



FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: SOUTHERN NEVADA WATER AUTHORITY/LAS VEGAS VALLEY WATER DISTRICT
1001 S. VALLEY VIEW BLVD
LAS VEGAS, NV 89153

Permit Number: NV0024104

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

Designation: MINOR NPDES

New/Existing: EXISTING

Location: LVVWD/SNWA OPERATIONS AND MAINTENANCE, CLARK LAS VEGAS, LAUGHLIN AND UNICORPORATED CLARK COUNTY, LAS VEGAS, LAUGHLIN AND UNICORPORATED CLARK COUNTY, NV 89153
LATITUDE: 36.171860, LONGITUDE: -115.160614
TOWNSHIP: T20S, RANGE: R61E, SECTION: S33

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	DISCHARGES TO THE LAS VEGAS WASH	External Outfall		36.174510	-115.147970	LAS VEGAS WASH
002	DISCHARGES TO LAKE MEAD	External Outfall		36.062317	-114.812650	LAKE MEAD
003	DISCHARGES TO THE COLORADO RIVER BELOW DAVIS DAM	External Outfall		35.173072	-114.570675	COLORADO RIVER BELOW DAVIS DAM
004	DISCHARGES TO THE COLORADO RIVER BETWEEN HOOVER DAM AND DAVIS DAM	External Outfall		35.629565	-114.675123	COLORADO RIVER BETWEEN HOOVER DAM AND DAVIS DAM
005	DISCHARGES TO THE PIUTE WASH	External Outfall		35.369008	-114.832492	GROUNDWATERS OF PAIUTE WASH
006	DISCHARGES TO ROACH DRY LAKE	External Outfall		35.672708	-115.345153	GROUNDWATERS OF ROACH DRY LAKE
007	DISCHARGES TO THE THE MUDDY RIVER	External Outfall		36.621068	-114.497915	MUDDY RIVER
008	DISCHARGES TO ELDORADO DRY LAKE	External Outfall		35.879756	-114.9347	GROUNDWATERS ELDORADO DRY LAKE
009	DISCHARGES TO UNNAMED GROUNDWATERS OF THE STATE	External Outfall		35.799603	-115.016356	UNNAMED GROUNDWATERS OF THE STATE
SUM	SUM OF OUTFALLS	Sum		36.090833	-114.971944	SUM OF OUTFALLS

Permit History/Description of Proposed Action

The Permittee, Las Vegas Valley Water District (LVVWD)/Southern Nevada Water Authority (SNWA), has applied for the renewal of their National Pollutant Discharge Elimination System (NPDES) permit, NV0024104. The permit authorizes the Permittee to discharge treated drinking water and other miscellaneous water from the drinking water distribution systems and facilities of the Permittee's water service area.

This permit was initially issued in January of 2012. That permit expired on February 26, 2017, and has been administratively continued since.

Facility Overview

The Permittee currently operates and maintains the majority of the water distribution systems, wells, and storage facilities of potable water in the Las Vegas Valley, as well as those in Coyote Springs, Kyle Canyon, Blue Diamond, Jean, Searchlight, Boulder City, and Laughlin, Nevada. The Permittee operates approximately 36 reservoirs and tanks which store more than 900 million gallons of treated drinking water, 51 pumping stations, and 76 production wells capable of producing 200 million gallons per day (mgd). The LVVWD also operates more than 4,230 miles of underground water pipelines in its water distribution system. The SNWA currently treats Colorado River water and delivers potable water to Southern Nevada's municipal water providers, including the LVVWD, City of Henderson, City of North Las Vegas, Nellis AFB, and Boulder City. SNWA currently operates the Alfred Merritt Smith Water Treatment Facility (AMSWTF) next to Lake Mead, the River Mountains Water Treatment Facility (RMWTF) in Henderson, and the Big Bend Water District (BBWD) in Laughlin. The AMSWTF currently treats up to 600 mgd of Lake Mead water and the RMWTF currently treats up to 300 mgd. The BBWD treats up to 15 mgd of Colorado River water. SNWA also operates more than 290 miles of major transmission pipelines, 28 pumping stations, and 10 reservoirs and tanks to distribute water to its water providers. The discharges authorized by this permit are the planned and unplanned operational, maintenance, and repair activities performed by LVVWD and SNWA throughout the water systems.

The following types of discharges may occur from the Permittee's facilities:

Treated Drinking Water: Discharge of treated drinking water occurs when maintenance and repairs are required on various parts of the water distribution system which can include, but is not limited to, pressure releases, reservoir dewatering, distribution line testing, fire hydrant flow testing, flushing and dewatering of water mains and pipelines, meter calibration, and backflow preventer testing.

Miscellaneous Water: Discharge of miscellaneous water includes subsurface vault and/or underground structure dewatering. The Permittee must periodically dewater subsurface vaults and underground structures to protect equipment or to safely perform repairs, maintenance, and/or installation of equipment. The volume of water discharged varies and is dependent on system leaks, groundwater seepage, and rainfall amounts.

Outfall Summary

The discharges will take place at numerous locations throughout Clark County, NV. This permit will regulate those discharges according to the receiving waters to which they flow. The following are the permitted outfalls:

Outfall 001: Discharges to the Las Vegas Wash

Outfall 002: Discharges to Lake Mead

Outfall 003: Discharges to the Colorado River below Davis Dam

Outfall 004: Discharges to the Colorado River between Hoover Dam and Davis Dam

Outfall 005: Discharges to the Piute Wash

Outfall 006: Discharges to Roach Dry Lake

Outfall 007: Discharges to the Muddy River

Outfall 008: Discharges to Eldorado Dry Lake

Outfall 009: Discharges to Unnamed Groundwaters of the State

Outfall SUM: The Sum of all Outfalls

Effluent Characterization

Chlorinated discharges (Total Residual Chlorine {TRC} ≥ 0.1 mg/l) result from either planned or unplanned maintenance activities on drinking water systems. For hyper-chlorinated discharges (TRC > 2.0 mg/l) dechlorination and sampling are required.

Non-chlorinated discharges (TRC < 0.1 mg/l) do not require dechlorination or monitoring.

Unplanned water discharges are the result of accidents or incidents that may pose an immediate risk to health, life, property or the environment. Unplanned releases cannot be scheduled or planned for in advance. These may include, but are not limited to, equipment failures and emergencies, water main breaks, leaks, reservoir and tank overflows, and emergency flushing activities. Planned water discharges result from routine operational maintenance activities such as disinfection of mains, testing of fire hydrants, storage tank draining for maintenance, cleaning and lining of pipeline sections, equipment and facility flow testing, and routine flushing of distribution facilities.

Pollutants of Concern

Pollutants of concern are any pollutants, or parameters, that are believed to be present in the discharge and could affect or alter the physical, chemical, or biological condition of the receiving water. Depending on the type of discharge, pollutants of concern to surface waters include total residual chlorine from chlorinated drinking water and total petroleum hydrocarbons (TPH) from utility vaults. Pollutants of concern to groundwaters of the State include TPH from utility vaults.

Total Residual Chlorine

Title 40, Part 122.44(d)(1)(vi) of the Code of Federal Regulations (CFR) provide options for a permitting authority to establish effluent limits where a state has not established water quality criterion for specific chemical pollutants present in an effluent at a concentration that causes, has the reasonable potential to cause, or contributes to an excursion above a narrative criterion within an applicable state's water quality standards (WQSs). The WQSs applicable to the receiving water prohibit the discharge of toxic substances in toxic amounts. The Division has previously determined that using a limit of 0.1 mg/L for total residual chlorine is protective of receiving water beneficial uses. At the dechlorination limit of 0.1 mg/L, the Division has not historically observed any reported fish kills where treated effluent discharges into the aquatic environment. Also, the Division has determined that a limit of 0.1 mg/L is practical considering the sensitivity of both common and alternative methods for measuring chlorine in the field. Nonetheless, since no technical basis for the 0.1 mg/L value can be presented by the Division, EPA Region 9 will not accept this limit without further study, and, or sampling. As a result, the proposed permit will retain a daily maximum effluent limit for total residual chlorine of 0.1 mg/L; however, a pending study of the effects of residual chlorine on the receiving bodies of water will determine if the limit of 0.1 mg/L is protective of all beneficial uses or if a lower limit should be applied.

Receiving Water

Surface waters that are receiving waters for the discharges include the following: Las Vegas Wash, Lake Mead, Colorado River, and Muddy River. The water quality standards for each of the applicable water bodies/reaches have been used to develop permit limits.

Groundwaters of the state that are receiving waters are include Roach Dry Lake, Eldorado Dry Lake, Piute Wash, and various unnamed groundwaters of the State.

Applicable Water Quality Standards/Beneficial Uses

The most stringent of the water quality Requirements to Maintain Higher Existing Quality (RMHQ), and Beneficial Use Standards specified in the NAC regulations for the specific water bodies, have been applied, since there is no method for distinguishing in which reach/section some discharges may occur. For discharges to the Las Vegas Wash, the applicable standards are detailed in NAC 445A.2156 and NAC

445A.2158. For discharges to Lake Mead, the applicable standards are detailed in NAC 445A.2152 and NAC 445A.2154. For discharges to the Colorado River, between Hoover Dam and Davis Dam, the standards are specified in NAC 445A.2147 and NAC 445A.2148; and for discharges below Davis Dam the standards are specified in NAC 445A.2146. For discharges to the Muddy River, the standards are specified in NAC 445A.2168, NAC 445A.2172, and NAC 445A.2174.

For Eldorado Dry Lake, Roach Dry Lake, Piute Wash, and other groundwaters of the State, there are currently no specific water quality standards that have been formally adopted by the State for groundwater. However, the Division has the discretion to implement effluent limitations outside water quality standards per Nevada Administrative Code (NAC) 445A.243, which states, "In establishing an effluent limitation to carry out the policy of this State set forth in NRS 445A.305, consideration must be given to, but is not limited by, the following: ... (2) the need for standards that specify by chemical, physical, biological or other characteristics the extent to which pollution by various substances will not be tolerated." The constituents listed in Profile I have been vetted by the Division and have been included in groundwater discharge permits for many years as a means of regulating groundwater quality. Per Nevada Revised Statute (NRS) 445A.490, "No permit may be issued which authorizes any discharge or injection of fluids through a well into any waters of the State: ... (3) which would result in the degradation of existing or potential underground sources of drinking water."

303 (d) Listing Status

Las Vegas Wash:

According to Nevada's 2020-2022 Water Quality Integrated Report, the Las Vegas Wash above Treatment Plants is impaired for irrigation by boron; for recreation not involving contact with water by *E. coli*; for aquatic life by iron, selenium, and TSS; and for watering of livestock by TDS.

Lake Mead:

According to Nevada's 2020-2022 Water Quality Integrated Report, none of the designated beneficial uses are currently impaired for Lake Mead (NAC 445A.2152). Inner Las Vegas Bay (NAC 445A.2154) is listed as impaired for aquatic life due to dissolved oxygen.

Colorado River:

According to Nevada's 2020-2022 Water Quality Integrated Report, the Colorado River below Hoover Dam (NAC 445A.2148) and the Colorado River below Davis Dam (NAC 445A.2146) are not listed as impaired. The Colorado River from Willow Beach to Davis Dam, also called Lake Mohave (NAC 445A.2147) is impaired for aquatic life due to temperature.

Muddy River:

According to Nevada's 2020-2022 Water Quality Integrated Report, The Muddy River at the Glendale Bridge (NAC 445A.2168) is impaired for aquatic life due to turbidity and for recreation involving contact with water due to *E. coli*. The Muddy River at the Wells Siding Diversion (NAC 445A.2172) is impaired for aquatic life due to iron. The Muddy River at Lake Mead (NAC 445A.2174) is impaired for aquatic life due to phosphorous and turbidity, for recreation involving contact with water due to *E. coli* and phosphorus, and for irrigation due to fecal coliform.

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

ammonia TMDLs on the Las Vegas Wash were established in 1989 and became fully effective in 1994 and 1995, respectively. The Las Vegas Wash TMDL applies to the downstream segment: Las Vegas Wash at Lake Mead (NAC 445A.2158).

There are no TMDLs for Lake Mead, the Colorado River, or the Muddy River. Piute Wash, Roach Dry Lake, and Eldorado Dry Lake are permitted as discharges to groundwaters of the State.

Waste Load Allocation

The Las Vegas Wash ultimately discharges into the Inner Las Vegas Bay, and has established TMDLs for total ammonia and total phosphorus. Per a Bureau of Water Quality Planning (BWQP) memo dated June 9, 2017, "...dewatering discharge activities in the Las Vegas area...[are]... assumed to be part of the base phosphorous load recognized in the 1989 Lake Mead Total Phosphorous TMDL Load Allocation."

Discharges of other miscellaneous waters occurs infrequently and the mass loading of total ammonia and total phosphorus may not be altered significantly enough to cause an excursion of the TMDL in the Wash. Additionally, discharges that are not groundwater are composed of water from Lake Mead, so the discharge of that water will not introduce new or additional quantities of phosphorous or ammonia to Lake Mead. Total phosphorous and total ammonia as N will be monitored and reported.

Compliance History

The Permittee was considered to be in substantial compliance during the previous permit term.

Proposed Effluent Limitations

Proposed Discharge Limitations, Sampling, and Monitoring Requirements: Specific sampling requirements are listed in discharge limitations tables, including frequency and location of sampling. The Permittee is authorized to discharge potable water, raw water, and groundwater to waters of the State from planned and unplanned operational maintenance activities related to the Permittee's facilities and systems. Discharges shall be routed and handled to prevent water quality degradation, sediment transport, and soil erosion to the extent practicable, in accordance with the plans and information submitted to the Nevada Division of Environmental Protection (Division). The most stringent of the water quality Requirements to Maintain Existing Higher Quality (RMHQ), and Water Quality Criteria to Protect Beneficial Uses specified in the Nevada Administrative Code (NAC) are applied at the points of discharge.

Discharge Limitations Table for Sample Location 001 (Discharges To The Las Vegas Wash) To Be Reported Monthly^{[1][2]}

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)		Effluent Gross	001	Daily When Discharging	CALCTD ^[3]
Flow, total	Monthly Total	M&R Million Gallons (Mgal)		Effluent Gross	001	Daily When Discharging	CALCTD ^[3]
Chlorine, total residual ^[4]	Daily Maximum		<= 0.1 Milligrams per Liter (mg/L) ^[5]	Effluent Gross	001	Daily When Discharging	DISCRT
pH, minimum	Daily Minimum		>= 6.5 Standard Units (SU)	Effluent Gross	001	Daily When Discharging	DISCRT
pH, maximum	Daily Maximum		<= 9.0 Standard Units (SU)	Effluent Gross	001	Daily When Discharging	DISCRT
Nitrogen, inorganic total	Daily Maximum		<= 17 Milligrams per Liter (mg/L)	Effluent Gross	001	Daily When Discharging	DISCRT
Nitrogen, nitrate total (as N)	Daily Maximum		<= 90 Milligrams per Liter (mg/L)	Effluent Gross	001	Daily When Discharging	DISCRT
Nitrogen, nitrite total (as N)	Daily Maximum		<= 5 Milligrams per Liter (mg/L)	Effluent Gross	001	Daily When Discharging	DISCRT
Solids, total dissolved	Daily Maximum		<= 1900 Milligrams per Liter (mg/L)	Effluent Gross	001	Daily When Discharging	DISCRT

Notes (Discharge Limitations Table):

1. Sampling requirements in this table are applicable to all planned types of discharges that enter the storm drain system and/or the Las Vegas Wash.
2. Total residual chlorine sampling must be performed at the discharge outlet prior to entering the storm drain system and/or the Las Vegas Wash. The sample shall be representative of the discharge.
3. Flow meter, estimate, or calculation.
4. All chlorinated discharges shall be sampled for total residual chlorine. A log shall be kept for this discharge type. The log shall include, but is not limited to, the date, time, discharge location, flow rate, and total residual chlorine level prior to discharge into a surface water (see Special Approvals / Condition Table Item #1). Sampling for total residual chlorine is not required for non-chlorinated discharges.
5. Dechlorination to ≤ 0.1 mg/L is required for water with a total residual chlorine >2.0 mg/L prior to discharging to the Las Vegas Wash and/or its tributaries (see Special Approvals / Conditions Table Item #2).

Discharge Limitations Table for Sample Location 001 (Discharges To The Las Vegas Wash) To Be Reported Annually^[1]

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	Annual	DISCRT
Beryllium, total recoverable (as Be)	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Boron, total recoverable	Daily Maximum		<= 750 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Cadmium, dissolved (as Cd)	Daily Maximum		<= 7.6 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Chromium, total recoverable	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Chromium, Hexavalent [As CR] (Chromium (VI)) ^[2]	Daily Maximum		<= 16 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Chromium, Trivalent [As CR] (Chromium (III)) ^[2]	Daily Maximum		<= 2022 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Copper, dissolved (as Cu)	Daily Maximum		<= 58 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Cyanide, total (as CN)	Daily Maximum		<= 22 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Fluoride, total (as F)	Daily Maximum		<= 1000 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Iron, total recoverable	Daily Maximum		<= 1000 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
			<= 100				

Discharge Limitations Table for Sample Location 001 (Discharges To The Las Vegas Wash) To Be Reported Annually^[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	Annual	DISCRT
Manganese, total recoverable	Daily Maximum		<= 200 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Mercury, dissolved (as Hg)	Daily Maximum		<= 1.4 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Molybdenum, total recoverable	Daily Maximum		<= 6160 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Nickel, total recoverable ^[2]	Daily Maximum		<= 200 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Selenium, dissolved [as Se]	Daily Maximum		<= 3.9 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Silver total recoverable ^[2]	Daily Maximum		<= 46 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Sulfide, total (as S)	Daily Maximum		<= 2 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Zinc, dissolved (as Zn)	Daily Maximum		<= 435 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Acrolein	Daily Maximum		<= 3 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Aldrin	Daily Maximum		<= 3 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
			<= 0.22				

Discharge Limitations Table for Sample Location 001 (Discharges To The Las Vegas Wash) To Be Reported Annually^[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	Annual	DISCRT
.beta.-Endosulfan	Daily Maximum		<= 0.22 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Chlordane (tech mix. and metabolites)	Daily Maximum		<= 2.4 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Chlorpyrifos	Daily Maximum		<= 0.083 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
4,4-DDT	Daily Maximum		<= 1.1 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Demeton	Daily Maximum		<= 0.1 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Diazinon	Daily Maximum		<= 0.17 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Dieldrin	Daily Maximum		<= 0.24 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Endrin	Daily Maximum		<= 0.086 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Azinphos-Methyl (Guthion)	Daily Maximum		<= 0.01 Micrograms per Liter (ug/L)	Effluent Gross (Supplementary)	001	Annual	DISCRT
Heptachlor	Daily Maximum		<= 0.52 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
			<= 0.52				

Discharge Limitations Table for Sample Location 001 (Discharges To The Las Vegas Wash) To Be Reported Annually^[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	Annual	DISCRT
Lindane	Daily Maximum		<= 0.95 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Malathion	Daily Maximum		<= 0.1 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Methoxychlor	Daily Maximum		<= 0.03 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Mirex	Daily Maximum		<= 0.001 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Nonylphenol	Daily Maximum		<= 28 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Parathion	Daily Maximum		<= 0.065 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Pentachlorophenol	Daily Maximum		<= 5.28 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Polychlorinated biphenyls (PCBs)	Daily Maximum		<= 0.014 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Toxaphene	Daily Maximum		<= 0.73 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Tributyltin	Daily Maximum		<= 0.46 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
			<= 1				

Discharge Limitations Table for Sample Location 001 (Discharges To The Las Vegas Wash) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Hydrocarbons, total petroleum	Daily Maximum		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
Nitrogen, ammonia total (as N)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Phosphorus, total (as P)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Perchlorate (ClO ₄)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT

Notes (Discharge Limitations Table):

1. Sample only planned discharges that are not associated with treated drinking water. Sample and analyze once annually as discharge occurs. A minimum of one (1) discharge is required to be sampled, analyzed, and reported annually, if discharge occurs. If no discharge occurs, use NODI Code "C" in NetDMR. Report results in the 4th quarter DMR.
2. Sample for dissolved fraction.

Discharge Limitations Table for Sample Location 002 (Discharges To Lake Mead) To Be Reported Monthly^{[1][2]}

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)		Effluent Gross	002	Daily When Discharging	CALCTD ^[3]
Flow, total	Monthly Total	M&R Million Gallons (Mgal)		Effluent Gross	002	Daily When Discharging	CALCTD ^[3]
Chlorine, total residual ^[4]	Daily Maximum		<= 0.1 Milligrams per Liter (mg/L) ^[5]	Effluent Gross	002	Daily When Discharging	DISCRT
pH, minimum	Daily Minimum		>= 6.5 Standard Units (SU)	Effluent Gross	002	Daily When Discharging	DISCRT
pH, maximum	Daily Maximum		<= 8.8 Standard Units (SU)	Effluent Gross	002	Daily When Discharging	DISCRT
Nitrogen, inorganic total	Daily Maximum		<= 4.5 Milligrams per Liter (mg/L)	Effluent Gross	002	Daily When Discharging	DISCRT
Nitrogen, nitrate total (as N)	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Effluent Gross	002	Daily When Discharging	DISCRT
Nitrogen, nitrite total (as N)	Daily Maximum		<= 1 Milligrams per Liter (mg/L)	Effluent Gross	002	Daily When Discharging	DISCRT
Nitrogen, ammonia total (as N)	Daily Maximum		<= 1.84 Milligrams per Liter (mg/L)	Effluent Gross	002	Daily When Discharging	DISCRT
Solids, total dissolved	Daily Maximum		<= 1000 Milligrams per Liter (mg/L)	Effluent Gross	002	Daily When Discharging	DISCRT
Chloride (as Cl)	Daily Maximum		<= 400 Milligrams per Liter (mg/L)	Effluent Gross	002	Daily When Discharging	DISCRT
			<= 500				

Discharge Limitations Table for Sample Location 002 (Discharges To Lake Mead) To Be Reported Monthly^{[1][2]}

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Sulfate (as S)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	002	Daily When Discharging	DISCRT

Notes (Discharge Limitations Table):

1. Sampling requirements in this table are applicable to all planned types of discharges that enter Lake Mead or unnamed tributaries to Lake Mead.
2. Total residual chlorine sampling shall be performed at the discharge outlet prior to entering Lake Mead or tributaries to Lake Mead. The sample shall be representative of the discharge.
3. Flow meter, estimate, or calculation.
4. All chlorinated discharges shall be sampled for total residual chlorine. A log shall be kept for this discharge type. The log shall include, but is not limited to, the date, time, discharge location, flow rate, and total residual chlorine level prior to discharge into a surface water (see Special Approvals / Condition Table Item #1). Sampling for total residual chlorine is not required for non-chlorinated discharges.
5. Dechlorination to ≤ 0.1 mg/L is required for water with a total residual chlorine >2.0 mg/L prior to discharging to the Las Vegas Wash and/or its tributaries (see Special Approvals / Conditions Table Item #2).

Discharge Limitations Table for Sample Location 002 (Discharges To Lake Mead) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Antimony, total (as Sb)	Daily Maximum		<= 146 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Arsenic, total recoverable	Daily Maximum		<= 50 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Barium, total (as Ba)	Daily Maximum		<= 2000 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Beryllium, total recoverable (as Be)	Daily Maximum		<= 4 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Boron, total recoverable	Daily Maximum		<= 750 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Cadmium, dissolved (as Cd)	Daily Maximum		<= 1.9 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Chromium, total recoverable	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Chromium, Hexavalent [As CR] (Chromium (VI)) ^[2]	Daily Maximum		<= 16 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Chromium, Trivalent [As CR] (Chromium (III)) ^[2]	Daily Maximum		<= 588 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Copper, dissolved (as Cu)	Daily Maximum		<= 14 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Cyanide, total (as CN)	Daily Maximum		<= 22 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
			<= 1000				

Discharge Limitations Table for Sample Location 002 (Discharges To Lake Mead) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Fluoride, total (as F)	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Iron, total recoverable	Daily Maximum		<= 1000 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Lead, total recoverable	Daily Maximum		<= 50 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Manganese, total recoverable	Daily Maximum		<= 200 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Mercury, dissolved (as Hg)	Daily Maximum		<= 1.4 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Molybdenum, total recoverable	Daily Maximum		<= 6160 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Nickel, total recoverable	Daily Maximum		<= 13.4 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Selenium, dissolved [as Se]	Daily Maximum		<= 1.9 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Silver total recoverable ^[2]	Daily Maximum		<= 3.4 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Sulfide, total (as S)	Daily Maximum		<= 2 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Thallium, total (as Tl)	Daily Maximum		<= 13 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
			<= 121				

Discharge Limitations Table for Sample Location 002 (Discharges To Lake Mead) To Be Reported Annually¹

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Zinc, dissolved (as Zn)	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Acrolein	Daily Maximum		<= 3 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Aldrin	Daily Maximum		<= 0 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
.alpha.-Endosulfan	Daily Maximum		<= 0.22 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
.beta.-Endosulfan	Daily Maximum		<= 0.22 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Benzene	Daily Maximum		<= 5 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Bis(2-chloroethyl) ether	Daily Maximum		<= 34.7 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Chlordane (tech mix. and metabolites)	Daily Maximum		<= 0 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Vinyl Chloride (Chloroethylene (Vinyl))	Daily Maximum		<= 2 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Chlorpyrifos	Daily Maximum		<= 0.083 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
2,4-Dichlorophenoxyacetic Acid (2 4-D)	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
			<= 0				

Discharge Limitations Table for Sample Location 002 (Discharges To Lake Mead) To Be Reported Annually¹

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
DDT	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
4,4-DDT	Daily Maximum		<= 1.1 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Demeton	Daily Maximum		<= 0.1 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Diazinon	Daily Maximum		<= 0.17 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Dibutyl phthalate	Daily Maximum		<= 34000 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
1,3-Dichlorobenzene (M-Dichlorobenzene)	Daily Maximum		<= 400 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
1,2-Dichlorobenzene (O-Dichlorobenzene)	Daily Maximum		<= 400 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
1,4-Dichlorobenzene (P-Dichlorobenzene)	Daily Maximum		<= 75 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
1,2-Dichloroethane	Daily Maximum		<= 5 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
1,1-Dichloroethylene	Daily Maximum		<= 7 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
2,4-Dichlorophenol	Daily Maximum		<= 3090 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
			<= 87				

Discharge Limitations Table for Sample Location 002 (Discharges To Lake Mead) To Be Reported Annually¹

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
1,1-Dichloropropene (Dichloropropenes)	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
1,3-Dichloropropene (Dichloropropenes)	Daily Maximum		<= 87 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Dieldrin	Daily Maximum		<= 0 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Di-2-ethylhexyl phthalate	Daily Maximum		<= 15000 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Diethyl phthalate	Daily Maximum		<= 350000 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Dimethyl phthalate	Daily Maximum		<= 313000 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
2-Methyl-4,6-Dinitrophenol (4,6-Dinitro-2-Methylphenol)	Daily Maximum		<= 13.4 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
2,4-Dinitrophenol (Dinitrophenols)	Daily Maximum		<= 70 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Endosulfan, total	Daily Maximum		<= 75 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Endrin	Daily Maximum		<= 0.086 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Ethylbenzene	Daily Maximum		<= 1400 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT

Discharge Limitations Table for Sample Location 002 (Discharges To Lake Mead) To Be Reported Annually¹¹

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Fluoranthene (Fluoranthene (Polynuclear Aromatic Hydrocarbon))	Daily Maximum		<= 42 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Azinphos-Methyl (Guthion)	Daily Maximum		<= 0.01 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Heptachlor	Daily Maximum		<= 0.52 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Heptachlor epoxide	Daily Maximum		<= 0.52 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Hexachlorocyclopentadiene	Daily Maximum		<= 206 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Isophorone	Daily Maximum		<= 5200 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Lindane	Daily Maximum		<= 0.95 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Malathion	Daily Maximum		<= 0.1 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Methoxychlor	Daily Maximum		<= 0.03 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Mirex	Daily Maximum		<= 0 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Monochlorobenzenes	Daily Maximum		<= 488 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
			<= 19800				

Discharge Limitations Table for Sample Location 002 (Discharges To Lake Mead) To Be Reported Annually¹

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Nitrobenzene	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Nonylphenol	Daily Maximum		<= 28 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Parathion	Daily Maximum		<= 0.065 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Pentachlorophenol	Daily Maximum		<= 5.28 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Phenol	Daily Maximum		<= 3500 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Polychlorinated biphenyls (PCBs)	Daily Maximum		<= 0 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Silvex	Daily Maximum		<= 10 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
2,4,5-TP(silvex) acids/salts, whole water sample	Daily Maximum		<= 10 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Carbon Tetrachloride (Tetrachloromethane (Carbon Tetrachloride))	Daily Maximum		<= 5 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Toluene	Daily Maximum		<= 14300 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Toxaphene	Daily Maximum		<= 0.73 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
			<= 0.46				

Discharge Limitations Table for Sample Location 002 (Discharges To Lake Mead) To Be Reported Annually¹

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Tributyltin	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
1,1,1-Trichloroethane	Daily Maximum		<= 200 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Trichloroethylene	Daily Maximum		<= 5 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Trihalomethane, tot.	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Hydrocarbons, total petroleum	Daily Maximum		<= 1 Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT

Notes (Discharge Limitations Table):

1. Sample only planned discharges that are not associated with treated drinking water. Sample and analyze once annually as discharge occurs. A minimum of one (1) discharge is required to be sampled, analyzed, and reported annually, if discharge occurs. If no discharge occurs, use NODI Code "C" in NetDMR. Report results in the 4th quarter DMR.
2. Sample for dissolved fraction.

Discharge Limitations Table for Sample Location 003 (Discharges To The Colorado River Below Davis Dam) To Be Reported Monthly^{[1][2]}

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)		Effluent Gross	003	Daily When Discharging	CALCTD ^[3]
Flow, total	Monthly Total	M&R Million Gallons (Mgal)		Effluent Gross	003	Daily When Discharging	CALCTD ^[3]
Chlorine, total residual ^[4]	Daily Maximum		≤ 0.1 Milligrams per Liter (mg/L) ^[5]	Effluent Gross	003	Daily When Discharging	DISCRT
pH, minimum	Daily Minimum		≥ 6.5 Standard Units (SU)	Effluent Gross	003	Daily When Discharging	DISCRT
pH, maximum	Daily Maximum		≤ 9.0 Standard Units (SU)	Effluent Gross	003	Daily When Discharging	DISCRT
Phosphorus, total (as P)	Daily Maximum		≤ 0.03 Milligrams per Liter (mg/L)	Effluent Gross	003	Daily When Discharging	DISCRT
Nitrogen, nitrate total (as N)	Daily Maximum		≤ 1.6 Milligrams per Liter (mg/L)	Effluent Gross	003	Daily When Discharging	DISCRT
Nitrogen, nitrite total (as N)	Daily Maximum		≤ 0.06 Milligrams per Liter (mg/L)	Effluent Gross	003	Daily When Discharging	DISCRT
Ammonia nitrogen, total, (as N) 30 day	Daily Maximum		≤ 0.885 Milligrams per Liter (mg/L)	Effluent Gross	003	Daily When Discharging	DISCRT
Solids, total dissolved	Daily Maximum		≤ 723 Milligrams per Liter (mg/L)	Effluent Gross	003	Daily When Discharging	DISCRT
Chloride (as Cl)	Daily Maximum		≤ 400 Milligrams per Liter (mg/L)	Effluent Gross	003	Daily When Discharging	DISCRT
			≤ 500				

Discharge Limitations Table for Sample Location 003 (Discharges To The Colorado River Below Davis Dam) To Be Reported Monthly^{[1][2]}

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Sulfate (as S)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	003	Daily When Discharging	DISCRT
Alkalinity, total (as CaCO ₃)	Daily Minimum		>= 20 Milligrams per Liter (mg/L)	Effluent Gross	003	Daily When Discharging	DISCRT

Notes (Discharge Limitations Table):

1. Sampling requirements in this table are applicable to all planned types of discharges that enter the Colorado River below Davis Dam and/or its tributaries.
2. Total residual chlorine sampling shall be performed at the discharge outlet prior to entering the Colorado River below Davis Dam and/or its tributaries. The sample shall be representative of the discharge.
3. Flow meter, estimate, or calculation.
4. All chlorinated discharges shall be sampled for total residual chlorine. A log shall be kept for this discharge type. The log shall include, but is not limited to, the date, time, discharge location, flow rate, and total residual chlorine level prior to discharge into a surface water (see Special Approvals / Condition Table Item #1). Sampling for total residual chlorine is not required for non-chlorinated discharges.
5. Dechlorination to ≤ 0.1 mg/L is required for water with a total residual chlorine >2.0 mg/L prior to discharging to the Colorado River below Davis Dam and/or its tributaries (see Special Approvals / Conditions Table Item #2).

Discharge Limitations Table for Sample Location 003 (Discharges To The Colorado River Below Davis Dam) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Antimony, total (as Sb)	Daily Maximum		<= 146 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Arsenic, total recoverable	Daily Maximum		<= 50 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Barium, total (as Ba)	Daily Maximum		<= 2000 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Beryllium, total recoverable (as Be)	Daily Maximum		<= 4 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Boron, total recoverable	Daily Maximum		<= 750 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Cadmium, dissolved (as Cd)	Daily Maximum		<= 2.3 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Chromium, total recoverable	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Chromium, Hexavalent [As CR] (Chromium (VI)) ^[2]	Daily Maximum		<= 16 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Chromium, Trivalent [As CR] (Chromium (III)) ^[2]	Daily Maximum		<= 710 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Copper, dissolved (as Cu)	Daily Maximum		<= 17 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Cyanide, total (as CN)	Daily Maximum		<= 22 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
			<= 1000				

Discharge Limitations Table for Sample Location 003 (Discharges To The Colorado River Below Davis Dam) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Fluoride, total (as F)	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Iron, total recoverable	Daily Maximum		<= 1000 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Lead, total recoverable	Daily Maximum		<= 50 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Manganese, total recoverable	Daily Maximum		<= 200 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Mercury, dissolved (as Hg)	Daily Maximum		<= 1.4 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Molybdenum, total recoverable	Daily Maximum		<= 6160 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Nickel, total recoverable	Daily Maximum		<= 13.4 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Selenium, dissolved [as Se]	Daily Maximum		<= 3.9 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Silver total recoverable ^[2]	Daily Maximum		<= 5.1 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Sulfide, total (as S)	Daily Maximum		<= 2 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Thallium, total (as Tl)	Daily Maximum		<= 13 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
			<= 147				

Discharge Limitations Table for Sample Location 003 (Discharges To The Colorado River Below Davis Dam) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Zinc, dissolved (as Zn)	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Acrolein	Daily Maximum		<= 3 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Aldrin	Daily Maximum		<= 0 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
.alpha.-Endosulfan	Daily Maximum		<= 0.22 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
.beta.-Endosulfan	Daily Maximum		<= 0.22 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Benzene	Daily Maximum		<= 5 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Bis(2-chloroethyl) ether	Daily Maximum		<= 34.7 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Chlordane (tech mix. and metabolites)	Daily Maximum		<= 0 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Vinyl Chloride (Chloroethylene (Vinyl))	Daily Maximum		<= 2 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Chlorpyrifos	Daily Maximum		<= 0.083 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
2,4-Dichlorophenoxyacetic Acid (2 4-D)	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
			<= 0				

Discharge Limitations Table for Sample Location 003 (Discharges To The Colorado River Below Davis Dam) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
DDT	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
4,4-DDT	Daily Maximum		<= 1.1 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Demeton	Daily Maximum		<= 0.1 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Diazinon	Daily Maximum		<= 0.17 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Dibutyl phthalate	Daily Maximum		<= 34000 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
1,3-Dichlorobenzene (M-Dichlorobenzene)	Daily Maximum		<= 400 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
1,2-Dichlorobenzene (O-Dichlorobenzene)	Daily Maximum		<= 400 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
1,4-Dichlorobenzene (P-Dichlorobenzene)	Daily Maximum		<= 75 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
1,2-Dichloroethane	Daily Maximum		<= 5 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
1,1-Dichloroethylene	Daily Maximum		<= 7 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
2,4-Dichlorophenol	Daily Maximum		<= 3090 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
			<= 87				

Discharge Limitations Table for Sample Location 003 (Discharges To The Colorado River Below Davis Dam) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
1,1-Dichloropropene (Dichloropropenes)	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
1,3-Dichloropropene (Dichloropropenes)	Daily Maximum		<= 87 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Dieldrin	Daily Maximum		<= 0 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Di-2-ethylhexyl phthalate	Daily Maximum		<= 15000 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Diethyl phthalate	Daily Maximum		<= 350000 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Dimethyl phthalate	Daily Maximum		<= 313000 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
2-Methyl-4,6-Dinitrophenol (4,6-Dinitro-2-Methylphenol)	Daily Maximum		<= 13.4 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
2,4-Dinitrophenol (Dinitrophenols)	Daily Maximum		<= 70 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Endosulfan, total	Daily Maximum		<= 75 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Endrin	Daily Maximum		<= 0.086 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Ethylbenzene	Daily Maximum		<= 1400 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT

Discharge Limitations Table for Sample Location 003 (Discharges To The Colorado River Below Davis Dam) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Fluoranthene (Fluoranthene (Polynuclear Aromatic Hydrocarbon))	Daily Maximum		<= 42 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Azinphos-Methyl (Guthion)	Daily Maximum		<= 0.01 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Heptachlor	Daily Maximum		<= 0.52 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Heptachlor epoxide	Daily Maximum		<= 0.52 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Hexachlorocyclopentadiene	Daily Maximum		<= 206 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Isophorone	Daily Maximum		<= 5200 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Lindane	Daily Maximum		<= 0.95 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Malathion	Daily Maximum		<= 0.1 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Methoxychlor	Daily Maximum		<= 0.03 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Mirex	Daily Maximum		<= 0 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Monochlorobenzenes	Daily Maximum		<= 488 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
			<= 19800				

Discharge Limitations Table for Sample Location 003 (Discharges To The Colorado River Below Davis Dam) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Nitrobenzene	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Nonylphenol	Daily Maximum		<= 28 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Parathion	Daily Maximum		<= 0.065 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Pentachlorophenol	Daily Maximum		<= 5.28 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Phenol	Daily Maximum		<= 3500 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Polychlorinated biphenyls (PCBs)	Daily Maximum		<= 0 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Silvex	Daily Maximum		<= 10 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
2,4,5-TP(silvex) acids/salts, whole water sample	Daily Maximum		<= 10 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Carbon Tetrachloride (Tetrachloromethane (Carbon Tetrachloride))	Daily Maximum		<= 5 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Toluene	Daily Maximum		<= 14300 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Toxaphene	Daily Maximum		<= 0.73 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
			<= 0.46				

Discharge Limitations Table for Sample Location 003 (Discharges To The Colorado River Below Davis Dam) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Tributyltin	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
1,1,1-Trichloroethane	Daily Maximum		<= 200 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Trichloroethylene	Daily Maximum		<= 5 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Trihalomethane, tot.	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	003	Annual	DISCRT
Hydrocarbons, total petroleum	Daily Maximum		<= 1 Milligrams per Liter (mg/L)	Effluent Gross	003	Annual	DISCRT

Notes (Discharge Limitations Table):

1. Sample only planned discharges that are not associated with treated drinking water. Sample and analyze once annually as discharge occurs. A minimum of one (1) discharge is required to be sampled, analyzed, and reported annually, if discharge occurs. If no discharge occurs, use NODI Code "C" in NetDMR. Report results in the 4th quarter DMR.
2. Sample for dissolved fraction.

Discharge Limitations Table for Sample Location 004 (Discharges To The Colorado River Between Hoover Dam And Davis Dam) To Be Reported Monthly^{[1][2]}

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)		Effluent Gross	004	Daily When Discharging	CALCTD ^[3]
Flow, total	Monthly Total	M&R Million Gallons (Mgal)		Effluent Gross	004	Daily When Discharging	CALCTD ^[3]
Chlorine, total residual ^[4]	Daily Maximum		<= 0.1 Milligrams per Liter (mg/L) ^[5]	Effluent Gross	004	Daily When Discharging	DISCRT
pH, minimum	Daily Minimum		>= 6.5 Standard Units (SU)	Effluent Gross	004	Daily When Discharging	DISCRT
pH, maximum	Daily Maximum		<= 9.0 Standard Units (SU)	Effluent Gross	004	Daily When Discharging	DISCRT
Phosphorus, total (as P)	Daily Maximum		<= 0.033 Milligrams per Liter (mg/L)	Effluent Gross	004	Daily When Discharging	DISCRT
Nitrogen, total	Daily Maximum		<= 1.5 Milligrams per Liter (mg/L)	Effluent Gross	004	Daily When Discharging	DISCRT
Nitrogen, nitrate total (as N)	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Effluent Gross	004	Daily When Discharging	DISCRT
Nitrogen, nitrite total (as N)	Daily Maximum		<= 0.06 Milligrams per Liter (mg/L)	Effluent Gross	004	Daily When Discharging	DISCRT
Nitrogen, ammonia total (as N)	Daily Maximum		<= 0.885 Milligrams per Liter (mg/L)	Effluent Gross	004	Daily When Discharging	DISCRT
Solids, total dissolved	Daily Maximum		<= 723 Milligrams per Liter (mg/L)	Effluent Gross	004	Daily When Discharging	DISCRT
			<= 400				

Discharge Limitations Table for Sample Location 004 (Discharges To The Colorado River Between Hoover Dam And Davis Dam) To Be Reported Monthly^{[1][2]}

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Chloride (as Cl)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	004	Daily When Discharging	DISCRT
Sulfate (as S)	Daily Maximum		<= 500 Milligrams per Liter (mg/L)	Effluent Gross	004	Daily When Discharging	DISCRT
Alkalinity, total (as CaCO ₃)	Daily Minimum		>= 20 Milligrams per Liter (mg/L)	Effluent Gross	004	Daily When Discharging	DISCRT

Notes (Discharge Limitations Table):

1. Sampling requirements in this table are applicable to all planned types of discharges to the Colorado River between Hoover Dam and Davis Dam and/or its tributaries.
2. Total residual chlorine sampling shall be performed at the discharge outlet prior to discharge to the Colorado River between the Hoover Dam and Davis Dam and/or its tributaries. The sample shall be representative of the discharge.
3. Flow meter, estimate, or calculation.
4. All chlorinated discharges shall be sampled for total residual chlorine. A log shall be kept for this discharge type. The log shall include, but is not limited to, the date, time, discharge location, flow rate, and total residual chlorine level prior to discharge into a surface water (see Special Approvals / Condition Table Item #1). Sampling for total residual chlorine is not required for non-chlorinated discharges.
5. Dechlorination to ≤ 0.1 mg/L is required for water with a total residual chlorine >2.0 mg/L prior to discharging to the Colorado River between the Hoover Dam and Davis Dam and/or its tributaries (see Special Approvals / Conditions Table Item #2).

Discharge Limitations Table for Sample Location 004 (Discharges To The Colorado River Between Hoover Dam And Davis Dam) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Antimony, total (as Sb)	Daily Maximum		<= 146 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Arsenic, total recoverable	Daily Maximum		<= 50 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Barium, total (as Ba)	Daily Maximum		<= 2000 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Beryllium, total recoverable (as Be)	Daily Maximum		<= 4 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Boron, total recoverable	Daily Maximum		<= 750 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Cadmium, dissolved (as Cd)	Daily Maximum		<= 2.3 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Chromium, total recoverable	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Chromium, Hexavalent [As CR] (Chromium (VI)) ^[2]	Daily Maximum		<= 16 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Chromium, Trivalent [As CR] (Chromium (III)) ^[2]	Daily Maximum		<= 715 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Copper, dissolved (as Cu)	Daily Maximum		<= 17 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Cyanide, total (as CN)	Daily Maximum		<= 22 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
			<= 1000				

Discharge Limitations Table for Sample Location 004 (Discharges To The Colorado River Between Hoover Dam And Davis Dam) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Fluoride, total (as F)	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Iron, total recoverable	Daily Maximum		<= 1000 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Lead, total recoverable	Daily Maximum		<= 50 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Manganese, total recoverable	Daily Maximum		<= 200 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Mercury, dissolved (as Hg)	Daily Maximum		<= 1.4 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Molybdenum, total recoverable	Daily Maximum		<= 6160 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Nickel, total recoverable	Daily Maximum		<= 13.4 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Selenium, dissolved [as Se]	Daily Maximum		<= 3.9 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Silver total recoverable ^[2]	Daily Maximum		<= 5.2 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Sulfide, total (as S)	Daily Maximum		<= 2 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Thallium, total (as Tl)	Daily Maximum		<= 13 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
			<= 148				

Discharge Limitations Table for Sample Location 004 (Discharges To The Colorado River Between Hoover Dam And Davis Dam) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Zinc, dissolved (as Zn)	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Acrolein	Daily Maximum		<= 3 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Aldrin	Daily Maximum		<= 0 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
.alpha.-Endosulfan	Daily Maximum		<= 0.22 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
.beta.-Endosulfan	Daily Maximum		<= 0.22 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Benzene	Daily Maximum		<= 5 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Bis(2-chloroethyl) ether	Daily Maximum		<= 34.7 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Chlordane (tech mix. and metabolites)	Daily Maximum		<= 0 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Vinyl Chloride (Chloroethylene (Vinyl))	Daily Maximum		<= 2 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Chlorpyrifos	Daily Maximum		<= 0.083 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
2,4-Dichlorophenoxyacetic Acid (2 4-D)	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
			<= 0				

Discharge Limitations Table for Sample Location 004 (Discharges To The Colorado River Between Hoover Dam And Davis Dam) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
DDT	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
4,4-DDT	Daily Maximum		<= 1.1 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Demeton	Daily Maximum		<= 0.1 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Diazinon	Daily Maximum		<= 0.17 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Dibutyl phthalate	Daily Maximum		<= 34000 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
1,3-Dichlorobenzene (M-Dichlorobenzene)	Daily Maximum		<= 400 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
1,2-Dichlorobenzene (O-Dichlorobenzene)	Daily Maximum		<= 400 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
1,4-Dichlorobenzene (P-Dichlorobenzene)	Daily Maximum		<= 75 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
1,2-Dichloroethane	Daily Maximum		<= 5 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
1,1-Dichloroethylene	Daily Maximum		<= 7 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
2,4-Dichlorophenol	Daily Maximum		<= 3090 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
			<= 87				

Discharge Limitations Table for Sample Location 004 (Discharges To The Colorado River Between Hoover Dam And Davis Dam) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
1,1-Dichloropropene (Dichloropropenes)	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
1,3-Dichloropropene (Dichloropropenes)	Daily Maximum		<= 87 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Dieldrin	Daily Maximum		<= 0 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Di-2-ethylhexyl phthalate	Daily Maximum		<= 15000 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Diethyl phthalate	Daily Maximum		<= 350000 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Dimethyl phthalate	Daily Maximum		<= 313000 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
2-Methyl-4,6-Dinitrophenol (4,6-Dinitro-2-Methylphenol)	Daily Maximum		<= 13.4 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
2,4-Dinitrophenol (Dinitrophenols)	Daily Maximum		<= 70 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Endosulfan, total	Daily Maximum		<= 75 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Endrin	Daily Maximum		<= 0.086 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Ethylbenzene	Daily Maximum		<= 1400 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT

Discharge Limitations Table for Sample Location 004 (Discharges To The Colorado River Between Hoover Dam And Davis Dam) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Fluoranthene (Fluoranthene (Polynuclear Aromatic Hydrocarbon))	Daily Maximum		<= 42 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Azinphos-Methyl (Guthion)	Daily Maximum		<= 0.01 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Heptachlor	Daily Maximum		<= 0.52 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Heptachlor epoxide	Daily Maximum		<= 0.52 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Hexachlorocyclopentadiene	Daily Maximum		<= 206 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Isophorone	Daily Maximum		<= 5200 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Lindane	Daily Maximum		<= 0.95 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Malathion	Daily Maximum		<= 0.1 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Methoxychlor	Daily Maximum		<= 0.03 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Mirex	Daily Maximum		<= 0 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Monochlorobenzenes	Daily Maximum		<= 488 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
			<= 19800				

Discharge Limitations Table for Sample Location 004 (Discharges To The Colorado River Between Hoover Dam And Davis Dam) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Nitrobenzene	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Nonylphenol	Daily Maximum		<= 28 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Parathion	Daily Maximum		<= 0.065 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Pentachlorophenol	Daily Maximum		<= 5.28 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Phenol	Daily Maximum		<= 3500 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Polychlorinated biphenyls (PCBs)	Daily Maximum		<= 0 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Silvex	Daily Maximum		<= 10 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
2,4,5-TP(silvex) acids/salts, whole water sample	Daily Maximum		<= 10 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Carbon Tetrachloride (Tetrachloromethane (Carbon Tetrachloride))	Daily Maximum		<= 5 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Toluene	Daily Maximum		<= 14300 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Toxaphene	Daily Maximum		<= 0.73 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
			<= 0.46				

Discharge Limitations Table for Sample Location 004 (Discharges To The Colorado River Between Hoover Dam And Davis Dam) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Tributyltin	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
1,1,1-Trichloroethane	Daily Maximum		<= 200 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Trichloroethylene	Daily Maximum		<= 5 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Trihalomethane, tot.	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	004	Annual	DISCRT
Hydrocarbons, total petroleum	Daily Maximum		<= 1 Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT

Notes (Discharge Limitations Table):

1. Sample only planned discharges that are not associated with treated drinking water. Sample and analyze once annually as discharge occurs. A minimum of one (1) discharge is required to be sampled, analyzed, and reported annually, if discharge occurs. If no discharge occurs, use NODI Code "C" in NetDMR. Report results in the 4th quarter DMR.
2. Sample for dissolved fraction.

Discharge Limitations Table for Sample Location 005 (Discharges To Groundwaters Of The Piute Wash) To Be Reported Monthly^[1]

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)		Effluent Gross	005	Daily When Discharging	CALCTD ^[2]
Flow, total	Monthly Total	M&R Million Gallons (Mgal)		Effluent Gross	005	Monthly	CALCTD ^[2]

Notes (Discharge Limitations Table):

1. Reporting requirements in this table are applicable to all types of discharges that enter groundwaters of the State.
2. Flow meter, estimate, or calculation.

Discharge Limitations Table for Sample Location 005 (Discharges To Groundwaters Of The Piute Wash) To Be Reported Annually^{[1][2][4]}

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Alkalinity, bicarbonate (as CaCO ₃)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Alkalinity, total (as CaCO ₃)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Aluminum, total (as Al)	Daily Maximum		<= 0.2 Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Antimony, total (as Sb)	Daily Maximum		<= 0.006 Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Arsenic, total (as As)	Daily Maximum		<= 0.01 Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Barium, total (as Ba)	Daily Maximum		<= 2 Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Beryllium, total (as Be)	Daily Maximum		<= 0.004 Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Cadmium, total (as Cd)	Daily Maximum		<= 0.005 Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Calcium, total (as Ca)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Chloride (as Cl)	Daily Maximum		<= 400 Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Chromium, total (as Cr)	Daily Maximum		<= 0.1 Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
			<= 1				

Discharge Limitations Table for Sample Location 005 (Discharges To Groundwaters Of The Piute Wash) To Be Reported Annually^{[1][2][4]}

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Copper, total (as Cu)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Fluoride, total (as F)	Daily Maximum		<= 4 Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Iron, total (as Fe)	Daily Maximum		<= 0.6 Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Lead, total (as Pb)	Daily Maximum		<= 0.015 Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Magnesium, total (as Mg)	Daily Maximum		<= 150 Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Manganese, total (as Mn)	Daily Maximum		<= 0.1 Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Mercury, total (as Hg)	Daily Maximum		<= 0.002 Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Nitrite plus nitrate total 1 det. (as N)	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
pH, maximum	Daily Maximum		<= 8.5 Standard Units (SU)	Effluent Gross	005	Annual	DISCRT
pH, minimum	Daily Minimum		>= 6.5 Standard Units (SU)	Effluent Gross	005	Annual	DISCRT
Potassium, total (as K)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT

Discharge Limitations Table for Sample Location 005 (Discharges To Groundwaters Of The Piute Wash) To Be Reported Annually^{[1][2][4]}

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Selenium, total (as Se)	Daily Maximum		<= 0.05 Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Silver, total (as Ag)	Daily Maximum		<= 0.1 Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Sodium, total (as Na)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Sulfate, total (as SO ₄)	Daily Maximum		<= 500 Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Thallium, total (as Tl)	Daily Maximum		<= 0.002 Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Solids, total dissolved	Daily Maximum		<= 1000 Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Uranium, natural, total	Daily Maximum		<= 0.01 Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Cyanide, weak acid, dissociable	Daily Maximum		<= 0.2 Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Zinc, total (as Zn)	Daily Maximum		<= 5 Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Hydrocarbons, total petroleum ^[3]	Daily Maximum		<= 1.0 Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT

Notes (Discharge Limitations Table):

1. Applicable only to planned discharges, except for those associated with treated drinking water.
2. Sample and analyze once annually as discharge occurs. A minimum of one (1) discharge is required to be sampled, analyzed, and reported annually, if discharge occurs. If no discharge occurs, use NODI Code "C" in NetDMR. Report results in the 4th quarter DMR.

3. TPH, purgeable and extractable, shall only be sampled for if the discharge being sampled is associated with subsurface vault and/or underground structure dewatering activities.
4. Sample for dissolved fraction.

Discharge Limitations Table for Sample Location 006 (Discharges To Groundwaters Of Roach Dry Lake) To Be Reported Monthly^[1]

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)		Effluent Gross	006	Daily When Discharging	CALCTD ^[2]
Flow, total	Monthly Total	M&R Million Gallons (Mgal)		Effluent Gross	006	Monthly	CALCTD ^[2]

Notes (Discharge Limitations Table):

1. Reporting requirements in this table are applicable to all types of discharges that enter groundwaters of the State.
2. Flow meter, estimate, or calculation.

Discharge Limitations Table for Sample Location 006 (Discharges To Groundwaters Of Roach Dry Lake) To Be Reported Annually^{[1][2][4]}

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Alkalinity, bicarbonate (as CaCO ₃)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Alkalinity, total (as CaCO ₃)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Aluminum, total (as Al)	Daily Maximum		<= 0.2 Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Antimony, total (as Sb)	Daily Maximum		<= 0.006 Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Arsenic, total (as As)	Daily Maximum		<= 0.01 Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Barium, total (as Ba)	Daily Maximum		<= 2 Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Beryllium, total (as Be)	Daily Maximum		<= 0.004 Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Cadmium, total (as Cd)	Daily Maximum		<= 0.005 Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Calcium, total (as Ca)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Chloride (as Cl)	Daily Maximum		<= 400 Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Chromium, total (as Cr)	Daily Maximum		<= 0.1 Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
			<= 1				

Discharge Limitations Table for Sample Location 006 (Discharges To Groundwaters Of Roach Dry Lake) To Be Reported Annually^{[1][2][4]}

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Copper, total (as Cu)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Fluoride, total (as F)	Daily Maximum		<= 4 Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Iron, total (as Fe)	Daily Maximum		<= 0.6 Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Lead, total (as Pb)	Daily Maximum		<= 0.015 Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Magnesium, total (as Mg)	Daily Maximum		<= 150 Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Manganese, total (as Mn)	Daily Maximum		<= 0.1 Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Mercury, total (as Hg)	Daily Maximum		<= 0.002 Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Nitrite plus nitrate total 1 det. (as N)	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
pH, maximum	Daily Maximum		<= 8.5 Standard Units (SU)	Effluent Gross	006	Annual	DISCRT
pH, minimum	Daily Minimum		>= 6.5 Standard Units (SU)	Effluent Gross	006	Annual	DISCRT
Potassium, total (as K)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT

Discharge Limitations Table for Sample Location 006 (Discharges To Groundwaters Of Roach Dry Lake) To Be Reported Annually^{[1][2][4]}

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Selenium, total (as Se)	Daily Maximum		<= 0.05 Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Silver, total (as Ag)	Daily Maximum		<= 0.1 Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Sodium, total (as Na)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Sulfate, total (as SO ₄)	Daily Maximum		<= 500 Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Thallium, total (as Tl)	Daily Maximum		<= 0.002 Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Solids, total dissolved	Daily Maximum		<= 1000 Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Uranium, natural, total	Daily Maximum		<= 0.01 Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Cyanide, weak acid, dissociable	Daily Maximum		<= 0.2 Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Zinc, total (as Zn)	Daily Maximum		<= 5 Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT
Hydrocarbons, total petroleum ^[3]	Daily Maximum		<= 1.0 Milligrams per Liter (mg/L)	Effluent Gross	006	Annual	DISCRT

Notes (Discharge Limitations Table):

1. Applicable only to planned discharges, except for those associated with treated drinking water.
2. Sample and analyze once annually as discharge occurs. A minimum of one (1) discharge is required to be sampled, analyzed, and reported annually, if discharge occurs. If no discharge occurs, use NODI Code "C" in NetDMR. Report results in the 4th quarter DMR.

3. TPH, purgeable and extractable, shall only be sampled for if the discharge being sampled is associated with subsurface vault and/or underground structure dewatering activities.
4. Sample for dissolved fraction.

Discharge Limitations Table for Sample Location 007 (Discharges To The The Muddy River) To Be Reported Monthly^{[1][2]}

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)		Effluent Gross	007	Daily When Discharging	CALCTD ^[3]
Flow, total	Monthly Total	M&R Million Gallons (Mgal)		Effluent Gross	007	Daily When Discharging	CALCTD ^[3]
Chlorine, total residual ^[4]	Daily Maximum		≤ 0.1 Milligrams per Liter (mg/L) ^[5]	Effluent Gross	007	Daily When Discharging	DISCRT
pH, minimum	Daily Minimum		≥ 6.5 Standard Units (SU)	Effluent Gross	007	Daily When Discharging	DISCRT
pH, maximum	Daily Maximum		≤ 9.0 Standard Units (SU)	Effluent Gross	007	Daily When Discharging	DISCRT
Phosphorus, total (as P)	Daily Maximum		≤ 0.1 Milligrams per Liter (mg/L)	Effluent Gross	007	Daily When Discharging	DISCRT
Nitrogen, total	Daily Maximum		≤ 1.4 Milligrams per Liter (mg/L)	Effluent Gross	007	Daily When Discharging	DISCRT
Nitrogen, nitrate total (as N)	Daily Maximum		≤ 10 Milligrams per Liter (mg/L)	Effluent Gross	007	Daily When Discharging	DISCRT
Nitrogen, nitrite total (as N)	Daily Maximum		≤ 1.0 Milligrams per Liter (mg/L)	Effluent Gross	007	Daily When Discharging	DISCRT
Nitrogen, ammonia total (as N)	Daily Maximum		≤ 1.32 Milligrams per Liter (mg/L)	Effluent Gross	007	Daily When Discharging	DISCRT
Solids, total dissolved	Daily Maximum		≤ 723 Milligrams per Liter (mg/L)	Effluent Gross	007	Daily When Discharging	DISCRT
			≥ 20				

Discharge Limitations Table for Sample Location 007 (Discharges To The The Muddy River) To Be Reported Monthly^{[1][2]}

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Alkalinity, total (as CaCO ₃)	Daily Minimum		Milligrams per Liter (mg/L)	Effluent Gross	007	Daily When Discharging	DISCRT
Fluoride, total (as F)	Daily Maximum		<= 2.6 Milligrams per Liter (mg/L)	Effluent Gross	007	Daily When Discharging	DISCRT
Boron, total recoverable	Daily Maximum		<= 0.75 Milligrams per Liter (mg/L)	Effluent Gross	007	Daily When Discharging	DISCRT

Notes (Discharge Limitations Table):

1. Sampling requirements in this table are applicable to all planned types of discharges that enter the Muddy River and/or its tributaries.
2. Total residual chlorine sampling shall be performed at the discharge outlet prior to entering the Muddy River and/or its tributaries. The sample shall be representative of the discharge.
3. Flow meter, estimate, or calculation.
4. All chlorinated discharges shall be sampled for total residual chlorine. A log shall be kept for this discharge type. The log shall include, but is not limited to, the date, time, discharge location, flow rate, and total residual chlorine level prior to discharge into a surface water (see Special Approvals / Condition Table Item #1). Sampling for total residual chlorine is not required for non-chlorinated discharges.
5. Dechlorination to ≤ 0.1 mg/L is required for water with a total residual chlorine >2.0 mg/L prior to discharging to the Muddy River and/or its tributaries (see Special Approvals / Conditions Table Item #2).

Discharge Limitations Table for Sample Location 007 (Discharges To The The Muddy River) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Antimony, total (as Sb)	Daily Maximum		<= 146 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Arsenic, total recoverable	Daily Maximum		<= 50 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Barium, total (as Ba)	Daily Maximum		<= 2000 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Beryllium, total recoverable (as Be)	Daily Maximum		<= 4 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Boron, total recoverable	Daily Maximum		<= 750 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Cadmium, dissolved (as Cd)	Daily Maximum		<= 3.7 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Chromium, total recoverable	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Chromium, Hexavalent [As CR] (Chromium (VI)) ^[2]	Daily Maximum		<= 16 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Chromium, Trivalent [As CR] (Chromium (III)) ^[2]	Daily Maximum		<= 1082 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Copper, dissolved (as Cu)	Daily Maximum		<= 28 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Cyanide, total (as CN)	Daily Maximum		<= 22 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
			<= 1000				

Discharge Limitations Table for Sample Location 007 (Discharges To The The Muddy River) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Iron, total recoverable	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Lead, total recoverable	Daily Maximum		<= 50 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Manganese, total recoverable	Daily Maximum		<= 200 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Mercury, dissolved (as Hg)	Daily Maximum		<= 1.4 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Molybdenum, total recoverable	Daily Maximum		<= 6160 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Nickel, total recoverable	Daily Maximum		<= 13.4 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Selenium, dissolved [as Se]	Daily Maximum		<= 3.9 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Silver total recoverable ^[2]	Daily Maximum		<= 12 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Sulfide, total (as S)	Daily Maximum		<= 2 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Thallium, total (as Tl)	Daily Maximum		<= 13 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Zinc, dissolved (as Zn)	Daily Maximum		<= 228 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
			<= 3				

Discharge Limitations Table for Sample Location 007 (Discharges To The The Muddy River) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Acrolein	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Aldrin	Daily Maximum		<= 0 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
.alpha.-Endosulfan	Daily Maximum		<= 0.22 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
.beta.-Endosulfan	Daily Maximum		<= 0.22 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Benzene	Daily Maximum		<= 5 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Bis(2-chloroethyl) ether	Daily Maximum		<= 34.7 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Chlordane (tech mix. and metabolites)	Daily Maximum		<= 0 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Vinyl Chloride (Chloroethylene (Vinyl))	Daily Maximum		<= 2 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Chlorpyrifos	Daily Maximum		<= 0.083 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
2,4-Dichlorophenoxyacetic Acid (2 4-D)	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
DDT	Daily Maximum		<= 0 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
			<= 1.1				

Discharge Limitations Table for Sample Location 007 (Discharges To The The Muddy River) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
4,4-DDT	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Demeton	Daily Maximum		<= 0.1 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Diazinon	Daily Maximum		<= 0.17 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Dibutyl phthalate	Daily Maximum		<= 34000 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
1,3-Dichlorobenzene (M-Dichlorobenzene)	Daily Maximum		<= 400 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
1,2-Dichlorobenzene (O-Dichlorobenzene)	Daily Maximum		<= 400 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
1,4-Dichlorobenzene (P-Dichlorobenzene)	Daily Maximum		<= 75 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
1,2-Dichloroethane	Daily Maximum		<= 5 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
1,1-Dichloroethylene	Daily Maximum		<= 7 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
2,4-Dichlorophenol	Daily Maximum		<= 3090 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
1,1-Dichloropropene (Dichloropropenes)	Daily Maximum		<= 87 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
			<= 87				

Discharge Limitations Table for Sample Location 007 (Discharges To The The Muddy River) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
1,3-Dichloropropene (Dichloropropenes)	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Dieldrin	Daily Maximum		<= 0 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Di-2-ethylhexyl phthalate	Daily Maximum		<= 15000 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Diethyl phthalate	Daily Maximum		<= 350000 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Dimethyl phthalate	Daily Maximum		<= 313000 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
2-Methyl-4,6-Dinitrophenol (4,6-Dinitro-2-Methylphenol)	Daily Maximum		<= 13.4 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
2,4-Dinitrophenol (Dinitrophenols)	Daily Maximum		<= 70 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Endosulfan, total	Daily Maximum		<= 75 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Endrin	Daily Maximum		<= 0.086 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Ethylbenzene	Daily Maximum		<= 1400 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Fluoranthene (Fluoranthene (Polynuclear Aromatic Hydrocarbon))	Daily Maximum		<= 42 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
			<= 0.01				

Discharge Limitations Table for Sample Location 007 (Discharges To The The Muddy River) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Azinphos-Methyl (Guthion)	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Heptachlor	Daily Maximum		<= 0.52 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Heptachlor epoxide	Daily Maximum		<= 0.52 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Hexachlorocyclopentadiene	Daily Maximum		<= 206 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Isophorone	Daily Maximum		<= 5200 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Lindane	Daily Maximum		<= 0.95 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Malathion	Daily Maximum		<= 0.1 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Methoxychlor	Daily Maximum		<= 0.03 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Mirex	Daily Maximum		<= 0 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Monochlorobenzenes	Daily Maximum		<= 488 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Nitrobenzene	Daily Maximum		<= 19800 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
			<= 28				

Discharge Limitations Table for Sample Location 007 (Discharges To The The Muddy River) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Nonylphenol	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Parathion	Daily Maximum		<= 0.065 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Pentachlorophenol	Daily Maximum		<= 5.28 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Phenol	Daily Maximum		<= 3500 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Polychlorinated biphenyls (PCBs)	Daily Maximum		<= 0 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Silvex	Daily Maximum		<= 10 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
2,4,5-TP(silvex) acids/salts, whole water sample	Daily Maximum		<= 10 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Carbon Tetrachloride (Tetrachloromethane (Carbon Tetrachloride))	Daily Maximum		<= 5 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Toluene	Daily Maximum		<= 14300 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Toxaphene	Daily Maximum		<= 0.73 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Tributyltin	Daily Maximum		<= 0.46 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
			<= 200				

Discharge Limitations Table for Sample Location 007 (Discharges To The The Muddy River) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
1,1,1-Trichloroethane	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Trichloroethylene	Daily Maximum		<= 5 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Trihalomethane, tot.	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	007	Annual	DISCRT
Hydrocarbons, total petroleum	Daily Maximum		<= 1 Milligrams per Liter (mg/L)	Effluent Gross	007	Annual	DISCRT

Notes (Discharge Limitations Table):

1. Sample only planned discharges that are not associated with treated drinking water. Sample and analyze once annually as discharge occurs. A minimum of one (1) discharge is required to be sampled, analyzed, and reported annually, if discharge occurs. If no discharge occurs, use NODI Code "C" in NetDMR. Report results in the 4th quarter DMR.
2. Sample for dissolved fraction.

Discharge Limitations Table for Sample Location 008 (Discharges To Groundwaters Of Eldorado Dry Lake) To Be Reported Monthly^[1]

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)		Effluent Gross	008	Daily When Discharging	CALCTD ^[2]
Flow, total	Monthly Total	M&R Million Gallons (Mgal)		Effluent Gross	008	Monthly	CALCTD ^[2]

Notes (Discharge Limitations Table):

1. Reporting requirements in this table are applicable to all types of discharges that enter groundwaters of the State.
2. Flow meter, estimate, or calculation.

Discharge Limitations Table for Sample Location 008 (Discharges To Groundwaters Of Eldorado Dry Lake) To Be Reported Annually^{[1][2][4]}

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Alkalinity, bicarbonate (as CaCO ₃)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Alkalinity, total (as CaCO ₃)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Aluminum, total (as Al)	Daily Maximum		<= 0.2 Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Antimony, total (as Sb)	Daily Maximum		<= 0.006 Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Arsenic, total (as As)	Daily Maximum		<= 0.01 Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Barium, total (as Ba)	Daily Maximum		<= 2 Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Beryllium, total (as Be)	Daily Maximum		<= 0.004 Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Cadmium, total (as Cd)	Daily Maximum		<= 0.005 Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Calcium, total (as Ca)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Chloride (as Cl)	Daily Maximum		<= 400 Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Chromium, total (as Cr)	Daily Maximum		<= 0.1 Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
			<= 1				

Discharge Limitations Table for Sample Location 008 (Discharges To Groundwaters Of Eldorado Dry Lake) To Be Reported Annually^{[1][2][4]}

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Copper, total (as Cu)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Fluoride, total (as F)	Daily Maximum		<= 4 Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Iron, total (as Fe)	Daily Maximum		<= 0.6 Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Lead, total (as Pb)	Daily Maximum		<= 0.015 Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Magnesium, total (as Mg)	Daily Maximum		<= 150 Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Manganese, total (as Mn)	Daily Maximum		<= 0.1 Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Mercury, total (as Hg)	Daily Maximum		<= 0.002 Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Nitrite plus nitrate total 1 det. (as N)	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
pH, maximum	Daily Maximum		<= 8.5 Standard Units (SU)	Effluent Gross	008	Annual	DISCRT
pH, minimum	Daily Minimum		>= 6.5 Standard Units (SU)	Effluent Gross	008	Annual	DISCRT
Potassium, total (as K)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT

Discharge Limitations Table for Sample Location 008 (Discharges To Groundwaters Of Eldorado Dry Lake) To Be Reported Annually^{[1][2][4]}

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Selenium, total (as Se)	Daily Maximum		<= 0.05 Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Silver, total (as Ag)	Daily Maximum		<= 0.1 Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Sodium, total (as Na)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Sulfate, total (as SO ₄)	Daily Maximum		<= 500 Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Thallium, total (as Tl)	Daily Maximum		<= 0.002 Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Solids, total dissolved	Daily Maximum		<= 1000 Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Uranium, natural, total	Daily Maximum		<= 0.01 Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Cyanide, weak acid, dissociable	Daily Maximum		<= 0.2 Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Zinc, total (as Zn)	Daily Maximum		<= 5 Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT
Hydrocarbons, total petroleum ^[3]	Daily Maximum		<= 1.0 Milligrams per Liter (mg/L)	Effluent Gross	008	Annual	DISCRT

Notes (Discharge Limitations Table):

1. Applicable only to planned discharges, except for those associated with treated drinking water.
2. Sample and analyze once annually as discharge occurs. A minimum of one (1) discharge is required to be sampled, analyzed, and reported annually, if discharge occurs. If no discharge occurs, use NODI Code "C" in NetDMR. Report results in the 4th quarter DMR.

3. TPH, purgeable and extractable, shall only be sampled for if the discharge being sampled is associated with subsurface vault and/or underground structure dewatering activities.
4. Sample for dissolved fraction.

Discharge Limitations Table for Sample Location 009 (Discharges To Unnamed Groundwaters Of The State) To Be Reported Monthly^[1]

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)		Effluent Gross	009	Daily When Discharging	CALCTD ^[2]
Flow, total	Monthly Total	M&R Million Gallons (Mgal)		Effluent Gross	009	Monthly	CALCTD ^[2]

Notes (Discharge Limitations Table):

1. Reporting requirements in this table are applicable to all types of discharges that enter groundwaters of the State.
2. Flow meter, estimate, or calculation.

Discharge Limitations Table for Sample Location 009 (Discharges To Unnamed Groundwaters Of The State) To Be Reported Annually^{[1][2][4]}

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Alkalinity, bicarbonate (as CaCO ₃)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Alkalinity, total (as CaCO ₃)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Aluminum, total (as Al)	Daily Maximum		<= 0.2 Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Antimony, total (as Sb)	Daily Maximum		<= 0.006 Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Arsenic, total (as As)	Daily Maximum		<= 0.01 Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Barium, total (as Ba)	Daily Maximum		<= 2 Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Beryllium, total (as Be)	Daily Maximum		<= 0.004 Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Cadmium, total (as Cd)	Daily Maximum		<= 0.005 Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Calcium, total (as Ca)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Chloride (as Cl)	Daily Maximum		<= 400 Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Chromium, total (as Cr)	Daily Maximum		<= 0.1 Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
			<= 1				

Discharge Limitations Table for Sample Location 009 (Discharges To Unnamed Groundwaters Of The State) To Be Reported Annually^{[1][2][4]}

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Copper, total (as Cu)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Fluoride, total (as F)	Daily Maximum		<= 4 Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Iron, total (as Fe)	Daily Maximum		<= 0.6 Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Lead, total (as Pb)	Daily Maximum		<= 0.015 Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Magnesium, total (as Mg)	Daily Maximum		<= 150 Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Manganese, total (as Mn)	Daily Maximum		<= 0.1 Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Mercury, total (as Hg)	Daily Maximum		<= 0.002 Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Nitrite plus nitrate total 1 det. (as N)	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
pH, maximum	Daily Maximum		<= 8.5 Standard Units (SU)	Effluent Gross	009	Annual	DISCRT
pH, minimum	Daily Minimum		>= 6.5 Standard Units (SU)	Effluent Gross	009	Annual	DISCRT
Potassium, total (as K)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT

Discharge Limitations Table for Sample Location 009 (Discharges To Unnamed Groundwaters Of The State) To Be Reported Annually^{[1][2][4]}

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Selenium, total (as Se)	Daily Maximum		<= 0.05 Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Silver, total (as Ag)	Daily Maximum		<= 0.1 Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Sodium, total (as Na)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Sulfate, total (as SO ₄)	Daily Maximum		<= 500 Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Thallium, total (as Tl)	Daily Maximum		<= 0.002 Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Solids, total dissolved	Daily Maximum		<= 1000 Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Uranium, natural, total	Daily Maximum		<= 0.01 Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Cyanide, weak acid, dissociable	Daily Maximum		<= 0.2 Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Zinc, total (as Zn)	Daily Maximum		<= 5 Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT
Hydrocarbons, total petroleum	Daily Maximum ^[3]		<= 1.0 Milligrams per Liter (mg/L)	Effluent Gross	009	Annual	DISCRT

Notes (Discharge Limitations Table):

1. Applicable only to planned discharges, except for those associated with treated drinking water.
2. Sample and analyze once annually as discharge occurs. A minimum of one (1) discharge is required to be sampled, analyzed, and reported annually, if discharge occurs. If no discharge occurs, use NODI Code "C" in NetDMR. Report results in the 4th quarter DMR.

3. TPH, purgeable and extractable, shall only be sampled for if the discharge being sampled is associated with subsurface vault and/or underground structure dewatering activities.
4. Sample for dissolved fraction.

Discharge Limitations Table for Sample Location Sum (Sum) To Be Reported Monthly^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Daily Maximum	<= 34.99 Million Gallons per Day (Mgal/d)		Effluent Gross	SUM	Continuous	CALCTD
Number of Events	Monthly Total	M&R Number (#)		Effluent Gross	SUM	Daily When Discharging	CALCTD
Flow, total	Monthly Total	M&R Million Gallons (Mgal)		Effluent Gross	SUM	Daily When Discharging	CALCTD

Notes (Discharge Limitations Table):

- Reporting requirements in this table are applicable to planned and unplanned discharges. Report data based on actual discharges to both surface water and to groundwater during the reporting period.

Summary of Changes From Previous Permit

The requirement to sample for priority pollutants during planned non-chlorinated discharges has been removed.

The requirement to sample for toxic materials, per NAC 445A.1236, for all planned discharges, except for those associated with treated drinking water, has been added.

The requirement to report the total volume discharged has been removed and the Permittee shall now report the total monthly flow.

The requirement to sample for oil and grease during sump and vault dewatering has been removed, and the requirement to sample for TPH has been added.

The requirement to sample for total ammonia and total phosphorus has been added.

The requirement to sample for Profile 1 pollutants in discharges to groundwater has been added.

Technology Based Effluent Limitations

No technology based effluent limitations have been promulgated by the U.S. EPA for the discharges from drinking water distribution systems.

Water Quality Based Effluent Limitations

The most stringent of the water quality Requirements to Maintain Existing Higher Quality (RMHQ), and Beneficial Use Standards specified in the NAC regulations for the specific water bodies, have been applied, since there is no method for distinguishing in which reach/section some discharges may occur. For discharges to the Las Vegas Wash, the applicable standards are detailed in NAC 445A.2156 and NAC 445A.2158. For discharges to Lake Mead, the applicable standards are detailed in NAC 445A.2152 and NAC 445A.2154. For discharges to the Colorado River, between Hoover Dam and Davis Dam, the standards are specified in NAC 445A.2147 and NAC 445A.2148; and for discharges below Davis Dam the standards are specified in NAC 445A.2146. For discharges to the Muddy River, the standards are specified in NAC 445A.2168, NAC 445A.2172, and NAC 445A.2174.

Reasonable Potential Analysis (RPA)

For this reasonable potential analysis, the Division took into consideration whether the proposed discharge activities have the potential to negatively impact water quality standards.

Treated drinking water is subjected to rigorous monitoring under safe drinking water regulations; however, potential pollutants associated with treated drinking water discharges may include residual chlorine.

Discharges of miscellaneous waters from subsurface vaults and/or underground structures have the potential to contain pollutants such as total petroleum hydrocarbons.

The Permittee's best management practices (BMPs), as detailed in their Division-approved operations and maintenance (O&M) manual, include administrative BMPs that may be implemented as additional measures in the overall effort to reduce the potential water quality impacts of pollutants during drinking water system releases, de-chlorination, sediment and erosion control and onsite treatment for groundwater releases that cannot be directly released to the storm drain system or surface waters without said treatment due to specific pollutants, such as pH and total petroleum hydrocarbons, contained in the water.

Overall, logistics of the discharge activities and BMPs from the O&M manual that must be implemented by the Permittee are found to be acceptable. Furthermore, available data does not currently indicate any potential for degradation from the effluent discharged within the compliance limits of the proposed permit.

**Proposed Water Quality Based Effluent Limits (monthly/weekly/daily)
Las Vegas Wash**

For discharges to the Las Vegas Wash, water quality standards for the nearest downstream control point, "Las Vegas Wash at the Historic Lateral" (NAC 445A.2156) apply. Per NAC 445A.2156, temperature, dissolved oxygen (DO), total suspended solids (TSS), *E. Coli*, and fecal coliform are required to be monitored. Discharges from the Permittee's distribution systems and facilities will most likely travel many miles through the storm drain system before finally reaching the Las Vegas Wash; therefore sampling the discharge for DO and temperature is not necessary. TSS is also not required to be sampled as treated drinking water and groundwater have no, or low, suspended solids. Furthermore, since the discharge is not associated with treated wastewater, sampling of fecal coliform and *E. Coli* is not required.

The following parameters are limited based on the water quality standards found in NAC 445A.2156 and NAC 445A.2158, whichever is strictest.

pH: pH is limited to 6.5 standard units (S.U.) to 9.0 S.U. in accordance with the aquatic life beneficial use.

Total Inorganic Nitrogen (TIN): TIN is limited to 17 mg/L in accordance with the RMHQ standard.

Nitrate (as N): Nitrate (as N) is limited to 90 mg/L in accordance with the aquatic life beneficial use.

Nitrite (as N): Nitrite (as N) is limited to 5 mg/L in accordance with the aquatic life beneficial use.

Total Dissolved Solids (TDS): TDS is limited to 1,900 mg/L in accordance with the RMHQ standard.

Toxic Materials: Per NAC 445A.1236, the standards for toxic materials apply; however, only planned discharges that are not associated with treated drinking water are required to be sampled. Most of the toxic materials listed only have limits for 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 a beneficial use for aquatic life, irrigation, or watering of livestock apply. Additionally, most of the limits have been rounded to the nearest tenths. Furthermore, due to the fact that discharges from the Permittee's distribution systems and facilities of the water service areas are intermittent, the 1-hour average limits are used, unless there was no 1-hour limit listed for that constituent in which case the 96-hour limit was used. Due to the fact that treated drinking water is subjected to rigorous monitoring under safe drinking water

regulations sampling for toxic materials is not required for discharges associated with treated drinking water at this time.

NAC 445A.1236 lists water quality criteria for seven 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 Division 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, though lead and nickel have other more restrictive criteria from which permit limits were created. For NPDES permitting purposes, the Division looked at 10 years of data on the Las Vegas Wash at the Historic Lateral (formerly Telephone Line Road) (NAC 445A.2156) to determine if a representative value for hardness could be derived for permitting purposes. The Division determined a 10th percentile value of 470 mg/L for hardness to be sufficiently protective of aquatic life under most conditions for this reach of the Las Vegas Wash. Therefore, the Division has used the 10th percentile value of 470 mg/L to calculate the applicable water quality criteria for hardness dependent metals listed at NAC 445A.1236. Furthermore, based on the most restrictive water quality standard, a value of 6.5 S.U. for pH was used to calculate the permit limit for pentachlorophenol.

Lake Mead

For discharges to Lake Mead, water quality standards for Lake Mead (NAC 445A.2152) and Inner Las Vegas Bay (NAC 445A.2154) apply, with the most restrictive taking precedence. Temperature, DO, TSS, turbidity, *E. Coli*, chlorophyll a, color, and fecal coliform are listed in those water quality standards. Discharges from the Permittee's distribution systems and facilities will most likely travel many miles through the storm drain system before finally reaching the Lake Mead; therefore sampling the discharge for DO and temperature is not necessary. TSS and Turbidity are also not required to be sampled as treated drinking water and groundwater have no, or low, suspended solids. Chlorophyll a and color are not parameters that are regulated in discharge permits. Furthermore, since the discharge is not associated with treated wastewater, sampling of fecal coliform and *E. Coli* is not required.

The following parameters are limited based on the water quality standards found in NAC 445A.2152 and NAC 445A.2154.

pH: pH is limited to 6.5 S.U. to 8.8 S.U. in accordance with the aquatic life beneficial use and the RMHQ.

Total Inorganic Nitrogen (TIN): TIN is limited to 4.5 mg/L in accordance with the RMHQ standard.

Nitrate (as N): Nitrate (as N) is limited to 10 mg/L in accordance with the aquatic life beneficial use.

Nitrite (as N): Nitrite (as N) is limited to 1 mg/L in accordance with the aquatic life beneficial use.

Ammonia: Ammonia is limited based on NAC 445A.118. Lake Mead is a warm-water fishery, and based on the most restrictive water quality standard, a value of 8.8 S.U. for pH was used to determine the permit limit of 1.84 mg/L.

Total Dissolved Solids (TDS): TDS is limited to 1000 mg/L in accordance with the municipal or domestic supply beneficial use.

Chloride: Chloride is limited to 400 mg/L in accordance with the municipal or domestic supply beneficial use.

Sulfate: Sulfate is limited to 500 mg/L in accordance with the municipal or domestic supply beneficial use.

Toxic Materials: Per NAC 445A.1236, the standards for toxic materials apply; however, only planned discharges that are not associated with treated drinking water are required to be sampled. Most of the limits have been rounded to the nearest tenths. Furthermore, due to the fact that discharges from the Permittee's

distribution systems and facilities of the water service areas are intermittent, the 1-hour average limits are used when most restrictive, unless there was no 1-hour limit listed for that constituent in which case the 96-hour limit was used when most restrictive. Due to the fact that treated drinking water is subjected to rigorous monitoring under safe drinking water regulations sampling for toxic materials is not required for discharges associated with treated drinking water at this time.

NAC 445A.1236 lists water quality criteria for seven 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 Division 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, though lead and nickel have other more restrictive criteria from which permit limits were created. For NPDES permitting purposes, the Division looked at 5 years of data from Lake Mead to determine if representative value for hardness could be derived for permitting purposes. The Division determined a 10th percentile value of 104 mg/L for hardness to be sufficiently protective of aquatic life under most conditions for Lake Mead. Therefore, the Division has used the 10th percentile value of 104 mg/L to calculate the applicable water quality criteria for hardness dependent metals listed at NAC 445A.1236. Furthermore, based on the most restrictive water quality standard, a value of 6.5 S.U. for pH was used to calculate the permit limit for pentachlorophenol.

Colorado River Below Davis Dam

For discharges to the Colorado River below Davis Dam, water quality standards found in NAC 445A.2146 apply. Temperature, dissolved oxygen (DO), TSS, turbidity, color, *E. Coli*, and fecal coliform are listed in those water quality standards. Discharges from the Permittee's distribution systems and facilities will most likely travel many miles through the storm drain system before finally reaching the Colorado River; therefore sampling the discharge for DO and temperature is not necessary. TSS and Turbidity are also not required to be sampled as treated drinking water and groundwater have no, or low, suspended solids. Color is not a parameter that is regulated in discharge permits. Furthermore, since the discharge is not associated with treated wastewater, sampling of fecal coliform and *E. Coli* is not required.

The following parameters are limited based on the water quality standards found in NAC 445A.2146.

pH: pH is limited to 6.5 S.U. to 9.0 S.U. in accordance with the aquatic life beneficial use.

Total Phosphorus: Total phosphorus is limited to 0.03 mg/L in accordance with the RMHQ standard.

Nitrate (as N): Nitrate (as N) is limited to 1.6 mg/L in accordance with the RMHQ standard.

Nitrite (as N): Nitrite (as N) is limited to 0.06 mg/L in accordance with the aquatic life beneficial use.

Ammonia: Ammonia is limited based on NAC 445A.118. The Colorado River is a cold-water fishery, and based on the most restrictive water quality standard, a value of 9.0 S.U. for pH was used to determine the permit limit of 0.885 mg/L.

TDS: TDS is limited to 723 mg/L in accordance with NAC 445A.1233.

Chloride: Chloride is limited to 400 mg/L in accordance with the municipal or domestic supply beneficial use.

Sulfate: Sulfate is limited to 500 mg/L in accordance with the municipal or domestic supply beneficial use.

Alkalinity: Alkalinity is limited to greater than 20 mg/L in accordance with the aquatic life beneficial use.

Toxic Materials: Per NAC 445A.1236, the standards for toxic materials apply; however, only planned discharges that are not associated with treated drinking water are required to be sampled. Most of the limits

have been rounded to the nearest tenths. Furthermore, due to the fact that discharges from the Permittee's distribution systems and facilities of the water service areas are intermittent, the 1-hour average limits are used when most restrictive, unless there was no 1-hour limit listed for that constituent in which case the 96-hour limit was used when most restrictive. Due to the fact that treated drinking water is subjected to rigorous monitoring under safe drinking water regulations sampling for toxic materials is not required for discharges associated with treated drinking water at this time.

NAC 445A.1236 lists water quality criteria for seven 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 Division 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, though lead and nickel have other more restrictive criteria from which permit limits were created. For NPDES permitting purposes, The Division looked at 5 years of data on the Colorado River below Davis Dam to determine if representative value for hardness could be derived for permitting purposes. The Division determined a 10th percentile value of 131 mg/L for hardness to be sufficiently protective of aquatic life under most conditions for this reach of the Colorado River. Therefore, the Division has used the 10th percentile value of 131 mg/L to calculate the applicable water quality criteria for hardness dependent metals listed at NAC 445A.1236. Furthermore, based on the most restrictive water quality standard, a value of 6.5 S.U. for pH was used to calculate the permit limit for pentachlorophenol.

Colorado River between Hoover Dam and Davis Dam

For discharges to the Colorado River between Hoover Dam and Davis Dam, water quality standards for Lake Mohave (NAC 445A.2147) and Colorado River below Hoover Dam (NAC 445A.2148) apply, with the most restrictive taking precedence. Temperature, dissolved oxygen (DO), TSS, turbidity, color, *E. Coli*, and fecal coliform are listed in those water quality standards. Discharges from the Permittee's distribution systems and facilities will most likely travel many miles through the storm drain system before finally reaching the Colorado River; therefore sampling the discharge for DO and temperature is not necessary. TSS and Turbidity are also not required to be sampled as treated drinking water and groundwater have no, or low, suspended solids. Color is not a parameter that is regulated in discharge permits. Furthermore, since the discharge is not associated with treated wastewater, sampling of fecal coliform and *E. Coli* is not required.

The following parameters are limited based on the water quality standards found in NAC 445A.2147 and 445A.2148.

pH: pH is limited to 6.5 S.U. to 9.0 S.U. in accordance with the aquatic life beneficial use.

Total Phosphorus: Total phosphorus is limited to 0.033 mg/L in accordance with the RMHQ standard.

Total Nitrogen (as N): Total nitrogen (as N) is limited to 1.5 mg/L in accordance with the RMHQ standard.

Nitrate (as N): Nitrate (as N) is limited to 10 mg/L in accordance with the municipal or domestic supply beneficial use.

Nitrite (as N): Nitrite (as N) is limited to 0.06 mg/L in accordance with the aquatic life beneficial use.

Ammonia: Ammonia is limited based on NAC 445A.118. The Colorado River is a cold-water fishery, and based on the most restrictive water quality standard, a value of 9.0 S.U. for pH was used to determine the permit limit of 0.885 mg/L.

TDS: TDS is limited to 723 mg/L in accordance with NAC 445A.1233.

Chloride: Chloride is limited to 400 mg/L in accordance with the municipal or domestic supply beneficial use.

Sulfate: Sulfate is limited to 500 mg/L in accordance with the municipal or domestic supply beneficial use.

Alkalinity: Alkalinity is limited to greater than 20 mg/L in accordance with the aquatic life beneficial use.

Toxic Materials: Per NAC 445A.1236, the standards for toxic materials apply; however, only planned discharges that are not associated with treated drinking water are required to be sampled. Most of the limits have been rounded to the nearest tenths. Furthermore, due to the fact that discharges from the Permittee's distribution systems and facilities of the water service areas are intermittent, the 1-hour average limits are used when most restrictive, unless there was no 1-hour limit listed for that constituent in which case the 96-hour limit was used when most restrictive. Due to the fact that treated drinking water is subjected to rigorous monitoring under safe drinking water regulations sampling for toxic materials is not required for discharges associated with treated drinking water at this time.

NAC 445A.1236 lists water quality criteria for seven 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 Division 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, though lead and nickel have other more restrictive criteria from which permit limits were created. For NPDES permitting purposes, The Division looked at 5 years of data on the Colorado River between Hoover Dam and Davis Dam to determine if representative value for hardness could be derived for permitting purposes. The Division determined a 10th percentile value of 132 mg/L for hardness to be sufficiently protective of aquatic life under most conditions for this reach of the Colorado River. Therefore, the Division has used the 10th percentile value of 132 mg/L to calculate the applicable water quality criteria for hardness dependent metals listed at NAC 445A.1236. Furthermore, based on the most restrictive water quality standard, a value of 6.5 S.U. for pH was used to calculate the permit limit for pentachlorophenol.

Muddy River

For discharges to the Muddy River, water quality standards for the Muddy River at the Glendale Bridge (NAC 445A.2168), the Muddy River at the Wells Siding Diversion (NAC 445A.2172), and the Muddy River at Lake Mead (NAC 445A.2174) apply, with the most restrictive taking precedence. Temperature, dissolved oxygen, turbidity, color, *E. Coli*, and fecal coliform are listed in those water quality standards. Discharges from the Permittee's distribution systems and facilities will most likely travel many miles through the storm drain system before finally reaching the Muddy River; therefore sampling the discharge for dissolved oxygen and temperature is not necessary. Turbidity is also not required to be sampled as treated drinking water and groundwater have no, or low, suspended solids. Color is not a parameter that is regulated in discharge permits. Furthermore, since the discharge is not associated with treated wastewater, sampling of fecal coliform and *E. Coli* is not required.

The following parameters are limited based on the water quality standards found in NAC 445A.2168, 445A.2172, and 445A.2174.

pH: pH is limited to 6.5 S.U. to 9.0 S.U. in accordance with the aquatic life beneficial use.

Total Phosphorus: Total phosphorus is limited to 0.1 mg/L in accordance with the aquatic life and recreation involving contact beneficial uses.

Total Nitrogen (as N): Total nitrogen (as N) is limited to 1.4 mg/L in accordance with the RMHQ standard.

Nitrate (as N): Nitrate (as N) is limited to 10 mg/L in accordance with the municipal supply beneficial use.

Nitrite (as N): Nitrite (as N) is limited to 1.0 mg/L in accordance with the municipal supply beneficial use.

Ammonia: Ammonia is limited based on NAC 445A.118. The Muddy River is a warm-water fishery, and

based on the most restrictive water quality standard, a value of 9.0 S.U. for pH was used to calculate the permit limit of 1.32 mg/L.

TDS: TDS is limited to 723 mg/L in accordance with NAC 445A.1233.

Alkalinity: Alkalinity is limited to greater than 20 mg/L in accordance with the aquatic life beneficial use.

Fluoride: Fluoride is limited to 2.6 mg/L in accordance with the irrigation beneficial use.

Boron: Boron is limited to 2.0 mg/L in accordance with the irrigation beneficial use.

Toxic Materials: Per NAC 445A.1236, the standards for toxic materials apply; however, only planned discharges that are not associated with treated drinking water are required to be sampled. Most of the limits have been rounded to the nearest tenths. Furthermore, due to the fact that discharges from the Permittee's distribution systems and facilities of the water service areas are intermittent, the 1-hour average limits are used when most restrictive, unless there was no 1-hour limit listed for that constituent in which case the 96-hour limit was used when most restrictive. Due to the fact that treated drinking water is subjected to rigorous monitoring under safe drinking water regulations sampling for toxic materials is not required for discharges associated with treated drinking water at this time.

NAC 445A.1236 lists water quality criteria for seven 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 Division 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, though lead and nickel have other more restrictive criteria from which permit limits were created. For NPDES permitting purposes, The Division looked at 5 years of data on the Muddy River to determine if representative value for hardness could be derived for permitting purposes. The Division determined a 10th percentile value of 219 mg/L for hardness to be sufficiently protective of aquatic life under most conditions for this reach of Las Vegas Wash. Therefore, the Division has used the 10th percentile value of 219 mg/L to calculate the applicable water quality criteria for hardness dependent metals listed at NAC 445A.1236. Furthermore, based on the most restrictive water quality standard, a value of 6.5 S.U. for pH was used to calculate the permit limit for pentachlorophenol.

Basis for Effluent Limitations

Priority Pollutants: The requirement to sample for priority pollutants during planned non-chlorinated discharges has been removed. Drinking water is regulated per primary and secondary drinking water standards. Accordingly, the potential discharges from the Permittee's distribution system are subject to rigorous monitoring under safe drinking water regulations. Therefore, the requirement to monitor for priority pollutants will not serve any reasonable regulatory control. As a result, the proposed permit is not requiring the Permittee to monitor priority pollutants at this time.

TPH: Previously, the Permittee had been required to sample for oil and grease during discharges associated with subsurface vault and/or underground structure dewatering activities; however, the requirement to sample for TPH for discharges associated with the aforementioned activity has been added in place of the oil and grease sampling as the water discharged from these areas has the potential to be contaminated from surface sources containing TPH, such as vehicle traffic. A limit of 1.0 mg/L, per the State's action level for remediation projects, has been retained.

Perchlorate: For discharges to the Las Vegas Wash not associated with treated drinking water, perchlorate is required to be monitored and reported to assess potential impacts to the Las Vegas Wash resulting from historical contamination.

Total Ammonia as Nitrogen and Total Phosphorus: The Las Vegas Wash has established total maximum daily loads (TMDLs) for total ammonia and total phosphorus. Discharges from the Permittee's distribution systems and facilities will be associated with treated drinking water and other miscellaneous water. Treated drinking water is subjected to rigorous monitoring under safe drinking water regulations. Discharges of

groundwater from dewatering activities within the general Las Vegas area, per a memo dated June 9, 2017 from the Division's Bureau of Water Quality Planning (BWQP), are, "...assumed to be part of the base phosphorus load recognized in the 1989 Lake Mead Total Phosphorus TMDL Load Allocation." Discharges of other miscellaneous waters occurs infrequently and the mass loading of total ammonia and total phosphorus may not be altered significantly enough to cause an excursion of the TMDL in the Wash. It is for these reasons that total ammonia and total phosphorus will be monitored and reported.

Total Residual Chlorine: In order to satisfy the antidegradation and anti-backsliding requirements, the Division is retaining the existing residual chlorine limit of 0.1 mg/L. The discharge of water containing residual chlorine to the storm sewer system will not negatively impact any beneficial uses of the Las Vegas Wash due to the volatilization of the residual chlorine when the concentrations are less than 2.0 mg/L. When discharges of water that have concentrations of residual chlorine of 2.0 or above, the Permittee is required to dechlorinate to less than 0.1 mg/L.

Profile I: Discharges not associated with treated drinking water to groundwaters of the state are to be sampled for Profile I constituents to ensure groundwater is not degraded.

Antidegradation

The Division implements antidegradation requirements through a "requirement to maintain existing higher quality (RMHQ) standards of the receiving water body." RMHQ protection is not applicable during periods of low and high flows of the receiving waterbody, and at a minimum, discharges shall meet the most restrictive standards established per designated beneficial use criteria. The Division compared available data with the most restrictive beneficial use criteria established per NAC 445A and has concluded that currently, available data does not indicate any potential for degradation of the receiving waterbody from the effluent discharged within the compliance limits of the proposed permit.

Special Conditions

See table below.

SA – Special Approvals / Conditions Table

Item #	Description
1	For planned discharges to Lake Mead, Las Vegas Wash, Colorado River, Muddy River, and/or their unnamed tributaries, all chlorinated discharges shall be sampled for total residual chlorine. A log shall be kept for this discharge type. The log must include, but is not limited to, the date, time, discharge location, flow rate, and total residual chlorine level prior to discharge. This log shall be submitted with the corresponding quarterly DMR, via the NetDMR system, as an attachment.
2	Dechlorination to ≤ 0.1 mg/L is required for water with a total residual chlorine >2.0 mg/L prior to discharging to surface waters and/or their tributaries.
3	The permit will retain a daily maximum effluent limit for total residual chlorine of 0.1 mg/L; however, a pending study of the effects of residual chlorine on the receiving bodies of water will determine if the limit of 0.1 mg/L is protective of all beneficial uses or if a lower limit should be applied.
4	The Permittee must implement the BMPs described in the Division-approved operations and maintenance manual.

Discharges From Future Outfalls/ Planned Facility Changes

There are currently no planned discharges from future outfalls nor any facility changes that would affect this permit.

Corrective Action Sites

There are numerous Bureau of Corrective Actions (BCA) remediation sites throughout the system-wide discharge areas. There are no anticipated effects to the remediation sites from the system-wide discharges.

Wellhead Protection Program

Within the project area the elevation of the groundwater varies with location substantially. There are multiple public drinking water supply wells throughout the Permittee's service areas and water distribution system area; they are generally situated at 300 to 1,500 feet deep, and are protected by a layer of clay and fine-grained sediments throughout most of the Las Vegas Valley. Wells operated by LVVWD are also protected under a Wellhead Protection Program to ensure that groundwater supplies are safe from potential sources of contamination.

Schedule of Compliance:

SOC – Schedule of Compliance Table

There are no Schedule of Compliance items

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly Reports	Quarterly	7/28/2024
2	Annual Reports	Annually	1/28/2025

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. **5/31/2024**, 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: **4/30/2024**
 Title: **Staff II, Associate Engineer**