



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: CLARK COUNTY WATER RECLAMATION DISTRICT
5857 EAST FLAMINGO ROAD
LAS VEGAS, NV - 89122

Permit Number: NV0024210

Location: LAS VEGAS WASH CHANNEL IMPROVEMENT PROJECT, CLARK
LAS VEGAS WASH NEAR EAST ROCHELLE AVE, LAS VEGAS, NV - 89122
LATITUDE: 36.111111, LONGITUDE: -115.026111
TOWNSHIP: T21S, RANGE: R62E, SECTION: S23

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Outfall City	Outfall State	Outfall Zip	Outfall County	Latitude	Longitude	Receiving Water
001	SETTLING TANK #1	External Outfall		LAS VEGAS	NV	89122	CLARK	36.116973	-115.029332	LAS VEGAS WASH
002	SETTLING TANK #2	External Outfall		LAS VEGAS	NV	89122	CLARK	36.116973	-115.627435	LAS VEGAS WASH
003	SETTLING TANK #3	External Outfall		LAS VEGAS	NV	89122	CLARK	36.107921	-115.022597	LAS VEGAS WASH
004	SETTLING TANK #1, #2, #3 COMBINED DISCHARGE	External Outfall		LAS VEGAS	NV	89122	CLARK	36.111111	-115.026111	LAS VEGAS WASH

General:

Clark County Water Reclamation District (CCWRD) has applied for a National Pollutant Discharge Elimination System permit to discharge groundwater generated during dewatering activities associated with CCWRD project #511D. This project is designed to help convey the 100-year flow through a 5,500' portion of the Las Vegas Wash (Wash) located on CCWRD's Central Plant property. Improvements will include the installation of five 6' x 30' reinforced concrete box culverts, construction of a 100'-200' wide riprap channel with a 45' wide low-flow channel, construction of a 150' wide concrete-lined channel with a 10' vertical drop/grade control structure, and the relocation and installation of new and existing utilities. CCWRD has proposed using settling tanks at three locations throughout the project to allow heavier solids to fall out of suspension prior to discharge to the Wash.

Discharge Characteristics:

The discharge will be shallow groundwater encountered during construction dewatering. The improvement project is located outside of the major perchlorate plumes that intersect the downstream portion of the Wash; however, a groundwater sample collected on July 23, 2012 revealed a perchlorate concentration of 0.000220 mg/L. In addition to perchlorate, the analysis revealed concentrations of nitrate + nitrite as nitrogen (5.28 mg/L), manganese (0.01 mg/L), chloride (265 mg/L), fluoride (0.93 mg/L), sulfate (672 mg/L) and total dissolved solids (1795 mg/L).

Receiving Water:

The receiving water is the Las Vegas Wash, a tributary to Lake Mead. The Wash is the primary treated effluent and stormwater drainage outlet for the Las Vegas Valley and surrounding watershed.

Summary of Changes From Previous Permit:

This is a new permit.

Proposed Effluent Limitations:

The Division proposes the following permit limitations and monitoring requirements:

Discharge Limitations Table for Sample Location 001 (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	001	Continuous	METER
Perchlorate (ClO ₄)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly When Discharging	DISCRT
Selenium, total recoverable	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly When Discharging	DISCRT
Solids, total dissolved	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly When Discharging	DISCRT
Solids, total suspended ^[2]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly When Discharging	DISCRT
pH, minimum	Monthly Minimum		>= 6.5 Standard Units (SU)	Effluent Gross	001	Weekly When Discharging ^[3]	DISCRT ^[4]
pH, maximum	Monthly Maximum		<= 9.0 Standard Units (SU)	Effluent Gross	001	Weekly When Discharging ^[3]	DISCRT ^[4]
pH	Monthly Average		M&R Standard Units (SU)	Effluent Gross	001	Weekly When Discharging ^[3]	DISCRT ^[4]

Notes (Discharge Limitations Table):

1. If no discharge takes place from this outfall during the reporting period, enter "No Discharge" on the DMR for this outfall.
2. Use appropriate BMPs to prevent visible plumes in the Wash.
3. Monitor weekly, and report quarterly, the monthly minimum, monthly maximum, and monthly average values.
4. Field measurement.

Discharge Limitations Table for Sample Location 002 (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	002	Continuous	METER
Perchlorate (ClO ₄)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly When Discharging	DISCRT
Selenium, total recoverable	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly When Discharging	DISCRT
Solids, total dissolved	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly When Discharging	DISCRT
Solids, total suspended	Value ^[2]		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly When Discharging	DISCRT
pH, minimum	Monthly Minimum		>= 6.5 Standard Units (SU)	Effluent Gross	002	Weekly When Discharging [3]	DISCRT [4]
pH, maximum	Monthly Maximum		<= 9.0 Standard Units (SU)	Effluent Gross	002	Weekly When Discharging [3]	DISCRT [4]
pH	Monthly Average		M&R Standard Units (SU)	Effluent Gross	002	Weekly When Discharging [3]	DISCRT [4]

Notes (Discharge Limitations Table):

1. If no discharge takes place from this outfall during the reporting period, enter "No Discharge" on the DMR for this outfall.
2. Use appropriate BMPs to prevent visible plumes in the Wash.
3. Monitor weekly, and report quarterly, the monthly minimum, monthly maximum, and monthly average values.
4. Field measurement.

Discharge Limitations Table 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
Perchlorate (ClO ₄)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Monthly When Discharging	DISCRT
Selenium, total recoverable	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Monthly When Discharging	DISCRT
Solids, total dissolved	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Monthly When Discharging	DISCRT
Solids, total suspended ^[2]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Monthly When Discharging	DISCRT
pH, minimum	Monthly Minimum		>= 6.5 Standard Units (SU)	Effluent Gross	003	Weekly When Discharging ^[3]	DISCRT ^[4]
pH, maximum	Monthly Maximum		<= 9.0 Standard Units (SU)	Effluent Gross	003	Weekly When Discharging ^[3]	DISCRT ^[4]
pH	Monthly Average		M&R Standard Units (SU)	Effluent Gross	003	Weekly When Discharging ^[3]	DISCRT ^[4]

Notes (Discharge Limitations Table):

1. If no discharge takes place from this outfall during the reporting period, enter "No Discharge" on the DMR for this outfall.
2. Use appropriate BMPs to prevent visible plumes in the Wash.
3. Monitor weekly, and report quarterly, the monthly minimum, monthly maximum, and monthly average values.
4. Field measurement.

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	Daily Maximum	<= 19.99 Million Gallons per Day (Mgal/d)		Effluent Gross	004	Continuous	METER

Notes (Discharge Limitations Table):

1. Monitor and report the sum of the highest combined daily discharge from all outfalls during each month of the reporting period.

Waste Load Allocation:

This permit is for the bypass of channel water. There is no Waste Load Allocation.

Rationale for Permit Requirements:

The Division's rationale for the proposed effluent limitations is as follows:

Flow: The Permittee has requested a maximum daily flow of 19.99 million gallons per day (MGD). Discharge flows are expected to average 12.7 MGD.

Perchlorate: Monitor & Report. The location of this channel improvement project is upstream of the identified perchlorate plumes and no significant concentrations of perchlorate are expected in the discharged groundwater. However, due to the proximity to the identified plume locations, monthly monitoring will be required.

Selenium: Monitor & Report. Because the shallow groundwater with naturally occurring elevated selenium levels would flow to the Wash if not intercepted by the dewatering system, no discharge limits have been set. Monitoring is required to track the amount of selenium discharged to the Wash.

TDS: Monitor & Report. The shallow groundwater, with naturally occurring elevated TDS levels, would flow to the Wash if it was not intercepted by the dewatering system. Therefore, the TDS standard is not applied to dewatering discharges in this area. This permit is for the interception and passage of groundwater and thus is exempted under the Colorado River Basin Salinity Control Forum's policy on groundwater interception.

TSS: Monitor & Report. Settling tanks will be used prior to discharge to the Wash. Reporting is required to monitor the treatment capabilities of the settling tanks.

pH: 6.5 - 9.0. This limit is based on the standards of water quality stipulated in NAC 445A.2156.

Special Conditions:

SA – Special Approvals / Conditions Table

Item #	Description
1	Additional Monitoring requirements: Total Petroleum Hydrocarbons (TPH) Collect a background TPH sample from the Las Vegas Wash prior to the first discharge. Collect an additional sample in the event of a fuel leak/visible sheen. Analyze and report the full range of purgeable and extractable hydrocarbons, C6 - C40, using appropriate EPA methods. Report the background analytical results with the first Discharge Monitoring Report (DMR). Report event-required analytical results with the DMR covering the quarter that the event occurred.

Reasonable Potential Analysis and Antidegradation Review:

All reported constituents meet the applicable standards listed in NAC 445A.1236 and NAC 445A.2156. The water discharged to the Wash will be of the same quality as the water removed by dewatering, therefore no degradation of existing water is expected.

Flow:

The Permittee has requested a 30-day average flow of 12.7 MGD and a maximum daily flow of 19.99 MGD.

Corrective Action Sites:

There are no NDEP Bureau of Corrective Actions remediation sites within a one-mile radius of this facility.

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 Operation and Maintenance (O&M) Manual for review and approval by the Division. The O&M Manual shall contain a Dewatering Discharge Plan and a Sampling and Analysis Plan. The O&M Manual shall be prepared by a Nevada Registered Professional Engineer or other Division-approved qualified person. The O&M Manual due date is based on an assumed Notice to Proceed date requested by CCWRD. If project construction activities begin prior to July of 2014, the O&M Manual shall be submitted within 30 days of project commencement. ^[1]	7/3/2014

Notes (Schedule of Compliance Table):

- 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	Discharge Monitoring Reports	Quarterly	10/28/2013

2	Annual Reports	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 surface waters 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. **8/16/2013**, 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: **4/19/2013**

Title: **P.E.**