NEVADA DIVISION OF
ENVIRONMENTAL
PROTECTION

A division of the
Nevada Department of Conservation & Natural Resources

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FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: MARS PETCARE US, INC.

500 WALTHAM WAY
SPARKS, NV 89434

Permit Number: NS0095017

Permit Type: GROUNDWATER DISCHARGE

Designation: GROUNDWATER

New/Existing: EXISTING

Location: MARS PETCARE US, INC., STOREY
500 WALTHAM WAY, MC CARRAN, NV 89434
LATITUDE: 39.556544, LONGITUDE: -119.547745
TOWNSHIP: 20 N, RANGE: 22 E, SECTION: 31, 32

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	INFLUENT	Internal Outfall		39.556544	-119.547745	NOT APPLICABLE
002	EFFLUENT POND	External Outfall		39.555884	-119.550565	GROUNDWATER
003	IRRIGATION/REUSE	Land Application Site		39.556097	-119.550945	GROUNDWATER
004	MONITORING WELL - MW-01	Monitoring Well		39.555290	-119.551612	GROUNDWATER
005	MONITORING WELL - MW-02	Monitoring Well		39.557576	-119.550093	GROUNDWATER
006	MONITORING WELL - MW-03	Monitoring Well		39.556789	-119.551302	GROUNDWATER
007	MONITORING WELL - MW-04	Monitoring Well		39.557621	-119.542276	GROUNDWATER
008	MONITORING WELL - MW-05	Monitoring Well		39.558041	-119.541846	GROUNDWATER
009	MONITORING WELL - MW-06	Monitoring Well		39.557890	-119.542237	GROUNDWATER

Permit History/Description of Proposed Action

The Permittee, Mars Petcare US, Inc. (MPC) has applied for the renewal of Permit NS0095017 for their wastewater treatment plant (WWTP), located at 500 Waltham Way, in McCarran, being within Storey County, Nevada. The Permittee intends to continue utilizing their Sequential Batch Reactor (SBR) treatment plant to process incoming industrial wastewater at a 30-day average permitted flow rate of 0.025 million gallons per day (Mgal/d), and a daily maximum permitted flow rate of 0.049 Mgal/d. After which, the Permittee proposes to continue discharging denitrified, disinfected, secondary-treated, being of Category C bacteriological quality (per Nevada Administrative Code [NAC] 445A.276) reclaimed water for onsite irrigation use. All reuse irrigation shall be conducted in accordance with the MPC's approved Reclaimed Water Management Plan (RWMP) along with the terms and conditions of the permit.

This permit was first issued on August 2, 1996. The most recent permit was issued on February 16, 2017, and expired on February 15, 2022; the permit has been administratively continued since.

Facility Overview
MPC operates a manufacturing facility in McCarran, Nevada, where they produce dry pet food brands. MPC utilizes an SBR wastewater treatment plant to treat industrial wastewater, having been constructed prior to the Tahoe Reno Industrial Center's (TRIC's) WWTP being completed (five years prior) waiving the requirement for them to connect to the system. The industrial waste from the facility includes liquids containing corn, seasoned liquid meat products, animal fats, vegetable oil, vitamins, and trace minerals with high fluctuations in both flow and organic strength.

A maximum of 5,000 Gal/d sanitary waste with a peak day industrial wastewater flow of 20,000 Gal/d is pumped via lift station 1 to the influent holding tank. The treatment process includes a 4,000-gallon industrial waste grease trap for grease separation. Floatable or settleable solids are retained in the trap and transported to the anaerobic digester for treatment. Land application of these solids is not included in this permit. The grease trap stabilizes waste strength and allows the operator to inspect and test the waste before it enters the 15,000-gallon, single tank SBR.

The MPC WWTP produces secondary-treated effluent, which in turn is disinfected prior to discharge to the effluent holding pond (EHP) for reuse. The SBR treatment plant is sized to receive a batch load of 12,500 gallons of waste from the influent holding tank to handle up to 3,000 milligrams per liter (mg/L) 5-day biochemical oxygen demand (BOD5) with 12-hour cycles. The cycle length is frequently reduced when the BOD5 of the incoming wastewater is less than design peak BOD5 loading. Each reaction cycle includes multiple aeration iterations that ensure completion of the nitrification and denitrification reactions. The SBR discharges the stabilized, settled effluent to the chlorine contact chamber for disinfection. The effective chlorine contact tank retention time is equal to the batch time. The excess activated sludge from the SBR is aerobically digested, discharged to a sludge dehydrator and transported to the Lockwood Landfill for disposal. Land application of these solids is not included in this permit. The chlorine contact chamber discharges disinfected effluent to the 60-mil high-density polyethylene (HDPE) lined, 700,000-gallon EHP. The EHP has approximately 500,000 gallons of emergency storage capacity with mandatory 2-foot freeboard. From the EHP, the Category C bacteriological quality reclaimed water, per NAC 445A.276, is distributed through an irrigation system and land applied to three landscaped areas located north of the facility for irrigation of three crop varieties, namely, sunflowers, Bermuda Grass, and Tall Fescue.

There are also six groundwater monitoring wells used to monitor potential impacts associated with the plant operations and treatment, with one being located upgradient of the plant (Outfall 004, MW-1), two located downgradient of the plant (Outfall 005, MW-2 and Outfall 006, MW-3), along with three additional monitoring wells located both upgradient and downgradient of the no-longer in use sludge holding pond, with one at the southwest corner (Outfall 007, MW-4), the northeast corner (Outfall 008, MW-5), and the northwest corner (Outfall 009, MW-6).

The site’s Reclaimed Water Management Plan (RWMP) (formerly known as an Effluent Management Plan) was last reviewed and approved by the Division on May 1, 2017. The Technical, Compliance, and Enforcement (TCE) Branch of the Bureau of Water Pollution Control requires RWMPs be updated every ten (10) years, with an updated RWMP being due on May 1, 2027.

Outfall Summary
Outfall 001 – This internal outfall is for measuring and monitoring of incoming influent to the MPC WWTP.

Outfall 002 – This external outfall is for measuring and monitoring of the treated wastewater being discharged to the effluent holding pond.

Outfall 003 – This land application outfall is measuring and monitoring of reclaimed water being applied to the irrigated acreage located north of the plant.

Outfall 004 – This upgradient monitoring well outfall (MW-1) is located west of the effluent holding pond.

Outfall 005 – This downgradient monitoring well outfall (MW-2) is located north of the plant and between the irrigated acreage and the Truckee River, located approximately 434 feet east of Outfall 006 (MW-3).

Outfall 006 – This downgradient monitoring well outfall (MW-3) is located north of the plant and between the irrigated acreage and the Truckee River, located approximately 434 feet west of Outfall 005 (MW-2).

Outfall 007 – This upgradient monitoring well outfall (MW-4) is located west of the sludge holding pond's western fenceline, and east of the MPC facility.

Outfall 008 – This upgradient monitoring well outfall (MW-5) is located north of the sludge holding pond's northern fenceline, near the northeast corner, and east of the MPC facility.

Outfall 009 – This upgradient monitoring well outfall (MW-6) is located north of the sludge holding pond's northern fenceline, near the northwest corner, and east of the MPC facility.

Facility Upgrades since last issued permit
In December 2025, the SBR rehabilitation project was completed with coated plates being welded to the influent holding tank interior and the exterior weld joints repaired where the project welding had occurred.

Solids Handling
The excess activated sludge from the SBR is aerobically digested, discharged to a sludge dehydrator, and then transported to the Lockwood Landfill for disposal.

Effluent Management and Reuse
The treated wastewater is discharged into the EHP and diverted through an irrigation system for the maintenance of landscaped sections located either north or northeast of the plant.

Design Flow (and basis) and Measurement & Current Capacity
The MPC WWTP was originally designed for an average 30-day flow rate of 0.025 Mgal/d and a maximum daily flow rate of 0.049 Mgal/d.

The average daily maximum flow rate reported for Outfall 001 (Influent) was 0.021 Mgal/d. The permitted daily maximum flow rate for Outfall INF is limited to 0.049 Mgal/d. There were no reported exceedances to this limit.

Based on the average daily maximum flow rate reported, the MPC WWTP is at approximately 43% capacity.

Pretreatment Program
The treatment process includes a 4,000-gallon industrial waste grease trap for grease separation. Floatable or settleable solids are retained in the trap and transported to the anaerobic digester for treatment. Land application of these solids is not included in this permit. The grease trap stabilizes waste strength and allows the operator to inspect and test the waste before it enters the 15,000-gallon, single tank SBR.

Operations & Maintenance (O&M) Manual status
The MPC WWTP's Operation and Maintenance (O&M) Manual was last reviewed and approved on May 1, 2017. The Technical, Compliance, and Enforcement Branch of the Bureau of Water Pollution Control requires O&M Manuals to be updated every ten years, with an updated O&M Manual due on May 1, 2027.

Effluent Characterization
Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from January 2020 to December 2025, was reviewed as part of this permit renewal process. The MPC WWTP discharges treated wastewater to a effluent storage pond to be diverted for applied irrigation use.

The following reported averages were taken from January 2020 to December 2025 reporting period:

Abbreviations:

BOD5 – Biochemical Oxygen Demand, 5-day
TDS – Total Dissolved Solids
TSS – Total Suspended Solids
Water Level – Water Level relative to Mean Sea Level
mg/L – Milligrams per Liter
Mgal/d – Million Gallons per Day
S.U. – Standard Units
ug/L – Micrograms per Liter

Outfall 001 (Influent):
Flow Rate: 0.021 Mgal/d
BOD5: 1265 mg/L
pH: 6.39 S.U.
TSS: 857 mg/L

Outfall 002 (Effluent):
Flow Rate: 0.023 Mgal/d
Freeboard: 4.15 Feet
BOD5: 15.22 mg/L
Coliform: 40.74 CFU/100mL
Nitrate: 1.03 mg/L
Nitrogen: 1.03 mg/L
pH: 7.92 S.U.
TSS: 15.95 mg/L

Outfall 003 (Land Application - Reuse):
Flow Rate: 90 gal/d
Fecal Coliform: 515.29 CFU/100mL
Nitrate: 0.44 mg/L
Nitrogen: 7.10 mg/L
pH: 8.47 mg/L
TDS: 1,323 mg/L

Outfall 004 (Monitoring Well MW-1):
Chloride: 24.25 mg/L
Depth: 13.82 Feet
Nitrate: 1.45 mg/L
Nitrogen: 3.78 mg/L
TDS: 244 mg/L
Water Level: 4,261 Feet

Outfalls 005 and 006 Averaged (Monitoring Wells MW-2 and MW-3):
Chloride: 31.44 mg/L
Depth: 16.54 Feet
Nitrate: 0.85 mg/L
Nitrogen: 1.51 mg/L
TDS: 266 mg/L
Water Level: 4265 Feet

Outfall 007, 008, and 009 Averaged (Monitoring Wells MW-4, MW-5, and MW-6):
Chloride: 50.08 mg/L
Depth: 35.42 Feet
Nitrate: 2.16 mg/L
Nitrogen: 2.58 mg/L
TDS: 426.5 mg/L

Water Level: 4,262 Feet

The average rate of removal, after treatment, for BOD5 was 94%, while TSS was approximately 95%.

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. Common pollutants of concern for the wastewater and reclaimed water are:

Effluent – BOD5, Chloride, Nitrogen, pH, General Fecal Coliform, along with potential inorganic chemicals and metals (Profile 1 contaminants).

Monitoring Wells: Chloride, Nitrogen, and TDS.

Receiving Water
The receiving water is groundwater of the State. The depth to groundwater is approximately 16 feet below ground surface (bgs) in the area of the EHP, approximately 14 feet bgs northwest of the 1.25 acre reuse irrigated fields, approximately 28 feet bgs north of the Canine Training Center, and ranges from 34 to 40 feet bgs in the area of the (no longer in use) sludge residuals holding pond. The groundwater gradient is in a northerly direction, towards the Truckee River.

Compliance History
The facility has been in compliance with the exception of intermittent overages of reported permitted parameter concentrations during the period reviewed.

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

WWTP Discharge Limitations Table for Sample Location 001 (Influent-Internal Outfall) To Be Reported Monthly

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	Daily Maximum	<= 0.049 Million Gallons per Day (Mgal/d)		Internal Monitoring Point	001	Continuous	METER
Flow rate	30 Day Average	<= 0.025 Million Gallons per Day (Mgal/d)		Internal Monitoring Point	001	Continuous	METER
BOD, 5-day[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Internal Monitoring Point	001	Monthly	DISCRT
BOD, 5-day[1]	Monthly Average		M&R Milligrams per Liter (mg/L)	Internal Monitoring Point	001	Monthly	DISCRT[2]
pH, maximum	Daily Maximum		M&R Standard Units (SU)	Internal Monitoring Point	001	Monthly	METER
pH, minimum	Daily Minimum		M&R Standard Units (SU)	Internal Monitoring Point	001	Monthly	METER
Solids, total suspended[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Internal Monitoring Point	001	Monthly	DISCRT
Solids, total suspended[1]	Monthly Average		M&R Milligrams per Liter (mg/L)	Internal Monitoring Point	001	Monthly	DISCRT[2]

Notes (WWTP Discharge Limitations Table):

1. Both Biochemical Oxygen Demand, 5-day (BOD5) and Total Suspended Solids (TSS) should be sampled concurrently when the same parameters are sampled in the effluent (Outfall 002) to determine the actual percentage of removal rates being achieved by the MPC WWTP.
2. To be calculated.

WWTP Discharge Limitations Table for Sample Location 002 (Effluent Pond-External Outfall) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	002	Continuous	METER
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	002	Continuous	METER
Freeboard	Daily Minimum		>= 2 Feet (ft)	See Footnote[3]	002	Weekly	VISUAL
BOD, 5-day[4]	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	DISCRT
BOD, 5-day[4]	Monthly Average		<= 30 Milligrams per Liter (mg/L)[1]	Effluent Gross	002	Monthly	DISCRT[5]
Coliform, fecal, colony forming units	Daily Maximum		<= 240 Colony Forming Units per 100ml T (CFU/100mL)[2]	Effluent Gross	002	Monthly	DISCRT
Coliform, fecal, colony forming units	30 Day Geometric Mean		<= 23 Colony Forming Units per 100ml T (CFU/100mL)[2]	Effluent Gross	002	Monthly	DISCRT
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	DISCRT
pH, minimum	Daily Minimum		>= 6.0 Standard Units (SU)	Effluent Gross	002	Monthly	DISCRT
pH, maximum	Daily Maximum		<= 9.0 Standard Units (SU)	Effluent Gross	002	Monthly	DISCRT
Solids, total suspended[4]	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	DISCRT
Solids, total suspended[4]	Monthly Average		<= 30 Milligrams per Liter (mg/L)[1]	Effluent Gross	002	Monthly	DISCRT[5]
BOD, 5-day, percent removal	Monthly Average Minimum		>= 85 Percent (%)	Effluent Gross	002	Monthly	CALCTD

WWTP Discharge Limitations Table for Sample Location 002 (Effluent Pond-External Outfall) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Solids, suspended percent removal	Monthly Average Minimum		>= 85 Percent (%)	Effluent Gross	002	Monthly	CALCTD

Notes (WWTP Discharge Limitations Table):

1. If the 30-day average discharge limitation is exceeded, additional sample(s) may be analyzed to facilitate establishing a more accurate 30-day average.
2. CFU/100mL or MPN/100mL.
3. Effluent holding pond.
4. Both Biochemical Oxygen Demand, 5-day (BOD5) and Total Suspended Solids (TSS) should be sampled concurrently when the same parameters are sampled in the influent (Outfall 001) to determine the actual percentage of removal rates being achieved by the MPC WWTP.
5. To be calculated.

WWTP Discharge Limitations Table for Sample Location 002 (Effluent Pond-External Outfall) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Alkalinity, bicarbonate (as CaCO3)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Alkalinity, total (as CaCO3)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Aluminum, dissolved (as Al)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Antimony, dissolved (as Sb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Arsenic, dissolved (as As)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Barium, dissolved (as Ba)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Beryllium, dissolved (as Be)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Cadmium, dissolved (as Cd)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Calcium, dissolved (as Ca)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Chromium, dissolved (as Cr)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
			M&R				

WWTP Discharge Limitations Table for Sample Location 002 (Effluent Pond-External Outfall) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Copper, dissolved (as Cu)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Fluoride, total (as F)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Iron, dissolved (as Fe)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Lead, dissolved (as Pb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Magnesium, dissolved (as Mg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Manganese, dissolved (as Mn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Mercury, dissolved (as Hg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Nitrite plus nitrate total 1 det. (as N)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Potassium, dissolved (as K)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Selenium, dissolved [as Se]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Silver, dissolved (as Ag)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
			M&R				

WWTP Discharge Limitations Table for Sample Location 002 (Effluent Pond-External Outfall) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Sodium, dissolved (as Na)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Sulfate, total (as SO4)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Thallium, dissolved (as Tl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Uranium, natural, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Cyanide, weak acid, dissociable	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Zinc, dissolved (as Zn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT

Groundwater Monitoring Wells Table for Sample Location 004 (Monitoring Well - Mw-01) To Be Reported Quarterly

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	004	Quarterly	DISCRT
Depth to water level ft below landsurface[1]	Daily Minimum	M&R Feet (ft)		Groundwater	004	Quarterly	VISUAL[2]
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	004	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	004	Quarterly	DISCRT
Water level relative to mean sea level[3]	Daily Maximum	M&R Feet (ft)		Groundwater	004	Quarterly	CALCTD

Notes (Groundwater Monitoring Wells Table):

1. Depth to groundwater, feet.
2. Field measurement.
3. Groundwater elevation, feet.

Groundwater Monitoring Wells Table for Sample Location 005 (Monitoring Well - Mw-02) To Be Reported Quarterly

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	005	Quarterly	DISCRT
Depth to water level ft below landsurface[1]	Daily Minimum	M&R Feet (ft)		Groundwater	005	Quarterly	VISUAL[2]
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	005	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	005	Quarterly	DISCRT
Water level relative to mean sea level[3]	Daily Maximum	M&R Feet (ft)		Groundwater	005	Quarterly	CALCTD

Notes (Groundwater Monitoring Wells Table):

1. Depth to groundwater, feet.
2. Field measurement.
3. Groundwater elevation, feet.

Groundwater Monitoring Wells Table for Sample Location 006 (Monitoring Well - Mw-03) To Be Reported Quarterly

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	006	Quarterly	DISCRT
Depth to water level ft below landsurface[1]	Daily Minimum	M&R Feet (ft)		Groundwater	006	Quarterly	VISUAL[2]
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	006	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	006	Quarterly	DISCRT
Water level relative to mean sea level[3]	Daily Maximum	M&R Feet (ft)		Groundwater	006	Quarterly	CALCTD

Notes (Groundwater Monitoring Wells Table):

1. Depth to groundwater, feet.
2. Field measurement.
3. Groundwater elevation, feet.

Groundwater Monitoring Wells Table for Sample Location 007 (Monitoring Well - Mw-04) To Be Reported Annually

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	007	Annual	DISCRT
Depth to water level ft below landsurface[1]	Daily Minimum	M&R Feet (ft)		Groundwater	007	Annual	VISUAL[2]
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	007	Annual	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	007	Annual	DISCRT
Water level relative to mean sea level[3]	Daily Maximum	M&R Feet (ft)		Groundwater	007	Annual	CALCTD

Notes (Groundwater Monitoring Wells Table):

1. Depth to groundwater, feet.
2. Field measurement.
3. Groundwater elevation, feet.

Groundwater Monitoring Wells Table for Sample Location 008 (Monitoring Well - Mw-05) To Be Reported Annually

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	008	Annual	DISCRT
Depth to water level ft below landsurface[1]	Daily Minimum	M&R Feet (ft)		Groundwater	008	Annual	VISUAL[2]
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	008	Annual	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	008	Annual	DISCRT
Water level relative to mean sea level[3]	Daily Maximum	M&R Feet (ft)		Groundwater	008	Annual	CALCTD

Notes (Groundwater Monitoring Wells Table):

1. Depth to groundwater, feet.
2. Field measurement.
3. Groundwater elevation, feet.

Groundwater Monitoring Wells Table for Sample Location 009 (Monitoring Well - Mw-06) To Be Reported Annually

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	009	Annual	DISCRT
Depth to water level ft below landsurface[1]	Daily Minimum	M&R Feet (ft)		Groundwater	009	Annual	VISUAL[2]
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	009	Annual	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	009	Annual	DISCRT
Water level relative to mean sea level[3]	Daily Maximum	M&R Feet (ft)		Groundwater	009	Annual	CALCTD

Notes (Groundwater Monitoring Wells Table):

1. Depth to groundwater, feet.
2. Field measurement.
3. Groundwater elevation, feet.

Re-use Discharge Limitations Table for Sample Location 003 (Irrigation/Reuse-Land Application Site) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Prior to Reuse	003	Continuous	METER
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Prior to Reuse	003	Continuous	METER
Coliform, fecal, colony forming units	Daily Maximum		M&R Colony Forming Units per 100ml T (CFU/100mL)[1]	Prior to Reuse	003	Monthly	DISCRT
Coliform, fecal, colony forming units	30 Day Geometric Mean		M&R Colony Forming Units per 100ml T (CFU/100mL)[1]	Prior to Reuse	003	Monthly	DISCRT

Notes (Re-use Discharge Limitations Table):

1. CFU/100mL or MPN/100mL.

Re-use Discharge Limitations Table for Sample Location 003 (Irrigation/Reuse-Land Application Site) To Be Reported Annually

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Nitrogen, total[2]	Annual Total[3]	M&R Pounds per Year (lb/yr)[1]		Beneficial Reuse	003	Annual	CALCTD[4]

Notes (Re-use Discharge Limitations Table):

1. Please read the reporting units as Pounds per Year per Acre (lb/yr-acre).
2. Cumulative total of annual Nitrogen application via irrigation and fertilization reported as pounds per acre per year.
3. This limit may be changed with minor modification of the permit upon the review and approval of a revised Reclaimed Water Management Plan (RWMP).
4. Please refer to Worksheet 2-C in the Effluent Management Plan for calculation details.

Summary of Changes From Previous Permit

Under Outfall 001 (Influent), To Be Reported Monthly, the following parameters were added or changed:

CHANGED – BOD, 5-day, with a “Monthly Maximum” Base, was changed to a “Daily Maximum” Base, with the remaining discharge limitations and monitoring requirements remaining unchanged.

CHANGED – pH, maximum, with a “Monthly Maximum” Base, was changed to a “Daily Maximum” Base, with the remaining discharge limitations and monitoring requirements remaining unchanged.

CHANGED – Solids, total suspended, with a “Monthly Maximum” Base, was changed to a “Daily Maximum” Base, with the other discharge limitations and monitoring requirements remaining unchanged.

CHANGED – pH, minimum, with a “Monthly Minimum” Base, was changed to a “Daily Minimum” Base, with the other discharge limitations and monitoring requirements remaining unchanged.

ADDED – Footnotes 1 and 2.
1. Both Biochemical Oxygen Demand, 5-day (BOD5) and Total Suspended Solids (TSS) should be sampled concurrently when the same parameters are sampled in the effluent (Outfall 002) to determine the actual percentage of removal rates being achieved by the MPC WWTP.

2. To be calculated.

Under Outfall 002 (Effluent Pond), To Be Reported Monthly, the following parameters were added, changed or deleted:

ADDED - BOD, 5-day, percent removal, with a “Monthly Average Minimum” Base, a “>=85 Percent (%)” Concentration, a “Effluent Gross"" Monitoring Location, a “002” Sample Location, a “Monthly” Measurement Frequency, and a “Calctd” Sample Type.

ADDED - Solids, suspended percent removal, with a “Monthly Average Minimum” Base, a “>=85 Percent (%)” Concentration, a “Effluent Gross", Monitoring Location, a “002” Sample Location, a “Monthly” Measurement Frequency, and a “Calctd” Sample Type.

ADDED – Footnotes 4 and 5.
4. Both Biochemical Oxygen Demand, 5-day (BOD5) and Total Suspended Solids (TSS) should be

sampled concurrently when the same parameters are sampled in the influent (Outfall 001) to determine the actual percentage of removal rates being achieved by the MPC WWTP.

5. To be calculated.

CHANGED – BOD, 5-Day, from a “Monthly Maximum” Base to a “Daily Maximum” Base, with the other discharge limitations and monitoring requirements being unchanged.

CHANGED – Nitrogen, total, with a “Monthly Maximum” Base, was changed to a “Daily Maximum” Base, with the other discharge limitations and monitoring requirements remaining unchanged.

CHANGED – Solids, total suspended, with a “Monthly Maximum” Base, was changed to a “Daily Maximum” Base, with the other discharge limitations and monitoring requirements remaining unchanged.

DELETED – Nitrogen, nitrate total (as N) with a “Monthly Maximum” Base.

DELETED – Nitrogen, nitrate total (as N) with a “Monthly Average” Base.

DELETED – Nitrogen, total (as N) with a “Monthly Average” Base.

ADDED – Outfall 002 (Effluent Pond), To Be Reported Once During the Permit Term, along with the following parameters:

ADDED – Profile 1 list, dissolved, with a “Daily Maximum” Base, an “M&R Milligrams per Liter (mg/L)” Concentration, a “Effluent Gross"” Monitoring Location, an “002” Sample Location, a “Once During Permit Term” Measurement Frequency, and a “Discrt” Sample Type.

Under Outfall 003 (Land Application Site), To be Reported Monthly, the following parameters were deleted:

DELETED - Nitrogen, nitrate total (as N), with a “Monthly Maximum” Base.

DELETED – Nitrogen, nitrate total (as N), with a “Monthly Average” Base.

DELETED – Nitrogen, total (as N), with a “Monthly Average” Base.

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

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

DELETED – Solids, total dissolved, with a “Monthly Average” Base.

DELETED – Solids, total dissolved, with a “Monthly Maximum” Base.

Under Outfall 003 (Land Application Site), To be Reported Annually, the following parameter was deleted:

DELETED - Area inspection visua, with a "Total" Base.

DELETED - Nootnotes 1 and 2, with the others automatically re-numbered after their removals.

Under Outfalls 004, 005, 006, 007, 008, and 009 (MW1-MW6), To Be Reported Quarterly, the following parameters were changed or deleted:

CHANGED – Chloride (as Cl), with a “Quarterly Maximum” Base to a “Daily Maximum” Base, with the other discharge limitations and monitoring requirements remaining unchanged.

CHANGED – Depth to water level ft below landsurface, with a “Quarterly Maximum” Base to a “Daily

Minimum” Base, with the other discharge limitations and monitoring requirements remaining unchanged.

CHANGED – Nitrogen, total, with a “Quarterly Maximum” Base to a “Daily Maximum” Base, with the other discharge limitations and monitoring requirements remaining unchanged.

CHANGED – Solids, total dissolved, with a “Quarterly Maximum” Base to a “Daily Maximum” Base, with the other discharge limitations and monitoring requirements remaining unchanged.

CHANGED – Water level relative to mean sea level, with a “Quarterly Maximum” Base to a “Daily Maximum” Base, with the other discharge limitations and monitoring requirements remaining unchanged.

DELETED – Nitrogen, nitrate total (as N), with a “Quarterly Maximum” Base.

CHANGED – Footnote 4.

From:
4. The detection of concentrations of total nitrogen as nitrogen (-N) in groundwater samples invoke the following limitations and response requirements:

i. If the total nitrogen-N concentration in any of the six monitoring wells increases to 4.0 milligrams per liter (mg/L), the frequency of
monitoring for all wells shall be increased to monthly.

ii. If the total nitrogen-N concentration in any of the six monitoring wells increases to 5.0 mg/L, the frequency of monitoring shall be increased to weekly and an alternate method of disposal or an Effluent Management Plan (EMP), revised to decrease the amount of nitrogen reaching the groundwater, shall be submitted to the Nevada Division of Environmental Protection (Division) for review and approval.

iii. If the total nitrogen-N concentration in any of the six monitoring wells increases to 6.0 mg/L, the Permittee shall immediately implement the Division-approved alternate method of disposal or stop discharging and continue the weekly monitoring.

To:

4. See Special Approvals/Conditions Table, Item 1.

Under Outfalls 007-009, being Monitoring Wells MW-4 through MW-6, To Be Reported Quarterly, the following changes were made:

The reporting frequency was changed from a "Quarterly" measurement frequency to an "Annual" measurement frequency, with the remaining discharge limitations being unchanged.

Changed SOC – Schedule of Compliance Table:

CHANGED – Item 1.
From:
Item 1. On or before April 17, 2017, the Permittee shall submit a revised O&M Manual to the Division for review and approval.

To:
Item 1. The Permittee shall submit two copies (one hard copy and one electronic copy) of an updated Operations and Maintenance (O&M) Manual for review and approval by the Division. The O&M Manual shall follow the Division's guidance document, WTS-2 Minimum Information Required for an Operation and Maintenance Manual for a Wastewater Treatment Plant and be prepared and wet stamped by a licensed, qualified Nevada professional engineer (P.E.).

CHANGED – Item 2.

From:
Item 2. On or before April 17, 2017, the Permittee shall submit a revised EMP to the Division for review and approval.

To:
Item 2. The Permittee shall submit two (2) copies (one hard copy and one electronic copy) of a Reclaimed Water Management Plan (RWMP) to the Division for review and approval. The RWMP shall follow the Division's guidance document WTS1B: General Design Criteria for Preparing a Reclaimed Water Management Plan and be prepared and wet stamped by a licensed, qualified Nevada professional engineer (P.E.) or another qualified professional.

Under the SA – Special Approvals / Conditions Table the following addition or deletion were done:

DELETED – Item 0.
Within 1 year of the current permit renewal, permittee shall submit all DMRs electronically through the Nevada NetDMR website: http://netdmr.ndep.nv.gov/netdmr/public/home.htm.

DELETED – Special Approvals/Conditions Table, Item 1.

Under DLV – Deliverable Schedule for Reports, Plans, and Other Submittals the following was deleted:

DELETED - Annual DMRs, with a "Compliance Schedule" Event Code.

Technology Based Effluent Limitations
Technology based effluent limitations (TBELs) are required as promulgated by the United States (U.S.) EPA for Publicly Owned Treatment Works (POTWs). The following limits are based on secondary treatment standards as allowed by the Code of Federal Regulation (CFR) Title 40, Section 133, and which has been adopted by the State of Nevada. U.S. EPA published federal secondary treatment standards at 40 CFR 133 based on an evaluation of performance data for POTWs practicing a combination of physical and biological treatment. Performance is measured by monitoring biodegradable organics, suspended solids in the effluent, and ensuring pH remains within regulatory limits. Federal secondary treatment standards are defined under 40 CFR 133 for maximum BOD5 as a 30-day average of 30 mg/L and a 7-day average of 45 mg/L and for maximum TSS as a 30-day average of 30 mg/L and a 7-day average of 45 mg/L. In addition to describing the minimum levels of effluent quality attainable by secondary treatment, 40 CFR 133.102 states that the 30-day average percent removal of BOD5 and TSS shall not be less than 85%. The Division has adopted these standards for discharges from treatment facilities, and has applied the same 7-day average thresholds as daily maximum effluent limits for BOD5 and TSS.

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

BOD5: Monthly average limit: <= 30 mg/L; Daily maximum limit: <= 45 mg/L.

TSS: Monthly average limit: <= 30 mg/L; Daily maximum limit: <= 45 mg/L.

pH: Daily Maximum: <= 9.0 Standard Units

pH: Daily Minimum >= 6.0 Standard Units

Limits Based on Secondary Treatment Standards:

BOD5 Percent removal: >= 85 percent.

TSS: Percent removal: >= 85 percent.

Limits Based on Facility's Design Criteria Review:

30-day average flow rate for influent is limited to <=0.025 Mgal/d.

Daily maximum flow rate for influent is limited to <=0.049 Mgal/d.

Water Quality Based Effluent Limitations
Water quality-based effluent limitations are not applicable to this permit.

Proposed Water Quality Based Effluent Limits (monthly/weekly/daily)
Water quality-based effluent limitations are not applicable to this permit.

Basis for Effluent Limitations
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 NAC 445A.243, which states, “In establishing an effluent limitation to carry out the policy of this State set forth in Nevada Revised Statutes (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 requirement to monitor the effluent for Profile 1 constituents once per permit term is included to evaluate the quality of the effluent and determine whether the effluent has potential to impact the receiving water. Although cyanide and uranium are not expected to be present in the effluent, the permit requires the Permittee to sample these constituents once per term because they are included in the Profile 1 list and have not been previously tested.

The constituents listed in Profile 1 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 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.”

Influent and Effluent Monitoring Requirements:
Monthly influent and effluent monitoring for BOD5 and TSS are included to assess the treatment performance of the MPC WWTP. A monthly sampling frequency for BOD5 and TSS is sufficient for determining compliance with the applicable effluent limitations. Percent removal requirements for BOD5 and TSS are established in the permit as monthly average minimums of 85%, based on secondary treatment standards.

Some wastewater treatment processes can increase or decrease wastewater pH; therefore, monthly monitoring for pH is included in assessing compliance with effluent limits of 6.0 S.U. as a daily minimum and 9.0 S.U. as a daily maximum.

Other Required Water Quality Monitoring:
The requirement to sample the effluent for fecal coliform prior to irrigation is for the protection of the environment and human health.

Anti-backsliding
None of the proposed permit limits were changed to a less restrictive limit compared to those in the previous permit, apart from the removal of the requirement to sample and report Nitrate as N from each of the monitoring wells and the measurement frequency for Monitoring Wells MW-4, MW-5, and MW-6.

The Total Nitrogen (as N) parameter encompasses all forms of nitrogen, including organic, ammonia, nitrite, and nitrate. Thus, no backsliding will be caused by the removal of this parameter and allows this permit to adhere to current Division reporting requirements.

The measurement frequency was changed to an annualized reporting requirement based on the pond no

longer being used and the reported levels during the past five years being low in concentation for the reportable parameters.

The requirement to report an area visual inspection was removed as that is not a common Division requirement for land application sites using reclaimed water.

Antidegradation
The Division has developed an antidegradation regulation that is applied on a statewide basis, and which meets the statutory requirements of Nevada's water pollution control law found at NRS 445A.520 and NRS 445A.565 and is consistent with the federal antidegradation policy found at 40 CFR § 131.12. The objective of the Division's antidegradation regulation is to prevent degradation of Nevada's surface waters and maintain the unique attributes and special characteristics and water quality associated with high-quality waters.

As this permit is for discharges to groundwater, and not surface water, the new antidegradation rule is not applicable. There are currently no specific water quality standards that have been formally adopted by the State for groundwater, however, data reviewed during the renewal process does not indicate the potential for degradation of the groundwater from the treated wastewater discharged within the compliance limits of the proposed permit.

Special Conditions
See the applicable Special Approvals/Conditions for this permit.

SA – Special Approvals / Conditions Table

There are no Special Approval / Condition items

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

Corrective Action Sites
There are no Bureau of Corrective Actions (BCA) remediation sites located within a one-mile radius of the MPC facility.

Wellhead Protection Program
There are three Public Water Supply (PWS) well located approximately 1,200 feet northeast, 18,000 feet south and 2,600 feet east to the Outfalls 002 and 003. The well northeast of the outfall has a depth of approximately 310 feet, with a screen from 110 to 310 feet. The well east of the outfall has a depth of approximately 350 feet, with a sanitary seal at 100 feet, and is screened from 140 to 150 feet, 170 to 220 feet, 225 to 240 feet, and 260 to 270 feet. The well south of the outfall has a depth of approximately 900 feeet. with a sanitary seal at 100 feet, and is screened from 300 to 420 feet, 500 to 640 feet, and 660 to 900 feet. The outfall is located in the Drinking Water Protection Area of the wells, which is defined by a 3,000-foot radius around a PWS well. The recent chemical history of the well reports that the well has been having detections and exceedances of Iron and Arsenic. The wells are at minimal risk based on the distance and the well and depths.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit two copies (one hard copy and one electronic copy) of an updated Operations and Maintenance (O&M) Manual for review and approval by the Division. The O&M Manual shall follow the Division's guidance document, WTS-2 Minimum Information Required for an Operation and Maintenance Manual for a Wastewater Treatment Plant and be prepared and wet stamped by a licensed, qualified Nevada professional engineer (P.E.).	6/1/2027
2	The Permittee shall submit two (2) copies (one hard copy and one electronic copy) of a Reclaimed Water Management Plan (RWMP) to the Division for review and approval. The RWMP shall follow the Division's guidance document WTS1B: General Design Criteria for Preparing a Reclaimed Water Management Plan and be prepared and wet stamped by a licensed, qualified Nevada professional engineer (P.E.) or another qualified professional.	6/1/2027

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	1/28/2027
2	Annual Report	Annually	1/28/2027
3	Once a Permit DMRs	Once during the permit term	7/28/2031

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. **7/7/2026,** a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator of EPA Region IX or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted. Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determined to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Proposed Determination:

The Division has made the tentative determination to issue/re-issue the proposed 5-year permit.

Prepared by: **Melissa Hanson**
Date: **6/4/2026**
Title: **Staff II Engineer**

Flow Diagram

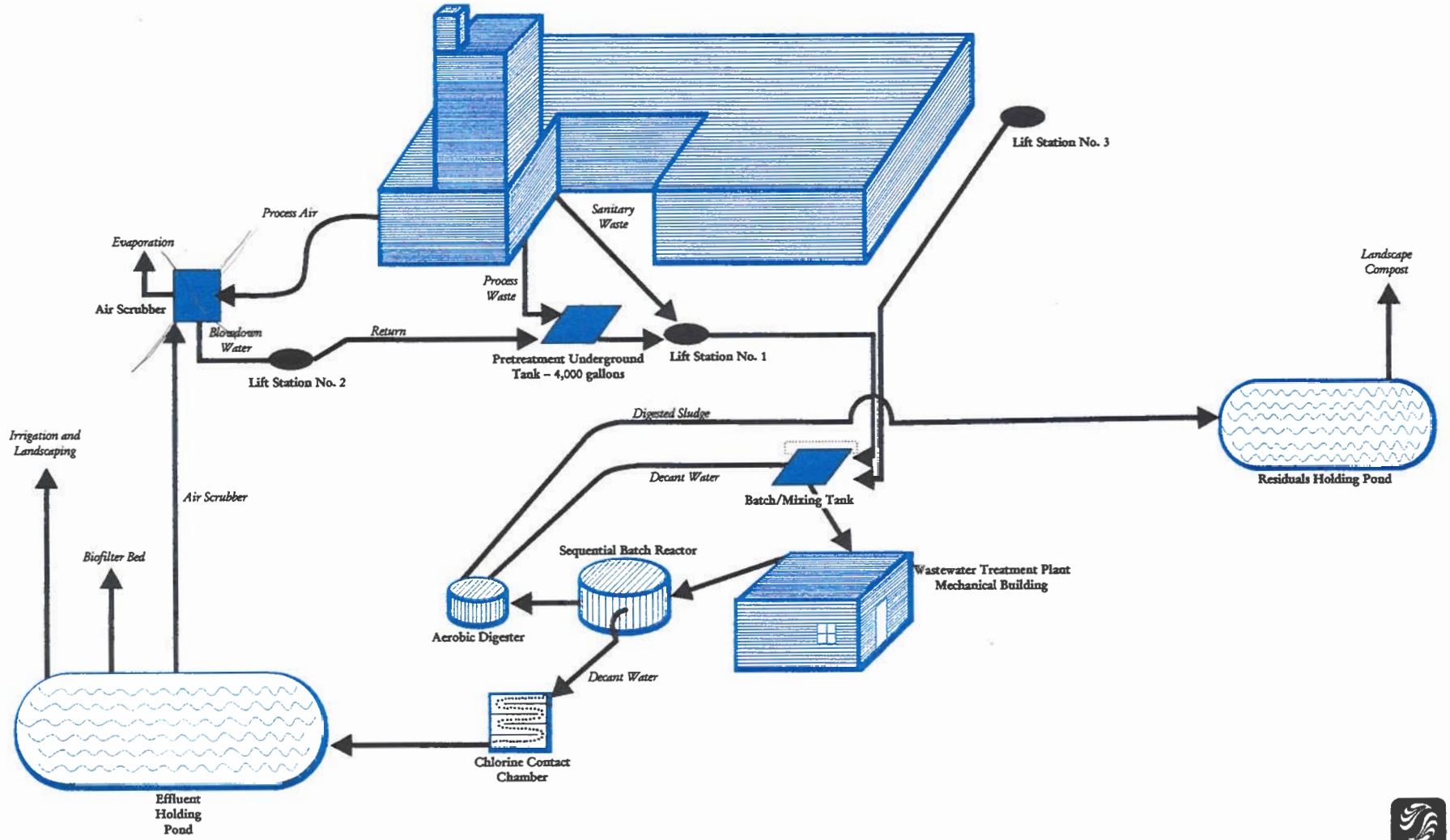

Plate 5

Stantech