



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: CITY OF LAS VEGAS WATER POLLUTION CONTROL FACILITY
6005 E VEGAS VALLEY DR
LAS VEGAS, NV - 89142

Permit Number: NS0098015

Location: CITY OF LAS VEGAS WATER POLLUTION CONTROL FACILITY, CLARK
6005 E VEGAS VALLEY DRIVE, LAS VEGAS, NV - 89142
LATITUDE: 36.137213, LONGITUDE: -115.04292020
TOWNSHIP: T21S, RANGE: R62E, SECTION: S10

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Outfall City	Outfall State	Outfall Zip	Outfall County	Latitude	Longitude	Receiving Water
001	TREATMENT PLANT EFFLUENT (CCB-1)	Internal Outfall		LAS VEGAS	NV	89142	CLARK	36.130472	-115.039111	GROUNDWATER
002	LVWPCF	Land Application Site		LAS VEGAS	NV	89142	CLARK	36.130472	-115.039111	GROUNDWATER

General:

The applicant has applied for renewal of groundwater discharge permit NS0098015, formerly NEV98015.

The City of Las Vegas Water Pollution Control Facility (LVWPCF) is a wastewater treatment plant that provides Category B treated effluent for reuse purposes. Wastewater treatment is provided by two separate treatment systems. One system includes primary sedimentation, trickling filters, secondary sedimentation, nitrification via activated sludge, phosphorus removal via chemical addition and filtration, chlorination and de-chlorination. The second system includes primary sedimentation, BOD and biological nutrient removal using the Bardenpho process, secondary sedimentation, phosphorus removal via chemical addition and filtration, chlorination and de-chlorination. The general discharge limitations for LVWPCF are outlined in NPDES permit NV0020133.

Permit NS0098015 will authorize the discharge of up to 9.0 million gallons per day (MGD) of Category B treated effluent for irrigation and other approved uses at various permitted locations throughout the Las Vegas Valley. Current reuse locations include LVWPCF, Royal Links Golf Club of Las Vegas, Stallion Mountain Country Club, Desert Pines Golf Course, and NV Energy Sunrise Station. Freedom Park has been requested as an approved reuse site; however, an application for this location has not yet been submitted and discharges to this site shall not begin prior to the issuance of a reuse permit for this location.

Additional reuse sites may be added to this permit through a minor permit modification as long as the requested discharge rate of 9.0 MGD is not exceeded.

Discharge Characteristics:

During the previous 12-month reporting period (July 2012 through June 2013), the following average discharge concentrations were reported:

1. 30-day average flow to LVWPCF - 0 MGD
2. 30-day average flow to all re-use locations - 1.7683 MGD
3. CBOD - 0.2 mg/L
4. Fecal Coliform - 0.64 MPN/100 mL
5. Total nitrogen - 22 mg/L
6. pH - 6.84 S.U.
7. Total suspended solids - 0.6 mg/L

Receiving Water:

Groundwater at LVWPCF is reported to be between 15 and 25 feet below ground surface. In order to protect groundwater, treated effluent shall be applied in accordance with a Division-approved effluent management plan.

Summary of Changes From Previous Permit:

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

1. The requirement to report the quantity of reuse water being delivered to the individual off-site reuse facilities has been removed from this permit. The reporting of flow to these locations is required by the individual reuse permits issued to the reuse facilities.
2. The requirement to submit an EMP adherence document each quarter has been added to this permit.
3. Due to a new permit naming convention at NDEP, Bureau of Water Pollution Control, the permit ID has been changed from NEV98015 to NS0098015. 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:

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

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	S a m p l e Type
Flow rate ^[1]	30 Day Average	<= 9.0 Million Gallons per Day (Mgal/d)		Prior to Reuse	001	Continuous	METER
Flow rate ^[1]	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Prior to Reuse	001	Continuous	METER
BOD, carbonaceous, 05 day, 20 C	30 Day Average		<= 30 Milligrams per Liter (mg/L)	Prior to Reuse	001	Daily	COMPOS
BOD, carbonaceous, 05 day, 20 C	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Prior to Reuse	001	Daily	COMPOS
Coliform, fecal general	30 Day Average		<= 2.2 Most Probable Number per 100ml T (MPN/100m L)	Prior to Reuse	001	Weekly	DISCRT
Coliform, fecal general	Daily Maximum		<= 23 Most Probable Number per 100ml T (MPN/100m L)	Prior to Reuse	001	Weekly	DISCRT
Nitrogen, total	30 Day Average		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Weekly	COMPOS
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Weekly	COMPOS
pH, minimum	Daily Minimum		>= 6.0 Standard Units (SU)	Prior to Reuse	001	Daily	DISCRT

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

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	S a m p l e Type
pH, maximum	Daily Maximum		<= 9.0 Standard Units (SU)	Prior to Reuse	001	Daily	DISCRT
Solids, total suspended	30 Day Average		<= 30 Milligrams per Liter (mg/L)	Prior to Reuse	001	Daily	COMPOS
Solids, total suspended	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Prior to Reuse	001	Daily	COMPOS

Notes (Re-use Discharge Limitations Table):

1. Report total flow to all reuse locations.

Re-use Discharge Limitations Table for Sample Location 002 (Land Application Site) To Be Reported Monthly

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate ^[1]	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Prior to Reuse	002	Continuous	METER
Flow rate ^[1]	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Prior to Reuse	001	Continuous	METER

Notes (Re-use Discharge Limitations Table):

1. Report total flow used at LVWPCF.

Rationale for Permit Requirements:

Monitoring is required to allow the Permittee and other end users to track the amount of nitrogen being applied during reuse activities, and to ensure the reclaimed water meets the requirements listed in NAC445A.275 and NAC445A.276.

Fecal Coliform:

NAC 445A.276 limits fecal coliform in reuse Category B treated effluent to a 30-day average of 2.2 MPN/100 mL and a daily maximum of 23 MPN/100 mL.

Special Conditions:

SA – Special Approvals / Conditions Table

Item #	Description
1	Each quarter, the Permittee shall submit a document confirming adherence to the approved EMP. This document shall be signed, and shall contain the following certification. “I certify that, for each month during the previous quarterly reporting period, all operational procedures and calculated application rates outlined in the approved Effluent Management Plan were adhered to.”

Flow:

The applicant has requested to retain the previous permitted flow of 9.0 MGD.

Corrective Action Sites:

There is one NDEP Bureau of Corrective Actions remediation site (H-000184) located within one mile of this facility. The NDEP case officer for this site 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 a Wellhead Protection Area established for any 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 Effluent Management Plan (EMP) for review and approval by the Division. The EMP shall be prepared by a Nevada Registered Professional Engineer or other qualified person. If no updates or revisions are required, the Permittee shall submit a letter by the due date stating that there have been no changes to the previously approved EMP. ^[1]	10/31/2013

Notes (Schedule of Compliance Table):

1. If the EMP is prepared by a Nevada Registered Professional Engineer, it 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	EMP adherence statement	Quarterly	10/28/2013
2	Discharge Monitoring Report	Quarterly	10/28/2013
3	Annual Report	Annually	1/28/2014

Procedures for Public Comment:

The Notice of the Division's intent to reissue 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. **9/26/2013**, 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.650.

Proposed Determination:

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

Prepared by: **Arthur Marr III**

Date: **7/17/2013**

Title: **P.E.**