



STATE OF NEVADA

Department of Conservation & Natural Resources

DIVISION OF ENVIRONMENTAL PROTECTION

Brian Sandoval, Governor

Leo M. Drozdoff, P.E., Director

Colleen Cripps, Ph.D., Administrator

FACTSHEET (pursuant to NAC 445A.236)

Permittee Name: THE PRIMADONNA COMPANY, LLC
31900 S. LAS VEGAS BLVD.
PRIMM, NV - 89019

Permit Number: NS0090001

Location: PRIMM WASTEWATER TREATMENT PLANT, CLARK
31900 S. LAS VEGAS BLVD., PRIMM, NV - 89019
LATITUDE: 35.605278, LONGITUDE: -115.386944
TOWNSHIP: 27S, RANGE: 59E, SECTION: 08 & 09

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Outfall City	Outfall State	Outfall Zip	Outfall County	Latitude	Longitude	Receiving Water
001	INFLUENT METER	Internal Outfall		PRIMM	NV	89019	CLARK	35.605278	-115.3875	GROUNDWATER
002	EFFLUENT	External Outfall		PRIMM	NV	89019	CLARK	35.6050	-115.387222	GROUNDWATER
003	RAPID INFILTRATION BASINS	External Outfall		PRIMM	NV	89019	CLARK	35.613333	-115.368333	GROUNDWATER
004	WALTER M. HIGGINS GENERATING STATION	External Outfall		PRIMM	NV	89019	CLARK	35.613611	-115.36	GROUNDWATER
005	LANDSCAPE IRRIGATION	External Outfall		PRIMM	NV	89019	CLARK	35.605278	-115.3875	GROUNDWATER
006	DUST CONTROL	External Outfall		PRIMM	NV	89019	CLARK	35.605278	-115.3875	GROUNDWATER
007	MONITORING WELL 1A (RIB DOWN-GRADIENT)	Monitoring Well		PRIMM	NV	89019	CLARK	35.6150	-115.367778	GROUNDWATER
008	MONITORING WELL 2A (RIB UP-GRADIENT)	Monitoring Well		PRIMM	NV	89019	CLARK	35.613056	-115.368333	GROUNDWATER
009	MONITORING WELL 3 (OLD RIB)	Monitoring Well		PRIMM	NV	89019	CLARK	35.607778	-115.380833	GROUNDWATER
010	MONITORING WELL 4 (DRYING BEDS)	Monitoring Well		PRIMM	NV	89019	CLARK	35.605833	-115.381944	GROUNDWATER

General:

The Primadonna Company, LLC (Primadonna) has applied for renewal of groundwater discharge permit NS0090001. Primadonna owns and operates the Primm Wastewater Treatment Plant (PWTP), an activated sludge/extended aeration package wastewater treatment plant located east of I-15 on the Nevada/California border. The treatment system includes four lift stations, two grinders, a Mar-Wood package treatment plant, four rapid infiltration basins, and twelve asphalt-lined sludge drying beds.

Service connections to PWTP include three hotel/casinos, two service station/convenience stores, several restaurants, an outlet mall, employee housing, and a California Lottery Outlet. Secondary treated and denitrified effluent is discharged to the rapid infiltration basins for evaporation/percolation (Outfall 003). Secondary treated, denitrified, and disinfected effluent meeting reuse Category C requirements may be discharged to the Walter M. Higgins Generating Station to be used as cooling tower/plant make-up water (Outfall 004). Secondary treated, denitrified, and disinfected effluent meeting reuse Category B requirements may be used at the Primadonna properties for landscape irrigation (Outfall 005) and

construction/dust control uses (Outfall 006). Waste activated sludge is discharged to a series of asphalt-lined drying beds prior to disposal at a permitted landfill.

Discharge Characteristics:

During the previous 12 month reporting period (January through December 2013), the following average discharge characteristics were reported:

1. 30-day average flow to the RIBs – 0.50 million gallons per day.
2. Daily maximum flow to the RIBs – 0.711 million gallons per day.
3. 30-day average flow to Walter M. Higgins Generating Station – 0.090 million gallons per day.
4. Daily maximum flow to Walter M. Higgins Generating Station – 0.230 million gallons per day.
5. BOD5 – 2.1 mg/L.
6. Total suspended solids – 11.5 mg/L.
7. Total nitrogen – 4.93 mg/L.
8. pH – 7.57 S.U.
9. Fecal Coliform – <1 CFU. This average does not include a one-time value of >2419 CFU reported for a sample taken June 11, 2013. A second confirmation sample taken on June 27, 2013, showed non-detect.

No discharge for landscape irrigation or construction/dust control has occurred during this reporting period.

Receiving Water:

During the previous 12 month reporting period (January through December 2013), groundwater sampled from monitoring wells MW #1A, MW #2A, MW #3 and MW #4 showed the following average characteristics:

MW #1A

1. Total nitrogen – 1.1 mg/L.
2. Total dissolved solids – 886 mg/L.
3. Chloride – 345 mg/L.
4. Depth to groundwater – 172 feet below ground surface.

MW #2A

1. Total nitrogen – 4.4 mg/L.
2. Total dissolved solids – 992 mg/L.
3. Chloride – 401 mg/L.
4. Depth to groundwater – 160 feet below ground surface.

MW #3

1. Total nitrogen – 0.9 mg/L.
2. Total dissolved solids – 2256 mg/L.
3. Chloride – 1067 mg/L.
4. Depth to groundwater – 117 feet below ground surface.

MW #4

1. Total nitrogen – 0.6 mg/L.
2. Total dissolved solids – 2441 mg/L.

3. Chloride – 1064 mg/L.
4. Depth to groundwater – 117 feet below ground surface.

Drinking water is pumped from wells located approximately 10 miles southwest of Primm near the base of Clark Mountain.

Summary of Changes From Previous Permit:

In order to maintain consistency with current NDEP policy and the monitoring requirements of similar treatment facilities, the following permit changes have been made:

1. The permitted Outfalls have been re-designated as:

- 001 – Influent Meter
- 002 – Effluent
- 003 – Rapid Infiltration Basins
- 004 – Walter M. Higgins Generating Station
- 005 – Landscape Irrigation
- 006 – Dust Control
- 007 – Monitoring Well 1A
- 008 – Monitoring Well 2A
- 009 – Monitoring Well 3
- 010 – Monitoring Well 4

2. A requirement to report the 30-day average and daily maximum flow into the treatment plant has been added to this permit.
3. The requirement to monitor sewage influent for BOD and total suspended solids has been removed from this permit.
4. The requirement to monitor the amount of nitrate as nitrogen and ammonia as nitrogen in the effluent has been removed from this permit. The Permittee is still required to report the amount of total nitrogen in the effluent.
5. The requirement to monitor the amount of nitrate as nitrogen and the elevation of groundwater in the monitoring wells has been removed from this permit. The Permittee is still required to report the amount of total nitrogen and the depth to groundwater.
6. Due to a new Permit naming convention at NDEP, Bureau of Water Pollution Control, the permit ID has been changed from NEV90001 to NS0090001. This change does not reflect a change in the type of permit being issued.

Proposed Effluent Limitations:

The Division proposes the following permit limitations and monitoring requirements:

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	30 Day Average	<= 1.0 Million Gallons per Day (Mgal/d)		Raw Sewage Influent	001	Continuous	METER
Flow rate	Daily Maximum	<= 1.0 Million Gallons per Day (Mgal/d)		Raw Sewage Influent	001	Continuous	METER

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

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
BOD, 5-day	30 Day Average ^[1]		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	COMPOS
BOD, 5-day	Daily Maximum ^[1]		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	COMPOS
Solids, total suspended	30 Day Average ^[1]		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	COMPOS
Solids, total suspended	Daily Maximum ^[1]		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	COMPOS
Nitrogen, total	30 Day Average ^[1]		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	COMPOS
Nitrogen, total	Daily Maximum ^[1]		< 10 Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	COMPOS
pH, minimum	Monthly Minimum ^[2]		>= 6.0 Standard Units (SU)	Effluent Gross	002	Monthly	DISCRT
pH, maximum	Monthly Maximum ^[2]		<= 9.0 Standard Units (SU)	Effluent Gross	002	Monthly	DISCRT

Notes (WWTP Discharge Limitations Table):

1. If only one sample is taken during the monitoring period, enter the result as both the 30-day average and daily maximum.
2. If only one sample is taken during the monitoring period, enter the result as both the monthly minimum and monthly maximum.

Groundwater Monitoring Wells Table for Sample Location 007 (Monitoring Well 1A) To Be Reported Quarterly

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Depth to water level ft below landsurface	Value	M&R Feet (ft)		Groundwater	007	Quarterly	DISCRT
Chloride (as Cl)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	007	Quarterly	DISCRT
Nitrogen, total	Value		< 10 Milligrams per Liter (mg/L)	Groundwater	007	Quarterly	DISCRT
Solids, total dissolved	Value		M&R Milligrams per Liter (mg/L)	Groundwater	007	Quarterly	DISCRT

Groundwater Monitoring Wells Table for Sample Location 008 (Monitoring Well 2A) To Be Reported Quarterly

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Depth to water level ft below landsurface	Value	M&R Feet (ft)		Groundwater	008	Quarterly	DISCRT
Chloride (as Cl)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	008	Quarterly	DISCRT
Nitrogen, total	Value		< 10 Milligrams per Liter (mg/L)	Groundwater	008	Quarterly	DISCRT
Solids, total dissolved	Value		M&R Milligrams per Liter (mg/L)	Groundwater	008	Quarterly	DISCRT

Groundwater Monitoring Wells Table for Sample Location 009 (Monitoring Well 3) To Be Reported Quarterly

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Depth to water level ft below landsurface	Value	M&R Feet (ft)		Groundwater	009	Quarterly	DISCRT
Chloride (as Cl)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	009	Quarterly	DISCRT
Nitrogen, total	Value		< 10 Milligrams per Liter (mg/L)	Groundwater	009	Quarterly	DISCRT
Solids, total dissolved	Value		M&R Milligrams per Liter (mg/L)	Groundwater	009	Quarterly	DISCRT

Groundwater Monitoring Wells Table for Sample Location 010 (Monitoring Well 4) To Be Reported Quarterly

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Depth to water level ft below landsurface	Value	M&R Feet (ft)		Groundwater	010	Quarterly	DISCRT
Chloride (as Cl)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	010	Quarterly	DISCRT
Nitrogen, total	Value		< 10 Milligrams per Liter (mg/L)	Groundwater	010	Quarterly	DISCRT
Solids, total dissolved	Value		M&R Milligrams per Liter (mg/L)	Groundwater	010	Quarterly	DISCRT

Re-use Discharge Limitations Table for Sample Location 004 (External Outfall) To Be Reported Monthly^[1]

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Prior to Reuse	005	Continuous	METER
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Prior to Reuse	005	Continuous	METER
Coliform, fecal, colony forming units	30 Day Average ^[2]		<= 23 Colony Forming Units per 100ml T (CFU/100mL)	Prior to Reuse	005	Monthly	DISCRT
Coliform, fecal, colony forming units	Daily Maximum ^[2]		<= 240 Colony Forming Units per 100ml T (CFU/100mL)	Prior to Reuse	005	Monthly	DISCRT

Notes (Re-use Discharge Limitations Table):

1. If there is no discharge from this outfall during the reporting period, enter "No Discharge" on the Discharge Monitoring Report for this outfall.
2. If only one sample is taken during the monitoring period, enter the result as both the 30-day average and daily maximum.

Re-use Discharge Limitations Table for Sample Location 005 (External Outfall) To Be Reported Monthly^[1]

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Prior to Irrigation	004	Continuous	METER
Coliform, fecal, colony forming units	30 Day Average ^[2]		<= 2.2 Colony Forming Units per 100ml T (CFU/100mL)	Prior to Irrigation	004	Monthly When Discharging	DISCRT
Coliform, fecal, colony forming units	Daily Maximum ^[2]		<= 23 Colony Forming Units per 100ml T (CFU/100mL)	Prior to Irrigation	004	Monthly When Discharging	DISCRT
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Prior to Irrigation	004	Continuous	METER

Notes (Re-use Discharge Limitations Table):

1. If there is no discharge from this outfall during the reporting period, enter "No Discharge" on the Discharge Monitoring Report for this outfall.
2. If only one sample is taken during the monitoring period, enter the result as both the 30-day average and daily maximum.

Re-use Discharge Limitations Table for Sample Location 006 (External Outfall) To Be Reported Monthly^[1]

Parameter	Discharge Limitations			Monitoring Requirements			
	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	006	Continuous	METER
Coliform, fecal, colony forming units	30 Day Average ^[2]		<= 2.2 Colony Forming Units per 100ml T (CFU/100mL)	Prior to Reuse	006	Monthly When Discharging	DISCRT
Coliform, fecal, colony forming units	Daily Maximum ^[2]		<= 23 Colony Forming Units per 100ml T (CFU/100mL)	Prior to Reuse	006	Monthly When Discharging	DISCRT
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Prior to Reuse	006	Continuous	METER

Notes (Re-use Discharge Limitations Table):

1. If there is no discharge from this outfall during the reporting period, enter "No Discharge" on the Discharge Monitoring Report for this outfall.
2. If only one sample is taken during the monitoring period, enter the result as both the 30-day average and daily maximum.

Ponds / Rapid Infiltration Basins for Sample Location 003 (External Outfall) To Be Reported Monthly^[1]

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	003	Continuous	METER
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	003	Continuous	METER

Notes (Ponds / Rapid Infiltration Basins):

1. If there is no discharge from this outfall during the reporting period, enter "No Discharge" on the Discharge Monitoring Report for this outfall.

Rationale for Permit Requirements:

Monitoring is required to ensure that the treatment plant capacity is not exceeded, to assess the quality of the effluent being discharged, to monitor the amount of treated effluent delivered to the approved reuse sites, and to monitor groundwater quality.

Fecal Coliform:

Reuse Category B treated effluent must meet a 30-day geometric mean of ≤ 2.2 mpn/100 mL and a daily maximum of ≤ 23 mpn/100 mL. Reuse Category C treated effluent must meet a 30-day geometric mean of ≤ 23 mpn/100 mL and a daily maximum of ≤ 240 mpn/100 mL.

Special Conditions:

SA – Special Approvals / Conditions Table

There are no Special Approval / Condition items

Flow:

This facility will be permitted to treat a 30-day average and daily maximum flow of 1.0 million gallons per day.

Corrective Action Sites:

There is one Bureau of Corrective Actions remediation site (8-000772) located within one mile of this facility. NDEP does not believe that the renewal of this discharge permit will have a negative impact on the ongoing remediation activities.

Wellhead Protection Program:

This facility is not located within a Drinking Water Protection Area or an active Wellhead Protection Area established for any current well sources.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit two (2) copies of an updated Operation and Maintenance (O&M) Manual for review and approval by the Division. The O&M Manual shall be prepared by a Nevada Registered Professional Engineer or other Division-approved qualified person. ^[1]	1/1/2015

Notes (Schedule of Compliance Table):

1. O&M Manuals prepared by Nevada Registered Professional Engineers must be signed and stamped in accordance with NAC 625.610.

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly Reports	Quarterly	1/28/2015
2	Annual Reports	Annually	1/28/2015

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 **Las Vegas Review Journal** 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. **9/26/2014**, 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: **Peter Lassaline**

Date: **8/19/2014**

Title: **Environmental Scientist**