample Location 001 (West - Unit C Crescendo) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Methoxychlor	Daily Maximum		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

Discharge Limitations Table for Sample Location 002 (East - Unit B Sterling / Squire) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	Daily Average	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	002	Continuous	METER
Flow rate	Monthly Total	M&R Million Gallons per Day (Mgal/d)[1]		Effluent Gross	002	Continuous	METER

Notes (Discharge Limitations Table):

1. To be reported as million gallons per month.

Discharge Limitations Table for Sample Location 002 (East - Unit B Sterling / Squire) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Boron, total recoverable	Daily Maximum		<= 750 Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
Boron, total recoverable	Quarterly Average		<= 750 Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
Fluoride, total (as F)[1]	Daily Maximum		<= 1000 Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
Fluoride, total (as F)[1]	Quarterly Average		<= 1000 Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
Nitrogen, inorganic total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Nitrogen, nitrate total (as N)	Daily Maximum		<= 90 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Nitrogen, nitrate total (as N)	Quarterly Average		<= 90 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Nitrogen, nitrite total (as N)	Daily Maximum		<= 5 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Nitrogen, nitrite total (as N)	Quarterly Average		<= 5 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Selenium, dissolved [as Se]	Daily Maximum		<= 6.3 Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
Selenium, dissolved [as Se]	Quarterly Average		<= 6.3 Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
		M&R	M&R				

Discharge Limitations Table for Sample Location 002 (East - Unit B Sterling / Squire) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Solids, total dissolved	Daily Maximum	Pounds per Day (lb/d)[2]	Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Solids, total suspended	Daily Maximum		<= 135 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Solids, total suspended	Quarterly Average		<= 135 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
pH, maximum	Daily Maximum		<= 9.0 Standard Units (SU)	Effluent Gross	002	Quarterly	DISCRT
pH, minimum	Daily Minimum		>= 6.5 Standard Units (SU)	Effluent Gross	002	Quarterly	DISCRT

Notes (Discharge Limitations Table):

1. Total recoverable.
2. To calculate the pounds per day (lbs/d) of TDS, the following formula shall be used: 8.34 x TDS concentration (mg/L) x effluent flow (MGD).

Discharge Limitations Table for Sample Location 002 (East - Unit B Sterling / Squire) To Be Reported Annually

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Phosphorus, total (as P)	Daily Maximum	M&R Pounds per Day (lb/d)[1]	M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Nitrogen, ammonia total (as N)	Daily Maximum	M&R Pounds per Day (lb/d)[2]	M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT

Notes (Discharge Limitations Table):

1. To calculate the pounds per day (lbs/d) of total phosphorus, the following formula shall be used: 8.34 x total phosphorus concentration (mg/L) x effluent flow (MGD).
2. To calculate the pounds per day (lbs/d) of total ammonia, the following formula shall be used: 8.34 x total ammonia concentration (mg/L) x effluent flow (MGD).

Discharge Limitations Table for Sample Location 002 (East - Unit B Sterling / Squire) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Antimony, total (as Sb)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Internal Monitoring Point	002	Once Per Permit Term	DISCRT
Arsenic, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Cadmium, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Chromium, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Chromium, Hexavalent [As CR] (Chromium (VI))	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Chromium, Trivalent [As CR] (Chromium (III))	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Copper, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Cyanide, total (as CN)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Iron, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Lead, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Manganese, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
			M&R				

Discharge Limitations Table for Sample Location 002 (East - Unit B Sterling / Squire) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Mercury, total recoverable	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Molybdenum, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Nickel, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Silver total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Sulfide, total (as S)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Thallium, total (as Tl)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Zinc, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Acrolein	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Aldrin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
.alpha.-Endosulfan	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
.beta.-Endosulfan	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
			M&R				

Discharge Limitations Table for Sample Location 002 (East - Unit B Sterling / Squire) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Chlordane (tech mix. and metabolites)	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Chlorpyrifos	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
4,4-DDT	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Demeton	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Diazinon	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Dieldrin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Endrin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Azinphos-Methyl (Guthion)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Heptachlor	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Heptachlor epoxide	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Lindane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
			M&R				

Discharge Limitations Table for Sample Location 002 (East - Unit B Sterling / Squire) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Malathion	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Methoxychlor	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Mirex	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Nonylphenol	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Parathion	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Pentachlorophenol	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Polychlorinated biphenyls (PCBs)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Toxaphene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Tributyltin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT

Discharge Limitations Table for Sample Location Sum (Sum Of Discharges (Outfall 001 + Outfall 002)) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	Daily Average	<= 0.90 Million Gallons per Day (Mgal/d)		See Footnote[1]	SUM	Continuous	CALCTD[1]
Flow rate	Monthly Total	M&R Million Gallons per Day (Mgal/d)[3]		See Footnote[2]	SUM	Continuous	CALCTD[2]

Notes (Discharge Limitations Table):

1. The daily average flow rate shall be the sum of the daily average flow rate for Outfall 001 + Outfall 002.
2. The monthly total flow rate shall be the sum of the monthly total flow rate for Outfall 001 + Outfall 002.
3. To be reported as million gallons per month.

Summary of Changes From Previous Permit

The flow for Outfall 001 and 002 was changed from ‘Flow, total’ to ‘Flow rate’.

The proposed permit establishes Outfall SUM for the summation of the combined flow from Outfall 001 and Outfall 002.

The proposed permit establishes a daily average flow rate limit of 0.90 MGD for Outfall SUM.

The proposed permit establishes the requirement to report the quantity of TDS in pounds per day (lbs/day) in addition to reporting the concentration in milligrams per liter (mg/L) for Outfall 001 and Outfall 002.

The proposed permit establishes the requirement to monitor total phosphorus and total ammonia (as N) for Outfall 001 and Outfall 002 once a year.

The proposed permit establishes the requirement to sample for nitrate (as N) and nitrite (as N) for Outfall 001 and 002. Furthermore, the permit establishes a daily maximum and a quarterly average limit for nitrate (as N) and nitrite (as N) of 90 mg/L and 5 mg/L, respectively.

The proposed permit establishes a daily maximum and a quarterly average limit of 6.3 ug/L for selenium for Outfall 001 and Outfall 002.

The proposed permit establishes a daily maximum and a quarterly average limit of 750 ug/L for boron for Outfall 001 and Outfall 002.

The proposed permit establishes a daily maximum and a quarterly average limit of 1,000 ug/L for fluoride for Outfall 001 and Outfall 002.

The proposed permit establishes a daily maximum and a quarterly average limit of 100 ug/L for arsenic for Outfall 001 only.

The proposed permit establishes a daily maximum and a quarterly average limit of 29 ug/L for copper for Outfall 001 only.

The proposed permit establishes the requirement to sample arsenic and copper once a quarter in lieu of once during the term of the permit for Outfall 001 only.

The proposed permit establishes the requirement to sample for the toxic materials, found at NAC 445A.1236, once during the term of the permit for Outfall 001 and Outfall 002.

Where applicable, both a maximum and an average limit have been established per Title 40 of the Code of Federal Regulation (CFR) section 122.445(d)(1).

Technology Based Effluent Limitations
There are no technology based effluent limitations associated with this permit.

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.2156, 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.

Per NAC 445A.2156, sampling is required for temperature, dissolved oxygen (D.O.), fecal coliform, and *Escherichia coli* (*E. coli*). The discharge from this facility will travel approximately 0.6 miles before reaching the Las Vegas Wash. It is anticipated that the temperature of the discharge, as well as the D.O., will change during the time it takes the water to reach the Wash. The Permittees' will have no control over the change in temperature or D.O. levels during the travel time. Therefore, sampling the discharge for temperature and D.O. is irrelevant in this instance. Furthermore, as the discharge is not associated with treated wastewater, sampling for fecal coliform and *E. coli* are not required.

The proposed permit retains a daily maximum limit of 9.0 standard units (S.U.) and a daily minimum limit of 6.5 S.U. for pH as prescribed at NAC 445A.2156 to protect the aquatic life designated beneficial use.

The proposed permit removes the daily maximum limit of 20 mg/L for total inorganic nitrogen (TIN) as prescribed at NAC 445A.2156 in accordance with the requirement to maintain higher existing quality (RMHQ) standard as the RPA proved no reasonable potential for TIN to cause or contribute to an in-stream excursion of the WQS.

The proposed permit establishes the requirement to sample for nitrate (as N) and nitrite (as N) as prescribed at NAC 445A.2156 to protect the aquatic life designated beneficial use. A limit of 90 mg/L and 5 mg/L has been established for nitrate (as N) and nitrite (as N), respectively.

The proposed permit retains a daily maximum limit of 135 mg/L for TSS in accordance with the aquatic life beneficial use per NAC 445A.2156 and establishes a quarterly average limit of 135 mg/L as well.

NAC 445A.2156 includes a RMHQ for TDS in the Las Vegas Wash at the Historic Lateral of 1,900 mg/L, with at least 95 percent of samples being equal to or less than the single value. NAC 445A.2156 also includes water quality criterion for TDS of 3,000 mg/L, as a single value, to protect the watering of livestock beneficial use. From 2020 to 2024, the effluent TDS ranged from 2,460 mg/L to 6,080 mg/L for Outfall 001 and from 4,428 mg/L to 5,800 mg/L for Outfall 002. The current project, by design, does not alter the background TDS, as such the TDS concentration in the effluent is the same as that of the influent. The results of the RPA determined that there is reasonable potential for TDS to exceed the RMHQ and beneficial use standards.

Section 6. – Conceptual Understanding and Groundwater Quality of the Basin-Fill Aquifer in Las Vegas Valley, Nevada found in the *Conceptual Understanding and Groundwater Quality of Selected Basin-Fill Aquifers in the Southwestern United States* document published by the United States Geological Survey (USGS) in 2010 states, "Concentrations of dissolved solids in water samples collected from the shallow monitoring wells ranged from 351 to 5,700 mg/L, with a median of 3,240 mg/L, although the Southern Nevada Water Authority has collected groundwater samples in eastern Las Vegas in which the

concentrations of dissolved solids exceeded 10,000 mg/L...". The document also states that, "The shallow groundwater becomes mineralized as a consequence of evapotranspiration and the dissolution of evaporite deposits." Therefore, it is reasonable to expect the effluent to not be within the RMHQ or water quality criteria standards.

The TDS in the effluent is consistent with the assumptions for the natural background water per NAC 445A.120(2), "Natural water conditions may, on occasion, be outside the limits established by standards. The standards adopted in NAC 445A.070 to 445A.2234, inclusive, related to the condition of waters as affected by discharges relating to human activities." It also follows that the intercepted groundwater is consistent with NAC 445A.121(8), which states, "The specified standards are not considered violated when the natural conditions of the receiving water are outside the established limits, including periods of extreme high or low flow."

Therefore, the proposed permit retains the requirement to monitor and report TDS. A sampling frequency of once per quarter is deemed sufficient. Furthermore, the proposed permit establishes the requirement for the Permittee to report TDS in lbs/day each quarter in addition to reporting TDS in mg/L.

Per NAC 445A.1236, the standards for toxic materials apply. Most of the toxic materials listed only have criteria to protect the municipal or domestic water supply beneficial uses which are not applicable to the section of the Las Vegas Wash receiving the discharge. Therefore, only the constituents with criteria to protect the aquatic life, irrigation, or watering of livestock beneficial uses apply. Limits have been established for constituents that proved to have reasonable potential. Furthermore, taking the discharge flow rate into consideration, the 96-hour limits are used, unless there was no 96-hour limit listed for that constituent in which case the 1-hour limit was used.

NAC 445A.1236 lists water quality criteria for seven (7) metals that vary as a function of hardness. The lower the hardness, the lower the water quality criteria. The metals with hardness dependent criteria include cadmium, chromium (III), copper, lead, nickel, silver, and zinc. The BWQP recommends calculating a 10th percentile receiving water hardness value to determine water quality criteria for hardness dependent metals that are sufficiently protective of aquatic life.

The BWQP reviewed ten (10) years of data on the Las Vegas Wash at the Historic Lateral (NAC 445A.2156) to determine if a representative value for hardness could be derived for permitting purposes. The BWQP found the hardness data to be normally distributed with a 10th percentile value of 470 mg/L. For hardness over 400 mg/L, Chapter 3 of the U.S. EPA's "Water Quality Standards Handbook: Second Edition" recommends two (2) options: (1) calculate the criterion using a default water effects ratio (WER) of 1.0 and using a hardness of 400 mg/L in the hardness equation; or (2) calculate the criterion using a WER and the actual ambient hardness of the surface water in the equation. Consistent with the U.S. EPA's recommendation, the Division has calculated the applicable water quality criteria for hardness dependent metals listed at NAC 445A.1236 using a hardness value of 400 mg/L, since the 10th percentile calculated by the BWQP was found to be 470 mg/L which exceeds 400 mg/L.

Unit conversions have been used to convert milligrams per liter (mg/L) to micrograms per liter (ug/L) when applicable.

Reasonable Potential Analysis (RPA)

Section 301(b)(1)(c) of the CWA requires effluent limitations necessary to meet WQSs, and 40 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 section 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.

For conducting the RPA, the Division used a mass-balanced approach to statistically calculate the projected maximum concentration and the expected critical downstream receiving water concentration using the guidance and recommendations from the U.S. EPA Technical Support Document for Water Quality Based Toxics Control (EPA/505/2 90 001) (TSD) (i.e., Table 31 of the TSD using the 99 percent probability basis and 99 percent confidence interval). For the purposes of the RPA, the critical receiving water flow was assumed to be zero (i.e., no dilution); therefore, the critical effluent pollutant concentrations were compared with the most restrictive water quality criteria and requirements to maintain RMHQs in NAC 445A.1236 and NAC 445A.2156 to determine if the discharge has reasonable potential to cause or contribute to an excursion above a state WQS.

Based on the RPA, both Outfall 001 and 002 exhibited reasonable potential to cause, or contribute to, in-stream excursions above the applicable water quality criteria for selenium, boron, fluoride, TDS, and TSS (see Attachment A for a summary of the RPA findings). Additionally, Outfall 001 exhibited reasonable potential to cause, or contribute to, in-stream excursions for arsenic and copper as well. Therefore, the limit for TSS has been retained while a daily maximum and a quarterly average limit has been established for selenium, boron, and fluoride for Outfall 001 and Outfall 002 and for arsenic and copper for Outfall 001. A limit for TDS was not established for Outfall 001 or Outfall 002 (see the *Water Quality Based Effluent Limitations* section of the Fact Sheet for further information). If, during the next renewal review process, the water quality data shows a reasonable potential (via an RPA) for any constituent, the Division will retain that constituent with a limit and may increase the sampling frequency for that constituent. Limits for constituents that prove no reasonable potential may be removed and the sampling frequency may be decreased in future permits, unless new information proves otherwise.

Proposed Water Quality Based Effluent Limits (monthly/weekly/daily)
As described in the *Reasonable Potential Analysis (RPA)* section of the Fact Sheet, there is reasonable potential for the discharge to cause or contribute to an in-stream excursion above the applicable water quality criteria at NAC 445A.1236 for arsenic, boron, copper, fluoride, and selenium. Therefore, the proposed permit establishes the following effluent limits based on the water quality criteria at NAC 445A.1236:

- Arsenic – The daily maximum and quarterly average thresholds, for Outfall 001, are limited to 100 ug/L for the protection of the irrigation beneficial use.
- Boron – The daily maximum and quarterly average thresholds, for Outfall 001 and Outfall 002, are limited to 750 ug/L for the protection of the irrigation beneficial use.
- Copper - The daily maximum and quarterly average thresholds, for Outfall 001, are limited to 29 ug/L for the protection of the aquatic life beneficial use.
- Fluoride – The daily maximum and quarterly average thresholds, for Outfall 001 and Outfall 002, are limited to 1,000 ug/L for the protection of the irrigation beneficial use.
- Selenium – The daily maximum and quarterly average thresholds, for Outfall 001 and Outfall 002, are limited to 6.3 ug/L for protection of the aquatic life beneficial use.

The effluent limit for copper was calculated using the following formula, for the 96-hour limit, found at NAC 445A.1236:

$$(0.960) * e^{(0.8545\{\ln(\text{hardness})\} - 1.702)}$$

Where e = 2.718 and hardness = 400 mg/L.

The proposed permit increases the sampling frequency, from once during the term of the permit to quarterly, for arsenic and copper, for Outfall 001, to determine compliance with effluent limits.

The proposed permit retains the requirement to monitor and report effluent concentrations once during the term of the permit for antimony, beryllium, cadmium, chromium, lead, mercury, nickel, silver, thallium, and zinc as these constituents proved no reasonable potential per the RPA.

For the rest of the toxic materials listed at NAC 445A.1236, a once per permit term sampling frequency is deemed appropriate to acquire additional water quality data and to determine compliance with effluent limits.

Basis for Effluent Limitations

The daily average flow rate for Outfall SUM is limited to 0.90 MGD based on the Permittee's requested flow limit. Additionally, instead of including a daily maximum and a 30-day average, as is typical in a NPDES permit, this permit includes daily averages and monthly total flows to be reported. This is due to the type of metering system the Permittees have which does not make it possible to obtain a daily flow rate.

The previous permit included the requirement to sample for antimony and thallium. Although these constituents are included in NAC 445A.1236, standards for toxic materials, they only have criteria to protect the municipal or domestic supply beneficial use which are not applicable to Duck Creek or the section of the Las Vegas Wash receiving the discharge. However, the permit retains the requirement to monitor and report these constituents once during the term of the permit to satisfy anti-backsliding requirement.

Anti-backsliding

Sections 402(o) and 303(d)(4) of the CWA and 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. With the exception of TIN, none of the proposed limits, or requirements, are less stringent than the previous permit. See the *Water Quality Based Effluent Limitations* section of the Fact Sheet for information regarding the removal of the daily maximum limit of 20 mg/L for TIN.

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 40 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. This objective is achieved through the implementation of procedures to ensure that waters are 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 Teir 3 protect water quality and the special characteristics of waterbodies designated with the beneficial uses of "extraordinary, ecological, aesthetic or recreational value" (NAC 445A.122).

Per Section 15 of the newly adopted Antidegradation regulation, an antidegradation review will be conducted only when an application for the following is submitted to the Division, 1. a new point source discharge, 2. an expanded point source discharge which includes an increase of the maximum flow of the discharge, an increase in the concentration of any parameter of concern in the discharge, an increase in the load of any parameter of concern to the receiving water, a change in the composition of the discharge, or relocation of the discharge, or 3. a new or altered zone of mixing. As the renewal application for this permit did not include any of the previously mentioned items, an antidegradation review is not required.

Special Conditions

There are no special conditions associated with this permit.

SA – Special Approvals / Conditions Table

There are no Special Approval / Condition items

Discharges From Future Outfalls/ Planned Facility Changes

The Permittee does not anticipate any planned facility changes or the addition of future outfalls.

Corrective Action Sites
There are no active Bureau of Corrective Actions sites located within a one-mile radius of the facility.

Wellhead Protection Program
The closest Public Water System (PWS) well is located approximately 5 miles to the west. The discharge is not located within a Drinking Water Protection Area, which is defined by a 3,000-foot radius around a PWS well. Furthermore, there are no Wellhead Protection Areas, which represent an approximate 10-year capture zone of a well, in the vicinity of the discharge. The discharge is not anticipated to affect any PWS wells due to the distance of the wells.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit two (2) copies (one hard copy and one electronic copy) of an updated Operations and Maintenance (O&M) Manual. The O&M manual shall be prepared by a Nevada Registered Professional Engineer or a Division-approved qualified person. The O&M Manual shall be prepared in accordance with guidance document *WTS-2A: Minimum Information Required for an Operation and Maintenance Manual for Pump-and-Treat Facilities and Dewatering Operations*.	2/1/2026

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Monthly DMRs	Quarterly	1/28/2026
2	Quarterly DMRs	Quarterly	1/28/2026
3	Annual Report	Annually	1/28/2026
4	Once per Permit Term DMRs	Once during the permit term	10/28/2030

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. **10/20/2025,** 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: **Bonnie Hartley**
Date: **9/15/2025**
Title: **Staff II, Associate Engineer**

Attachment A

Summary of Reasonable Potential Analysis for Outfall 001

Parameter	Units	No. of Effluent Samples	Critical Effluent Concentration	Most Stringent Criterion	Criterion Basis	Does RP Exist?
Metals (Total Recoverable), Cyanide and Phenols						
Antimony, Total Recoverable	ug/L	4	179.5	No Criteria		No
Arsenic, Total Recoverable	ug/L	4	592.0	100	Irrigation	**Yes**
Chromium, Total	ug/L	4	7.6	100	Irrigation	No
Copper, Total Recoverable	ug/L	4	156.3	30	Chronic Aquatic Life	**Yes**
Nickel, Total Recoverable	ug/L	4	25.1	169	Chronic Aquatic Life	No
Selenium, Total Recoverable	ug/L	19	83.2	6.3	Chronic Aquatic Life	**Yes**
Other Pollutants						
Ammonia, Total (as N)	mg/L	19	3.18	No Criteria		No
Boron	ug/L	19	3,791.44	750	Irrigation	**Yes**
Fluoride	mg/L	19	2,792.76	1000	Irrigation	**Yes**
Nitrate, Total (as N)	mg/L	18	10.61	90	WQC to Protect Beneficial Uses	No
Nitrogen, Total Inorganic (as N)	mg/L	17	12.48	20	RMHQ	No
Total Dissolved Solids	mg/L	19	8,187.20	1900	RMHQ	**Yes**
Total Suspended Solids	mg/L	19	338.10	135	WQC to Protect Beneficial Uses	**Yes**

Summary of Reasonable Potential Analysis for Outfall 002

Parameter	Units	No. of Effluent Samples	Critical Effluent Concentration	Most Stringent Criterion	Criterion Basis	Does RP Exist?
Metals (Total Recoverable), Cyanide and Phenols						
Selenium, Total Recoverable	ug/L	12	61.8	6.3	Chronic Aquatic Life	**Yes**
Other Pollutants						
Boron	ug/L	12	6,178.43	750	Irrigation	**Yes**
Fluoride	ug/L	12	4,633.36	1000	Irrigation	**Yes**
Nitrogen, Total Inorganic (as N)	mg/L	12	17.00	20	RMHQ	No
Total Dissolved Solids	mg/L	12	5,819.89	1900	RMHQ	**Yes**
Total Suspended Solids	mg/L	12	146.67	135	WQC to Protect Beneficial Uses	**Yes**