

STATE OF NEVADA

Department of Conservation & Natural Resources

Brian Sandoval, Governor

Leo M. Drozdoff, P.E., Director

DIVISION OF ENVIRONMENTAL PROTECTION

Colleen Cripps, Ph.D., Administrator

FACTSHEET (pursuant to NAC 445A.236)

Permittee Name: MINDEN GARDNERVILLE SANITATION DISTRICT 1790 U.S. HIGHWAY 395 MINDEN, NV - 89423

Permit Number: NS0040027

Location: MINDEN GARDNERVILLE SANITATION DISTRICT, DOUGLAS 1790 U.S. HIGHWAY 395, MINDEN, NV - 89423 LATITUDE: 38.965556, LONGITUDE: -119.781111 TOWNSHIP: 13N, RANGE: 20E, SECTION: 30

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Outfall Citv	Outfall State	Outfall Zip	Outfall County	Latitude	Longitude	Receiving Water
001	INFLUENT	Influent Structure		MINDEN	NV	89423	DOUGLAS	38.964861	-119.779694	GROUNDWATER
002	CHLORINE CONTACT TANK	External Outfall		MINDEN	NV	89423	DOUGLAS	38.965417	-119.781667	GROUNDWATER
003	MGSD IRRIGATION FIELDS	Land Application Site		MINDEN	NV	89423	DOUGLAS	38.966667	-119.783056	GROUNDWATER
004	STORAGE RESERVOIRS	External Outfall		MINDEN	NV	89423	DOUGLAS	38.973333	-119.791667	GROUNDWATER
005	MW-2	Monitoring Well		MINDEN	NV	89423	DOUGLAS	38.973160	-119.787410	GROUNDWATER
006	MW-3	Monitoring Well		MINDEN	NV	89423	DOUGLAS	38.975630	-119.800830	GROUNDWATER
007	MW-4	Monitoring Well		MINDEN	NV	89423	DOUGLAS	38.979560	-119.796770	GROUNDWATER
008	MW-5	Monitoring Well		MINDEN	NV	89423	DOUGLAS	39.002260	-119.7941	GROUNDWATER
009	MW-6	Monitoring Well		MINDEN	NV	89423	DOUGLAS	39.025040	-119.790890	GROUNDWATER
010	MW-7	Monitoring Well		MINDEN	NV	89423	DOUGLAS	38.975740	-119.786250	GROUNDWATER
011	MW-8	Monitoring Well		MINDEN	NV	89423	DOUGLAS	39.017440	-119.802190	GROUNDWATER
012	MW-9	Monitoring Well		MINDEN	NV	89423	DOUGLAS	39.008080	-119.8027	GROUNDWATER
013	MW-10	Monitoring Well		MINDEN	NV	89423	DOUGLAS	38.989020	-119.813020	GROUNDWATER

General:

The Minden Gardnerville Sanitation District (MGSD) operates a 3.1 million-gallon per day (MGD) wastewater treatment plant (WTP) in Douglas County, Nevada. Wastewater from residential and commercial sources in the Minden and Gardnerville areas is treated to meet secondary treatment standards, partially denitrified, and disinfected.

Wastewater entering the headworks is screened on parallel FMC® traveling bar screens, with grit removed in an aerated Pista® grit chamber. Screened wastewater is discharged to three parallel 45-foot diameter primary clarifiers. Primary clarified effluent is then split and treated in parallel through attached-growth trickling filters packed with cross-flow plastic media for biological treatment. Effluent from the trickling filters is then mixed with

return activated sludge (RAS) from the secondary clarifiers in aerated contact basins to further enhance nitrification and reduce the 5-day carbonaceous biochemical oxygen demand (CBOD5). The mixed liquor is then discharged to three secondary clarifiers for final clarification before disinfection. Effluent is disinfected using sodium hypochlorite in two chlorine contact basins.

Sludge from the primary and secondary clarifiers is digested in two anaerobic digesters operated in series. Sludge is subsequently treated at 95°F for 90 days, producing Class B biosolids. Recovered methane gas from the digestion process is used to maintain proper digester temperature, as well as to heat the plant buildings. Digested sludge is thickened with polymer additives, and is dewatered using a belt filter press. The MGSD currently uses Bently Family Limited Partnership composting facilities for the disposal of biosolids as a beneficial soil amendment and source of crop nutrients (permit NS0097012).

Because commercial and residential developments have encroached into the area surrounding the treatment plant, the MGSD has installed a number of odor control measures. The MGSD uses a chemical scrubber to treat odorous gases from the headworks. Primary clarifiers are either partially (#1 & #2) or fully (#3) covered for odor capture, and the air is discharged through a biofilter for biological treatment of the odor-causing compounds. Air is also down-drafted through the trickling filters for odor capture and the pulled air is vented through the odor neutralization beds. The MGSD has been proactive in implementing odor control measures.

Following disinfection, treated effluent is either discharged for storage in two clay-lined reservoirs or discharged for the irrigation of approximately 28 acres of land owned and cultivated by the MGSD. The storage reservoirs have a cumulative holding capacity of 550 acre-feet and are located northwest of the treatment plant, across Muller Lane. Treated wastewater is released from the reservoirs on an as-needed basis for reuse irrigation of property owned and cultivated for forage crops by Park Cattle Company, Galeppi Land & Livestock, and Bently Family Limited Partnership. Off-site reuse of treated effluent is administered by each entity under groundwater discharge permits NS2000501 (Park Cattle Company), NS2002513 (Galeppi Land & Livestock), and NS2002514 (Bently Family Limited Partnership). There is no direct discharge of effluent to ground or surface waters.

This permit renewal allows for continued WTP operation, reuse irrigation, and distribution of biosolids meeting Class B treatment standards for land application uses. Site-specific permits for either reuse irrigation or land application of biosolids must be applied for and obtained by those receiving and using the treated products.

Discharge Characteristics:

The reclaimed water meets Category D quality (NAC 445A.276) and is treated to meet secondary standards, partially denitrified, and disinfected prior to distribution for reuse.

PARAMETER	AVERAGE VALUE
CBOD5 (mg/L)	5.2
Total Suspended Solids (TSS, mg/L)	8.9
Fecal Coliform (CFU/100mL)	2.9
Nitrate as N (mg/L)	17
Total Nitrogen (mg/L)	21.5

Average effluent characteristics for 2008-2013 are included below.

Receiving Water:

Groundwater below the effluent reuse areas is currently monitored at nine groundwater monitoring wells. Average groundwater monitoring results for 2008-2013 are included below.

PARAMETER	AVERAGE VALUE
Total Nitrogen (mg/L)	0.90
Nitrate as N (mg/L)	0.41
Total Dissolved Solids (TDS, mg/L)	533
Chloride (mg/L)	31
Groundwater Depth (feet below ground surface)	3.2

Summary of Changes From Previous Permit:

Changes made to the MGSD WTP since issuance of the 2008 permit include the addition of an anaerobic digester, a grease receiving facility, and a co-generation facility.

The biosolids land-application limitations table has been removed from the permit. Biosolids monitoring and reporting requirements are outlined in permit section *B.BS. Biosolids and Sewage Sludge*.

Due to the new naming conventions at the Nevada Division of Environmental Protection (NDEP), Bureau of Water Pollution Control, the permit number has been changed from NEV40027 to NS0040027. This change does not reflect a change in the type of permit being issued.

Proposed Effluent Limitations:

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

	[Discharge Lim	Monitoring Requirements				
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Solids, total suspended	Daily Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent ^[1]	001	Weekly	COMPOS
Solids, total suspended	30 Day Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent ^[1]	001	Weekly	COMPOS
BOD, carbonaceous, 05 day, 20 C	Daily Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent ^[1]	001	Weekly	COMPOS
BOD, carbonaceous, 05 day, 20 C	30 Day Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent ^[1]	001	Weekly	COMPOS
Flow rate	Daily Maximum	<= 3.1 Million Gallons per Day (Mgal/d)		Raw Sewage Influent ^[2]	001	Continuous	METER
Flow rate	30 Day Average	<= 2.8 Million Gallons per Day (Mgal/d)		Raw Sewage Influent ^[2]	001	Continuous	METER

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

Notes (WWTP Discharge Limitations Table):

1. At the influent pump station wet well.

2. At the intake Parshall flume.

WWTP Discharge Limitations Table for Sample Location 002 (Chlorine Contact Tank) To Be Reported Monthly

			Monitoring Requirements				
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
pH, maximum	Monthly Maximum		<= 9 Standard Units (SU)	Effluent Gross	002	Weekly	DISCRT
pH, minimum	Monthly Minimum		>= 6 Standard Units (SU)	Effluent Gross	002	Weekly	DISCRT
Coliform, fecal, colony forming units	Daily Maximum		<= 400 Colony Forming Units per 100ml T (CFU/100mL)	Effluent Gross	002	Weekly	DISCRT
Coliform, fecal, colony forming units	30 Day Average		<= 200 Colony Forming Units per 100ml T (CFU/100mL)	Effluent Gross	002	Weekly	DISCRT
Solids, suspended percent removal	Monthly Minimum		> 85 Percent (%)	Effluent Gross	002	Monthly	CALCTD
Solids, total suspended	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	002	Weekly	COMPOS
Solids, total suspended	30 Day Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	002	Weekly	COMPOS
BOD, 5-day, percent removal	Monthly Minimum		> 85 Percent (%)	Effluent Gross	002	Monthly	CALCTD
BOD, carbonaceous, 05 day, 20 C	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	002	Weekly	COMPOS
BOD, carbonaceous, 05 day, 20 C	30 Day Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	002	Weekly	COMPOS
рН	Monthly Average		M&R Standard Units (SU)	Effluent Gross	002	Weekly	DISCRT

WWTP Discharge Limitations Table for Sample Location 002 (Chlorine Contact Tank) To Be Reported Quarterly

		Discharge Lim	Monitoring Requirements				
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Phosphate, total (as PO4)	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Phosphate, total (as PO4)	Quarterly Average		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT

	Monitoring Requirements						
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Chlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Carbon tetrachloride	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Bromoform	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Chloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Benzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Acrylonitrile	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Acrolein	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
2-Chloroethyl vinyl ether, (mixed)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
1,3-Dichloropropene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
trans-1,2-Dichloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
1,2-Dichloropropane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
			M&R				

	Monitoring Requirements						
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
1,2-Dichloroethane	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
1,1-Dichloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
1,1-Dichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
1,1,2-Trichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
1,1,2,2-Tetrachloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
1,1,1-Trichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Pyrene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Phenanthrene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
N-Nitrosodiphenylamine	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
N-Nitrosodi-N-propylamine	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
N-Nitrosodimethylamine (NDMA)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
			M&R				

	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	COMPOS
Naphthalene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Isophorone	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Indeno(1,2,3-cd)pyrene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Hexachloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Hexachlorocyclopentadiene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Hexachlorobutadiene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Hexachlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Fluorene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Fluoranthene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Di-n-octyl phthalate	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
			M&R				

	Monitoring Requirements						
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Di-n-butyl phthalate	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Dimethyl phthalate	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Diethyl phthalate	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Dibenzo(a,h)anthracene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Chrysene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Butyl benzyl phthalate	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Bis(2-ethylhexyl) phthalate	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Bis(2-chloroisopropyl) ether	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Bis(2-chloroethyl) ether	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Bis(2- chloroethoxy)methane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Benzo(k)fluoranthene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
		1	M&R		1		1

	Monitoring Requirements						
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Benzo(ghi)perylene	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Benzo(b)fluoranthene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Benzo(a)pyrene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Benzo(a)anthracene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Benzidine	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Anthracene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Acenaphthylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Acenaphthene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
4-Chlorophenyl phenyl ether	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
4-Bromophenyl phenyl ether	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
3,3-Dichlorobenzidine	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
			M&R				

	Dischar	rge Limitat	ions	Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
2-Chloronaphthalene	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
2,6-Dinitrotoluene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
2,4-Dinitrotoluene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
1,4-Dichlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
1,3-Dichlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
1,2-Diphenylhydrazine	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
1,2-Dichlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
1,2,4-Trichlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Cyanide, total (as CN)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Asbestos	Daily Maximum		M&R Fibers per Milliliter (Fib/mL)	Effluent Gross	002	Annual	COMPOS
2,3,7,8- Tetrachlorodibenzo-p- dioxin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Zinc, total recoverable	Daily Maximum		M&R Micrograms per Liter	Effluent Gross	002	Annual	COMPOS

	ons	Monitoring Requirements					
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
			(ug/L)				
Thallium, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Silver total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Selenium, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Nickel, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Mercury, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Lead, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Copper, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Chromium, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Cadmium, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Beryllium, total recoverable (as Be)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Arsenic, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS

	Discharge Limitations				Monitoring Requirements					
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type			
Antimony, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS			
Phenol	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS			
Pentachlorophenol	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS			
4-Nitrophenol	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS			
4-Chloro-3-methylphenol	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS			
2-Nitrophenol	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS			
2-Methyl-4,6-dinitrophenol	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS			
2-Chlorophenol	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS			
2,4-Dinitrophenol	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS			
2,4-Dimethylphenol	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS			
2,4-Dichlorophenol	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS			
			M&R							

	Discharge Limitations Monitoring Requirements						
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
2,4,6-Trichlorophenol	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Toxaphene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
PCB-1260	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
PCB-1254	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
PCB-1248	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
PCB-1242	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
PCB-1232	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
PCB-1221	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
PCB-1016	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Heptachlor epoxide	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
Heptachlor	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
		1	M&R		1		

	Discharge Limitations					Monitoring Requirements						
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type					
.gammaBHC	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS					
Endrin aldehyde	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS					
.alphaBHC	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS					
Aldrin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS					
4,4-DDT	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS					
4,4-DDE	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS					
4,4-DDD	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS					
Vinyl chloride	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT					
Trichloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT					
Toluene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT					
Tetrachloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT					
	T		M&R									

	Discharge Limitations					Monitoring Requirements						
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type					
Methylene chloride	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT					
Methyl chloride (Chloromethane)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT					
Methyl bromide (Bromomethane)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT					
Ethylbenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT					
Dichlorobromomethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT					
Dibromochloromethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT					
Chloroform	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT					
Endrin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS					
Endosulfan sulfate	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS					
Dieldrin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS					
.deltaBHC	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS					
			M&R									

	ons	Monitoring Requirements					
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Chlordane (tech mix. and metabolites)	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
.betaEndosulfan	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
.betaBHC	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS
.alphaEndosulfan	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	COMPOS

Notes (WWTP Discharge Limitations Table):

1. The Permittee shall submit the results of an annual priority pollutant analysis with the fourth quarter report.

Groundwater Monitoring Wells Table for Sample Location 005 (Monitoring Well Mw-2) To Be Reported Quarterly

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

Notes (Groundwater Monitoring Wells Table):

1. Field measurement

2. Groundwater elevation above mean sea level (AMSL)

Groundwater Monitoring Wells Table for Sample Location 006 (Monitoring Well Mw-3) To Be Reported Quarterly

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

Notes (Groundwater Monitoring Wells Table):

1. Field measurement

Groundwater Monitoring Wells Table for Sample Location 007 (Monitoring Well Mw-4) To Be Reported Quarterly

		Discharge Li	mitations	I	Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type	
Depth to water level ft below landsurface	Quarterly Maximum	M&R Feet (ft)		Groundwater	007	Quarterly	VISUAL ^[1]	
Water level relative to mean sea level ^[2]	Quarterly Maximum	M&R Feet (ft)		Groundwater	007	Quarterly	CALCTD	
Nitrogen, nitrate total (as N)	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	007	Quarterly	DISCRT	
Nitrogen, total	Quarterly Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	007	Quarterly	DISCRT	
Chloride (as Cl)	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	007	Quarterly	DISCRT	
Solids, total dissolved	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	007	Quarterly	DISCRT	

Notes (Groundwater Monitoring Wells Table):

1. Field measurement

Groundwater Monitoring Wells Table for Sample Location 008 (Monitoring Well Mw-5) To Be Reported Quarterly

		Discharge Li	mitations	I	Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type	
Depth to water level ft below landsurface	Quarterly Maximum	M&R Feet (ft)		Groundwater	008	Quarterly	VISUAL ^[1]	
Water level relative to mean sea level ^[2]	Quarterly Maximum	M&R Feet (ft)		Groundwater	008	Quarterly	CALCTD	
Nitrogen, nitrate total (as N)	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	008	Quarterly	DISCRT	
Nitrogen, total	Quarterly Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	008	Quarterly	DISCRT	
Chloride (as Cl)	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	008	Quarterly	DISCRT	
Solids, total dissolved	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	008	Quarterly	DISCRT	

Notes (Groundwater Monitoring Wells Table):

1. Field measurement

Groundwater Monitoring Wells Table for Sample Location 009 (Monitoring Well Mw-6) To Be Reported Quarterly

		Discharge Li	mitations	I	Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type	
Depth to water level ft below landsurface	Quarterly Maximum	M&R Feet (ft)		Groundwater	009	Quarterly	VISUAL ^[1]	
Water level relative to mean sea level ^[2]	Quarterly Maximum	M&R Feet (ft)		Groundwater	009	Quarterly	CALCTD	
Nitrogen, nitrate total (as N)	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	009	Quarterly	DISCRT	
Nitrogen, total	Quarterly Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	009	Quarterly	DISCRT	
Chloride (as Cl)	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	009	Quarterly	DISCRT	
Solids, total dissolved	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	009	Quarterly	DISCRT	

Notes (Groundwater Monitoring Wells Table):

1. Field measurement

Groundwater Monitoring Wells Table for Sample Location 010 (Monitoring Well Mw-7) To Be Reported Quarterly

		Discharge Li	mitations	I	Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type	
Depth to water level ft below landsurface	Quarterly Maximum	M&R Feet (ft)		Groundwater	010	Quarterly	VISUAL ^[1]	
Water level relative to mean sea level ^[2]	Quarterly Maximum	M&R Feet (ft)		Groundwater	010	Quarterly	CALCTD	
Nitrogen, nitrate total (as N)	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	010	Quarterly	DISCRT	
Nitrogen, total	Quarterly Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	010	Quarterly	DISCRT	
Chloride (as Cl)	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	010	Quarterly	DISCRT	
Solids, total dissolved	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	010	Quarterly	DISCRT	

Notes (Groundwater Monitoring Wells Table):

1. Field measurement

Groundwater Monitoring Wells Table for Sample Location 011 (Monitoring Well Mw-8) To Be Reported Quarterly

Discharge Limitations						Monitoring Requirements		
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type	
Nitrogen, nitrate total (as N)	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	011	Quarterly	DISCRT	
Depth to water level ft below landsurface	Quarterly Maximum	M&R Feet (ft)		Groundwater	011	Quarterly	VISUAL ^[1]	
Water level relative to mean sea level ^[2]	Quarterly Maximum	M&R Feet (ft)		Groundwater	011	Quarterly	CALCTD	
Chloride (as Cl)	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	011	Quarterly	DISCRT	
Solids, total dissolved	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	011	Quarterly	DISCRT	
Nitrogen, total	Quarterly Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	011	Quarterly	DISCRT	

Notes (Groundwater Monitoring Wells Table):

1. Field measurement

Groundwater Monitoring Wells Table for Sample Location 012 (Monitoring Well Mw-9) To Be Reported Quarterly

		I	Monitoring Requirements				
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Depth to water level ft below landsurface	Quarterly Maximum	M&R Feet (ft)		Groundwater	012	Quarterly	VISUAL ^[1]
Water level relative to mean sea level ^[2]	Quarterly Maximum	M&R Feet (ft)		Groundwater	012	Quarterly	CALCTD
Nitrogen, nitrate total (as N)	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	012	Quarterly	DISCRT
Nitrogen, total	Quarterly Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	012	Quarterly	DISCRT
Chloride (as Cl)	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	012	Quarterly	DISCRT
Solids, total dissolved	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	012	Quarterly	DISCRT

Notes (Groundwater Monitoring Wells Table):

1. Field measurement

Groundwater Monitoring Wells Table for Sample Location 013 (Monitoring Well Mw-10) To Be Reported Quarterly

Discharge Limitations						g Requirements	
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Depth to water level ft below landsurface	Quarterly Maximum	M&R Feet (ft)		Groundwater	013	Quarterly	VISUAL ^[1]
Water level relative to mean sea level ^[2]	Quarterly Maximum	M&R Feet (ft)		Groundwater	013	Quarterly	CALCTD
Nitrogen, nitrate total (as N)	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	013	Quarterly	DISCRT
Nitrogen, total	Quarterly Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	013	Quarterly	DISCRT
Chloride (as Cl)	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	013	Quarterly	DISCRT
Solids, total dissolved	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	013	Quarterly	DISCRT

Notes (Groundwater Monitoring Wells Table):

1. Field measurement

Re-use Discharge Limitations Table for Sample Location 003 (Mgsd Irrigation Fields) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Nitrogen, nitrate total (as N)	30 Day Average		M&R Milligrams per Liter (mg/L)	Prior to Reuse ^[4]	003	Monthly ^[1]	COMPOS
Nitrogen, total	30 Day Average		M&R Milligrams per Liter (mg/L)	Prior to Reuse ^[4]	003	Monthly ^[1]	COMPOS
Flow rate	Monthly Total	M&R Million Gallons per Day (Mgal/d)		Prior to Reuse ^[4]	003	Monthly	METER
Flow, total ^[2]	Monthly Total	M&R Million Gallons (Mgal) ^[3]		Prior to Reuse ^[4]	003	Monthly ^[1]	CALCTD

Notes (Re-use Discharge Limitations Table):

1. During reuse. When not in reuse season, this condition shall be indicated on the Discharge Monitoring Report (DMR).

2. The annual application volume applied only to those fields managed by the MGSD.

3. Report in million gallons per acre. Volume determined for/from Consumptive Use Balance.

4. At the discharge of the chlorine contact tank prior to MGSD field application.

Re-use Discharge Limitations Table for Sample Location 003 (Mgsd Irrigation Fields) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Nitrogen, total	Quarterly Total	M&R Pounds per Quarter (lb/qtr) ^[1]		Prior to Reuse ^[2]	003	Quarterly	CALCTD

Notes (Re-use Discharge Limitations Table):

1. Actual Nitrogen Loading should be reported in lbs/acre/quarter and should be less than the allowable Nitrogen Loading Value listed in the Effluent Management Plan (EMP).

Mass determined in accordance with guidance document WTS-1B: General Criteria for Preparing an Effluent Management Plan for fields managed by the MGSD.

The total annual nitrogen applied (lbs/acre/year) shall not be greater than 110% of the total annual nitrogen uptake (lbs/acre/year). Calculations and monitoring data (submitted quarterly) shall use the **total nitrogen** in the applied wastewater (monitored by the treatment facility), total nitrogen from fertilizer applications, nitrogen uptake by crops or vegetation, evapotranspiration rate, precipitation rate, and fraction of applied nitrogen removed by denitrification and volatilization. Quarterly calculations shall be used to reconcile available nitrogen balance, prorated based on the allocated limitation (lbs/acre/year) defined in the EMP, and an annual report shall be submitted for the fourth quarter of every year demonstrating compliance with the Annual Nitrogen Balance limitation.

2. At the discharge of the chlorine contact tank prior to MGSD field application.

Re-use Discharge Limitations Table for Sample Location 003 (Mgsd Irrigation Fields) To Be Reported Annually

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Nitrogen, total ^[2]	Cumulative Total	M&R Pounds per Year (lb/yr) ^[1]		Prior to Reuse ^[5]	003	Quarterly	CALCTD
Nitrogen, total ^[2]	Annual Mass Loading	M&R Pounds per Year (lb/yr) ^[3]		Prior to Reuse ^[5]	003	Quarterly ^[4]	CALCTD

Notes (Re-use Discharge Limitations Table):

1. **Cumulative Annual Nitrogen Loading** to Date shall be reported in lbs/acre/year and shall be less than the allowable Nitrogen Loading Value listed in the EMP.

Mass determined in accordance with guidance document WTS-1B: General Criteria for Preparing an Effluent Management Plan for fields managed by the MGSD.

The total annual nitrogen applied (lbs/acre/year) shall not be greater than 110% of the total annual nitrogen uptake (lbs/acre/year). Calculations and monitoring data (submitted quarterly) shall use the **total nitrogen** in the applied wastewater (monitored by the treatment facility), total nitrogen from fertilizer applications, nitrogen uptake by crops or vegetation, evapotranspiration rate, precipitation rate, and fraction of applied nitrogen removed by denitrification and volatilization. Quarterly calculations shall be used to reconcile available nitrogen balance, prorated based on the allocated limitation (lbs/acre/year) defined in the EMP, and an annual report shall be submitted for the fourth quarter of every year demonstrating compliance with the Annual Nitrogen Balance limitation.

- 2. For each reporting year.
- 3. Allowable Nitrogen Loading shall be reported in lbs/acre/year.

Calculated in the required EMP for irrigation fields managed by the MGSD and incorporated by reference as the effluent limitation for the allowable application of nitrogen mass in lbs/acre/year. The amount of nitrogen applied shall not exceed 110% of the amount of nitrogen consumed by irrigated crops.

- 4. The calculated Annual Nitrogen Loading value included in the EMP must be reported on each quarterly DMR.
- 5. At the discharge of the chlorine contact tank prior to MGSD field application.

		Discharge Lin	Monitoring Requirements				
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Nitrogen, nitrate total (as N)	30 Day Average		M&R Milligrams per Liter (mg/L)	Prior to Reuse	004	Monthly	COMPOS
Nitrogen, total	30 Day Average		M&R Milligrams per Liter (mg/L)	Prior to Reuse	004	Monthly	COMPOS
Flow rate	Monthly Total	M&R Million Gallons per Day (Mgal/d)		Prior to Reuse	004	Monthly	METER

Re-use Discharge Limitations Table for Sample Location 004 (Storage Reservoirs) To Be Reported Monthly

Rationale for Permit Requirements:

Because the effluent is not completely denitrified, the renewed permit will continue the requirement for monitoring of effluent nitrogen species and calculation of annual nitrogen loading of the MGSD reuse site. Total nitrogen application (applied effluent and any fertilizers/soil amendments) will be limited to no more than 110% of the estimated uptake of nitrogen by irrigated crops. Nitrogen species will also be reported for exported effluent, so that off-site users may calculate nitrogen loading due to applied effluent.

Influent Flow Rate: The influent flow rate limitations are based on the current operational flow values indicated in the permit renewal application.

MGSD Irrigation Volume : This reporting requirement is included for tracking nitrogen application to irrigation fields.

*CBOD*₅: The 30-day average limitation and required minimum treatment efficiency (percent removal) are based on the secondary treatment standards in 40 Code of Federal Regulations (CFR) § 133.102.

Total Suspended Solids (TSS) : The 30-day average limitation and required minimum treatment efficiency (percent removal) are based on the secondary treatment standards in 40 CFR § 133.102.

Fecal Coliform: Fecal coliform is monitored to ensure that the concentration in the treated effluent does not exceed the allowable concentration for Reuse Category D in accordance with NAC 445A.276.

pH: This limitation is based on the secondary treatment standards in Nevada Administrative Code (NAC) 445A.275.

Priority Pollutants: An annual monitoring requirement for priority pollutants is used to confirm the absence of industrial pollutants in the treated discharge.

Total Nitrogen as Nitrogen : This reporting requirement is included to account for the total mass of nitrogen applied to irrigation fields.

Nitrate as Nitrogen: This reporting requirement is included to evaluate the proportional distribution of nitrogen compounds in the treated effluent discharge.

Application Volume : This reporting requirement is included to track the total amount of treated effluent discharged for reuse on MGSD irrigation fields.

Actual Nitrogen Loading and Allowable Nitrogen Loading: These reporting requirements are included to verify the total amount of nitrogen applied to the MGSD irrigation fields in order to ensure compliance with the Effluent Management Plan.

Fecal Coliform:

30-Day Average ≤ 200 CFU/100mL

Daily Maximum ≤ 400 CFU/100mL

Special Conditions: Substantial compliance with the current permit is a condition of permit renewal.

SA – Special Approvals / Conditions Table

ltem #	Description
1	The cumulative mass of nitrogen applied to irrigation plots shall be reported in each quarterly report for comparison with estimates of annual nitrogen uptake and consumption.
2	Nitrogen balance calculations and a cumulative reconciliation between mass of nitrogen applied to irrigation plots versus the calculated mass of nitrogen uptake determined for the crops actually grown and irrigated during the calendar year must be reported annually in the fourth quarter report.
3	Should monitoring results indicate questionable or anomalous data, confirmation samples shall be collected and analyzed within six weeks of any compliance samples yielding potentially unreliable data. All confirmation sampling results shall be reported with any anomalous data detected during a reporting period.
4	Only <i>influent flow</i> shall be reported on the plot required by section A.4.2. of this permit. The Permittee is exempt from having to submit plots for any other analyzed constituent identified in the Monitoring Table.
5	Biosolids shall be sampled at the discharge of the belt press after the digester.

Flow:

30-Day Average ≤ 2.8 MGD

Daily Maximum ≤ 3.1 MGD

Corrective Action Sites:

There are no Bureau of Corrective Actions remediation sites located within one mile of the MGSD WTP.

Wellhead Protection Program:

The northern and southern MGSD reuse fields are located within a 3,000-foot Drinking Water Protection Area (DWPA). The southern reuse field is partially located within a 1,000-foot DWPA and a 10-year Wellhead Protection Area (WHPA). Continued reuse activities are not expected to negatively impact the WHPA or DWPAs.

Schedule of Compliance:

ltem #	Description	Due Date
1	The Permittee shall submit a new Effluent Management Plan (EMP) to the Division. The EMP shall be prepared and wet-stamped by a Nevada Registered Professional Engineer in accordance with guidance document <i>WTS-1B: General Criteria for Preparing an Effluent Management Plan</i> .	8/1/2015
2	The Permittee shall submit a revised Operation and Maintenance (O&M) Manual to the Division. The O&M Manual shall be prepared in accordance with guidance document WTS-2: Minimum Information Required for an Operation and Maintenance Manual for a Wastewater Treatment Plant.	8/1/2015
3	The Permittee shall submit a Biosolids Monitoring Report (BMR) for the previous calendar year to the Division.	1/28/2016

SOC – Schedule of Compliance Table

Deliverable Schedule:

Item #	Description	Interval	First Scheduled Due Date					
1	Quarterly DMRs	Quarterly	7/28/2015					
2	Annual Report	Annually	1/28/2016					
3	Annual BMR	Annually	1/28/2016					

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

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 sent to the **Reno Gazette Journal, The Record Courier** for publication. The notice is being mailed to interested persons on our
mailing list. Anyone wishing to comment on the proposed permit can do so in writing until 5:00 P.M. **4/15/2015**, 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 to 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:Alan PinedaDate:3/5/2015Title:Staff I Associate Engineer