



FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: TOMIYASU RESIDENCE
3300 LAS VEGAS BLVD. S.
LAS VEGAS, NV 89109

Permit Number: NV0022781

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

Designation: MINOR NPDES

New/Existing: EXISTING

Location: TOMIYASU RESIDENCE, CLARK
7030 TOMIYASU LANE, LAS VEGAS, NV 89120
LATITUDE: 36.060789, LONGITUDE: -115.103267
TOWNSHIP: 22S, RANGE: 61E, SECTION: 1

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	TOMIYASU BADMINTON COURT	External Outfall		36.060789	-115.103267	LAS VEGAS WASH VIA DUCK CREEK

Permit History/Description of Proposed Action

The Permittee, the Tomiyasu Residence, has applied for the renewal of their National Pollutant Discharge Elimination System Permit NV0022781, the residence is located at 3030 Tomiyasu Lane, in the Paradise portion of Las Vegas, within Clark County, Nevada. This residence is located on the north side of Duck Creek, where it intersects Tomiyasu Lane. Duck Creek eventually flows to the Las Vegas Wash. The Permittee proposes to continue to discharge intercepted groundwater to the Las Vegas Wash via Duck Creek.

This permit was first issued on March 3, 1998. The most recent permit was issued on February 7, 2017, and expired on February 6, 2022; the permit has been administratively continued since.

Facility Overview

The Tomiyasu Residence consists of a private residence and several buildings, including a sports complex and barn. The residence operates a dewatering system designed to accumulate and remove groundwater from the property's sports complex basement. Groundwater is collected by the system and discharged into the Las Vegas Wash via Duck Creek.

Groundwater, from the sports complex (being a main level basketball court and lower-level swimming pool) is collected via a sub-surface French drain piping, is then discharged into an interior collection sump, flowing out through an exterior wet well, into a sub-surface 4-inch diameter polyvinyl chloride (PVC) pipe, through a water meter, and is discharged to Duck Creek, which flows into the Las Vegas Wash.

The Tomiyasu Residence's Operation and Maintenance (O&M) Manual was last reviewed and approved on

April 3, 2017. The Technical, Compliance, and Enforcement Branch of the Bureau of Water Pollution Control requires O&M Manuals to be updated every ten (10) years, with an updated O&M Manual due on April 3, 2027.

Outfall Summary

Outfall 001 – This external outfall is for the discharge of untreated, intercepted groundwater to the Las Vegas Wash via Duck Creek.

Effluent Characterization

Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from the years January 2019 to December 2024, as this permit has only annual and once during the permit term reporting requirements, was reviewed as part of this permit renewal process. The reported long-term average flow rate was 0.1 million gallons per day (Mgal/d), being permitted for 0.20 Mgal/d, with no daily maximum flow reported as it was not an applicable parameter. There were no reported exceedances of the permitted limit.

Notes:

mg/L = Milligrams per Liter

S.U.= Standard Units

TDS = Total Dissolved Solids

TPH = Total Petroleum Hydrocarbons

VOC = Volatile Organic Compounds

Outfall 001:

Ammonia as N: 0.113 mg/L

Arsenic: 0.26 mg/L

Bromodichloromethane: 43.2 ug/L

Chlorodibromomethane: 13.8 ug/L

Copper: 0.0323 mg/L

Thallium: 0.124 mg/L

TDS: 872 mg/L

Nitrogen: 6.27 mg/L

pH: 7.87 S.U.

TDS: 892 mg/L

Zinc, total: 0.111 mg/L

The remaining constituents, being either Total Inorganics, TPHs, or VOCs, apart from those listed above, reported during the same period, were below detectable levels.

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 Ammonia as N, Boron, Fluoride, Iron, Phosphorus, Selenium, TDS, TPH, and VOCs.

Receiving Water

The dewatering system discharges into a concrete-lined storm drain channel, and into Duck Creek, which discharges to the Upper Las Vegas Wash.

Applicable Water Quality Standards/Beneficial Uses

The water quality standards (WQSs) for the nearest downstream control point, "Las Vegas Wash at the Historic Lateral" (NAC 445A.2156) apply. WQSs for the Las Vegas Wash from the confluence of the Sloan Channel to the Historic Lateral includes beneficial uses for the 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

According to Nevada's 2020 – 2022 Water Quality Integrated Report (WQIR), the following beneficial uses for Duck Creek are not supported:

- The Aquatic Life beneficial use is impaired by 1-hour Selenium, 96-hour Selenium, and Temperature (single value - SV).
- The Irrigation beneficial use is impaired by Boron, Fluoride, and Selenium.
- The Watering Livestock beneficial use is impaired by TDS.

According to the Nevada's 2022 – 2022 WQIR, the following beneficial uses for the Las Vegas Wash above the Treatment Plants are not supported:

- The Aquatic Life beneficial use is impaired by 96-hour Iron, 1-hour Selenium, 96-hour Selenium, and Total Suspended Solids (TSS).
- The Irrigation beneficial use is impaired by Boron.
- The Recreation Not Involving Contact with the Water beneficial use is impaired by *Escherichia coli* (*E. coli*).
- The Watering of Livestock beneficial use is impaired by TDS.

TMDL

Per Section 303(d)(1)(C) of the Clean Water Act (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 TMDLs apply to a 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 the 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 rationale, 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

The Tomiyasu Residence has been in compliance with their 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	<= 0.200 Million Gallons per Day (Mgal/d)		Effluent Gross	001	Continuous	METER

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

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	001	Annual	DISCRT
Fluoride, total (as F) [3]	Daily Maximum		<= 1000 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Hydrocarbons, total petroleum ^[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Iron, total recoverable	Daily Maximum		<= 1000 Micrograms per Liter (ug/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
Nitrogen, inorganic total	Daily Maximum		<= 20 Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Nitrogen, nitrate total (as N)	Daily Maximum		<= 90 Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Nitrogen, nitrite total (as N)	Daily Maximum		<= 5 Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
pH, maximum	Daily Maximum		<= 9.0 Standard Units (SU)	Effluent Gross	001	Annual	DISCRT
pH, minimum	Daily Minimum		>= 6.5 Standard Units (SU)	Effluent Gross	001	Annual	DISCRT
Phosphorus, total (as P)	Daily Maximum	M&R Pounds per Day (lb/d) ^[2]	M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Selenium, dissolved [as Se]	Daily Maximum		<= 6.3 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Solids, total dissolved	Daily Maximum		<= 1900 Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT

Notes (Discharge Limitations Table):

1. Full range, purgeable and extractable, C6-C40
2. Loading (lbs/day) - Flow (Mgal/d) x Concentration (mg/L) x 8.34
3. Fluoride, total recoverable.

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
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
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)) ^[1]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chromium, Trivalent [As CR] (Chromium (III)) ^[1]	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 Kilogram (mg/kg)	Effluent Gross	001	Once Per Permit Term	DISCRT
Cyanide, total (as CN) ^[2]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Fluoride, total (as F) ^[3]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Lead, dissolved (as Pb)	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
			M&R				

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Mercury, dissolved (as Hg)	Daily Maximum		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) ^[1]	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
.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 (External Outfall) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
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 (External Outfall) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
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

Notes (Discharge Limitations Table):

1. Analysis is for the dissolved fraction.
2. Free Cyanide (per NAC 445A.1236).
3. Total Recoverable.

Summary of Changes From Previous Permit

Under Outfall 001 a "To Be Reported Annually" Discharge Limitation Table the following parameters were added:

ADDED – Boron, total recoverable, with a "Daily Maximum" Base, a " ≤ 750 Micrograms per Liter (ug/L)" Concentration, a "Effluent Gross" Monitoring Location, a "001" Sample Location, a "Annual" Measurement Frequency, and a "DisCRT" Sample Type.

ADDED – Fluoride total recoverable, with a "Daily Maximum" Base, a " $\leq 1,000$ Micrograms per Liter (ug/L)"

Concentration, a "Effluent Gross" Monitoring Location, a "001" Sample Location, a "Annual" Measurement Frequency, and a "Discret" Sample Type.

ADDED - Iron, total recoverable, with a "Daily Maximum" Base, a " $\leq 1,000$ Micrograms per Liter (ug/L)" Concentration, a "Effluent Gross" Monitoring Location, a "001" Sample Location, a "Annual" Measurement Frequency, and a "Discret" Sample Type.

ADDED – Nitrogen, Total Inorganic, with a "Daily Maximum" Base, a " ≤ 20 Milligrams per Liter (mg/L)" Concentration, a "Effluent Gross" Monitoring Location, a "001" Sample Location, a "Annual" Measurement Frequency, and a "Discret" Sample Type.

ADDED – Nitrate as N, with a "Daily Maximum" Base, a " ≤ 90 Milligrams per Liter (mg/L)" Concentration, a "Effluent Gross" Monitoring Location, a "001" Sample Location, a "Annual" Measurement Frequency, and a "Discret" Sample Type.

ADDED – Nitrite as N, with a "Daily Maximum" Base, a " ≤ 5 Milligrams per Liter (mg/L)" Concentration, a "Effluent Gross" Monitoring Location, a "001" Sample Location, a "Annual" Measurement Frequency, and a "Discret" Sample Type.

ADDED – An additional discharge limitation for both Nitrogen, ammonia total (as N) and Phosphorus, total (as P) being "M&R Milligrams per Liter (mg/L)" Concentration along with maintaining the "M&R Pounds per Day (lb/d)" quantity. All remaining monitoring limitations remained unchanged.

DELETED – Selenium, total with a "Daily Maximum" Base.

ADDED – Selenium, Dissolved, with a "Daily Maximum" Base, a " ≤ 6.3 Micrograms per Liter (ug/L)" Concentration, a "Effluent Gross" Monitoring Location, a "001" Sample Location, a "Annual" Measurement Frequency, and a "Discret" Sample Type.

ADDED – An additional specific concentration to Solids, Total Dissolved, with a "Daily Maximum" Base, a " $\leq 1,900$ Milligrams per Liter (mg/L)" Concentration, the remaining limitations did not change.

ADDED - Footnote 1.

1. Loading (lbs/day) = Flow (Mgal/d) x Concentration (mg/L) x 8.34.

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

Under this outfall, the sample type was changed from "Compos" to "Discrete". This change was done based on both Divisional sampling standards for this type of nuisance water discharge permit, along with "Compos" sampling involving taking multiple discrete samples (done at different times or locations). The outfall has only one location, and based on non-detect results, multiple sampling times are not needed.

ADDED - Arsenic, dissolved (as As), with a "Daily Maximum" Base, a "M&R Micrograms per Liter (ug/L)" Concentration, a "Effluent Gross" Monitoring Location, a "001" Sample Location, a "Once Per Permit Term" Sampling Frequency, and a "Discret" Sample Type.

ADDED – Chromium, Hexavalent [as CR] (Chromium (VI)), with a "Daily Maximum" Base, a "M&R Micrograms per Liter (ug/L)" Concentration, a "Effluent Gross" Monitoring Location, a "001" Sample Location, a "Once Per Permit Term" Sampling Frequency, and a "Discret" Sample Type.

ADDED - Chromium, Trivalent [as CR] (Chromium (III)), with a "Daily Maximum" Base, a "M&R Micrograms per Liter (ug/L)" Concentration, a "Effluent Gross" Monitoring Location, a "001" Sample Location, a "Once Per Permit Term" Sampling Frequency, and a "Discret" Sample Type.

ADDED – Molybdenum, total recoverable, with a "Daily Maximum" Base, a "M&R Micrograms per Liter (ug/L)" Concentration, a "Effluent Gross" Monitoring Location, a "001" Sample Location, a "Once Per Permit

Term” Sampling Frequency, and a “Discret” Sample Type.

ADDED – Sulfide, total (as S), with a “Daily Maximum” Base, a “M&R Micrograms per Liter (ug/L)” Concentration, a “Effluent Gross” Monitoring Location, a “001” Sample Location, a “Once Per Permit Term” Sampling Frequency, and a “Discret” Sample Type.

ADDED - Demeton, with a “Daily Maximum” Base, a “M&R Micrograms per Liter (ug/L)” Concentration, a “Effluent Gross” Monitoring Location, a “001” Sample Location, a “Once Per Permit Term” Sampling Frequency, and a “Discret” Sample Type.

ADDED - Diazinon, with a “Daily Maximum” Base, a “M&R Micrograms per Liter (ug/L)” Concentration, a “Effluent Gross” Monitoring Location, a “001” Sample Location, a “Once Per Permit Term” Sampling Frequency, and a “Discret” Sample Type.

ADDED – Azinphos—Methyl (Guthion), with a “Daily Maximum” Base, a “M&R Micrograms per Liter (ug/L)” Concentration, a “Effluent Gross” Monitoring Location, a “001” Sample Location, a “Once Per Permit Term” Sampling Frequency, and a “Discret” Sample Type.

ADDED - Lindane, with a “Daily Maximum” Base, a “M&R Micrograms per Liter (ug/L)” Concentration, a “Effluent Gross” Monitoring Location, a “001” Sample Location, a “Once Per Permit Term” Sampling Frequency, and a “Discret” Sample Type.

ADDED - Malathion, with a “Daily Maximum” Base, a “M&R Micrograms per Liter (ug/L)” Concentration, a “Effluent Gross” Monitoring Location, a “001” Sample Location, a “Once Per Permit Term” Sampling Frequency, and a “Discret” Sample Type.

ADDED - Methoxychlor, with a “Daily Maximum” Base, a “M&R Micrograms per Liter (ug/L)” Concentration, a “Effluent Gross” Monitoring Location, a “001” Sample Location, a “Once Per Permit Term” Sampling Frequency, and a “Discret” Sample Type.

ADDED - Nonylphenol, with a “Daily Maximum” Base, a “M&R Micrograms per Liter (ug/L)” Concentration, a “Effluent Gross” Monitoring Location, a “001” Sample Location, a “Once Per Permit Term” Sampling Frequency, and a “Discret” Sample Type.

ADDED - Parathion, with a “Daily Maximum” Base, a “M&R Micrograms per Liter (ug/L)” Concentration, a “Effluent Gross” Monitoring Location, a “001” Sample Location, a “Once Per Permit Term” Sampling Frequency, and a “Discret” Sample Type.

ADDED - Tributyltin, with a “Daily Maximum” Base, a “M&R Micrograms per Liter (ug/L)” Concentration, a “Effluent Gross” Monitoring Location, a “001” Sample Location, a “Once Per Permit Term” Sampling Frequency, and a “Discret” Sample Type.

DELETED – Arsenic, Total Recoverable, with a “Daily Maximum”. This parameter is under the Once per Permit Term Reporting Discharge Limitation Table.

DELETED – Selenium, Total Recoverable, with a “Daily Maximum”. This parameter is under the Annualized Reporting Discharge Limitation Table.

ADDED - Footnotes 1, 2, and 3.

1. Analysis is to the dissolved fraction.
2. Free Cyanide (per NAC 445A.1236).
3. Total Recoverable.

Technology Based Effluent Limitations

Technology-based effluent limitations are not applicable to 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 dissolved oxygen (D.O.), total suspended solids (TSS), temperature, fecal coliform, and *Escherichia coli* (*E. coli*). The discharge from this residential site will travel many miles through the Clark County's Duck Creek storm water channel system before finally reaching Las Vegas Wash; therefore, sampling the discharge for D.O. and temperature are irrelevant in this instance. TSS is also not required to be sampled as groundwater, typically, has low suspended solids. Also, since the discharge is not associated with treated wastewater, sampling of fecal coliform and *E. coli*s not an applicable requirement.

The proposed permit establishes the daily maximum limit of 20 milligrams per liter (mg/L) for Total Inorganic Nitrogen (TIN) as prescribed at NAC 445A.2156 in accordance with the requirement to maintain a higher existing quality (RMHQ) standard.

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

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 establishes the requirement to sample for TDS based on the water quality standards stated under NAC 445A.2156, which includes a TDS requirement of 95% of the single value samples being less than or equal to 1900 mg/L.

The proposed permit establishes a daily maximum limit of 6.3 ug/L for Selenium. This limitation for Selenium is due to the 303(d) listing of this parameter being a pollutant of concern for Duck Creek along with the Las Vegas Wash above the Treatment Plants. The sampling frequency remained on an annual basis.

The proposed permit establishes a daily maximum limit of 1,000 ug/L for Fluoride, as prescribed by NAC 445A.1236 and based on it being included in the 303(d) list.

The proposed permit includes a daily maximum limit of 750 ug/L for Boron, per NAC 445A.1236, based on it being included in the 303(d) list in the Las Vegas Wash.

Per 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 Las Vegas Wash receiving the discharge. Therefore, only toxic materials with water quality criteria to protect the aquatic life, irrigation, and watering of livestock beneficial uses apply.

The proposed permit establishes once per permit term sampling of toxic materials as these constituents are listed in NAC 445A.1236. If, during the next renewal review process, the water quality data shows a reasonable potential (via a RPA) for any constituent, the Division will retain that constituent with a limit and may increase its sampling frequency. Toxic constituents that prove no reasonable potential may remain in future permits; however, a limit may not be associated with said constituent. The sampling frequency may remain once during the term of the permit, unless new information proves otherwise.

The proposed permit retains the requirement to monitor and report both Total Ammonia (as N) and Phosphorus on an annual basis to comply with the Las Vegas Wash TMDLs.<

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.

For conducting the RPA, the Division used a mass balanced approach to determine the expected critical downstream receiving water concentration using statistics recommended in the United States Environmental Protection Agency's Technical Support Document (TSD) for Water Quality Based Toxic Control for statistically calculating the projected maximum effluent concentration (i.e., Table 31 of the TSD using the 99 percent probability basis and 99 percent confidence interval). For 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 under NAC 445A.2156 to determine if the discharge has reasonable potential to cause, or contribute to, an excursion above a State WQS. Water quality criteria relating to NAC 445A.1236 were also reviewed for this analysis although majority of the applicable toxic materials sampled for in the previous permit were non-detect.

The RPA was based on data collected from January 2019 to December 2024 which includes effluent data submitted in DMRs and the Permittee's monitoring laboratory reports. Based on the RPA, the discharge from Outfall 001 exhibits no reasonable potential to cause, or contribute to, instream excursions above the applicable water quality criteria with the exception of TDS; therefore, a limit was included for this constituent under the outfall.

Proposed Water Quality Based Effluent Limits (monthly/weekly/daily)

The proposed permit establishes once per permit term sampling of toxic materials as these constituents are listed in NAC 445A.1236. The Division does not expect most of these constituents to be present in the discharge; therefore, once per permit term sampling is deemed sufficient for obtaining initial water quality data for toxic materials.

The permit retains the requirement to monitor and report VOCs to satisfy anti-backsliding requirements. Since VOCs have been non-detect for the past six (6) years, the Permittee may continue to sample for VOCs once per permit term. There are no numerical limits for VOCs as these constituents either have a maximum contaminant level (MCL), or are regulated through NAC 445A.1236 for municipal or domestic supply, both of which do not apply to this section of the Las Vegas Wash; therefore, VOCs will be monitored and reported.

Basis for Effluent Limitations

The permit retains the requirement to monitor and report VOCs once a permit term to satisfy anti-backsliding requirements, even if the prior results have been non-detect during the past 6 years. VOCs are required to be sampled to ensure that there is no contaminant plume being encountered.

Anti-backsliding

Sections 402(o) and 303(d)(4) 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. VOCs, and other non-detected parameters, were removed, based on the following anti-backsliding exception (Section 402(o), Item 2) being new information that was not available at the time of permit issuance.

Antidegradation

The Division has developed an antidegradation regulation that is applied on a statewide basis, and which meets the statutory requirements of Nevada’s water pollution control law found at Nevada Revised Statute (NRS) 445A.520 and NRS 445A.565 and is consistent with the federal antidegradation policy found at Title 40 in the CFR section 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 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 recreational 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, the antidegradation review is not required.

Special Conditions

There are no Special Approvals/Conditions applicable to this permit.

SA – Special Approvals / Conditions Table

There are no Special Approval / Condition items

Discharges From Future Outfalls/ Planned Facility Changes

There are no planned discharges from future outfalls or facility changes.

Corrective Action Sites

There are no active Bureau of Corrective Actions (BCA) remediation sites within a one-mile radius of the Tomiyasu Residence.

Wellhead Protection Program

There are Public Water Supply (PWS) well, located approximately 1080 feet southwest to the outfall, with a depth of approximately 600 feet, a sanitary seal at 50 feet, and a screen from 60 to 515 and again from 560 to 600 feet. A second well is located 1220 feet to the southwest to the outfall, that has a depth of approximately 450 feet, with a sanitary seal at 80 feet, and is screened from 80 feet to 180 feet, 220 feet to 260 feet, and 300 feet to 450 feet. The outfall is located in the Drinking Water Protection Area of the wells, which is defined by a 3,000-foot radius around a public water supply (PWS) well. The outfall is not located in a Wellhead Protection Area (WHPA), which represents an approximate 10-year capture zone of a well. The wells are at minimal risk based on the direction and the well structures and depths.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit two copies (one hard copy and one electronic copy) of an updated Operations and Maintenance (O&M) Manual for review and approval by the Division. The O&M Manual shall follow the Division's guidance document, WTS-2A Minimum Information for an Operations and Maintenance (O&M) Manual for Pump-and-Treat Facilities and Dewatering Operations and be prepared by either a Nevada licensed Professional Engineer (P.E.) or certified environmental manager.	4/3/2027

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Annual DMRs	Annually	1/28/2027

Procedures for Public Comment:

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to groundwater of the State of Nevada subject to the conditions contained within the permit, is being mailed to interested persons on our mailing list and will be posted on our website at <https://ndep.nv.gov/posts>. Anyone wishing to comment on the proposed permit can do so in writing until 5:00 P.M. **4/28/2026**, 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: **3/19/2026**

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?
Arsenic, Total Recoverable	ug/L	4	1.2	50	Municipal or Domestic	No
Copper, Total Recoverable	ug/L	1	0.4	30	Chronic Aquatic Life	No
Thallium, Total Recoverable	ug/L	1	1.6	13	Municipal or Domestic	No
Zinc, Total Recoverable	ug/L	1	1.5	388	Acute Aquatic Life	No
Ammonia, Total (as N)	mg/L	2	0.84	0.342	Chronic Aquatic Life	Yes
Total Dissolved Solids	mg/L	6	4,582.28	1900	RMHQ	Yes