NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET

(pursuant to NAC 445A.236)

Applicant: Clark County Water Reclamation District
5857 E. Flamingo Rd.
Las Vegas, NV 89122

Permit Number: NV0023906

Facility Locations: Circus Circus Sewer Rehabilitation Project 634-02
City of Las Vegas in Clark County, Nevada
Section 9 T21S R61E
Latitude: 36º 08' 17.72" N Longitude: 115º 09' 54.46" W

Discharge Outfalls: Approximately 11 well points will be established within each 500' trench; four trenches will be required for the 2,000-linear foot project. All of the sumps and well points will combine into a common pipe with one discharge location at Outfall 001.

Outfall 001: storm drain drop inlet on south side of Bridge Lane South within the Circus Circus property
Latitude: 36º 08' 35.31" N Longitude: 115º 09' 47.24" W

General: Clark County Water Reclamation District is proposing upgrades to a 2,000-linear foot section of sanitary sewer located within Circus Circus Drive, extending from Las Vegas Blvd. to Industrial Road, in Las Vegas, Nevada. Dewatering is required for the trench excavation and facility upgrades. Eleven pumping wells will be required for each 500' trench dewatering, with a maximum total pumping rate of 1,000 gallons per minute (gpm). The project is scheduled to begin February 1, 2011. The proposed NPDES permit is for a period of five years although the sewer line replacement, dewatering and discharge activities are expected to be completed in 4 months or less.

Flow: The applicant requested a daily maximum dewatering discharge flow rate of 1,000 gallons per minute (gpm), equivalent to 1.44 million gallons per day (MGD). Dewatering is anticipated to require no more than 4 months.

Receiving Water Characteristics: After initial discharge to the Circus Circus property stormdrain drop inlet flow will enter the NDOT right-of-way storm drain in Bridge Lane South. From there, the flows are conveyed east in Sahara Avenue and eventually discharge into the Flamingo Wash (Wash), the receiving water body. The Flamingo Wash is a major tributary to the Las Vegas Wash, the primary wastewater and stormwater drainage outlet for the Las Vegas Valley and surrounding watershed. Settling tanks will be used to settle sediment from the water prior to discharge to the Wash. Monitoring of the discharge outfall to the stormdrain drop inlet will ensure that Wash water quality is not adversely impacted and that downstream projects and downstream water users are not adversely impacted by the additional activities.

Site Groundwater: Within the project area the groundwater elevation is generally quite shallow, approximately 12 feet below ground surface. The local groundwater flow direction is northeast.

Corrective Actions Sites: There are six Bureau of Corrective Actions (BCA) hydrocarbon remediation sites within a one-mile radius of the facility. These include Sahara Center, located approximately ¾

mile down-gradient on Sahara Ave., west of Las Vegas Blvd.; Las Vegas Convention Center, located approximately ¾ mile cross-gradient and southeast of the site; Deluca Liquors, located approximately ¾ mile up-gradient on W. Desert Inn Road; Texaco Station, located approximately located approximately ¾ mile down-gradient on Sahara Ave., west of Las Vegas Blvd.; Unocal SS, located approximately located approximately ¾ mile down-gradient on Las Vegas Blvd.; and Riviera Hotel & Casino, located approximately ¼ mile cross-gradient and southeast of the site. The BCA does not expect the remediation sites to be impacted by the proposed project dewatering. Recent data from the on-site monitoring well, B-13, shows elevated perchlorate (9.4 µg/l) and PCE concentrations (2100 µg/l), and monthly monitoring and sampling will be required to ensure that none of the BCA remediation projects are adversely impacted and that downstream water quality is not degraded.

Wellhead and Drinking Water Supply Protection: The application identified no public drinking water supply wells within 6000' of the site. The sewer line construction and discharge sites are not within a wellhead protection area.

Proposed Effluent Limits: Specific sampling and monitoring requirements are listed below in Table I.

Table I. Discharge Limitations, Sampling and Monitoring Requirements

Parameters	Units	Discharge Limitations		Monitoring Requirements		
		30-Day Average	Daily Maximum	Sampling Locations	Monitoring Frequency	Monitoring Type
Flow [1]	gpm	1,000	1,000	001	Continuous	Flow meter
Flow [1]	MGD	1.44	1.44	001	Continuous	Calculate
pH –SV [2]	S.U.	$6.5 \leq pH \leq 9.0$ [2]		001	Monthly	Discrete
TDS [3]	mg/l	M&R	M&R	001	Monthly	Discrete
TPH [4]	mg/l	M&R	1.0	001	Monthly	Discrete
VOC [5]	µg/l	M&R	M&R	001	Monthly	Discrete
MTBE [5]	µg/l	M&R	20	001	Monthly	Discrete
Benzene [5]	µg/l	M&R	5.0	001	Monthly	Discrete
Toluene [5]	µg/l	M&R	100	001	Monthly	Discrete
Ethylbenzene [5]	µg/l	M&R	100	001	Monthly	Discrete
Total Xylenes [5]	µg/l	M&R	200	001	Monthly	Discrete
PCE [6]	µg/l	M&R	5.0	001	Monthly	Discrete
Perchlorate	µg/l	M&R	M&R	001	Monthly	Discrete

NOTES:

1. Monitor continuously and report quarterly, the total daily discharge rate from all wells.
2. Monitor monthly and report quarterly, the minimum and maximum pH values.
3. Sample monthly and report quarterly, the TDS concentration values.
4. Sample monthly and report all results quarterly. Report the full range of hydrocarbons, C6-C40, purgeable and extractable. Analyze using EPA Methods 8260B and 8015B.
5. Sample monthly, and report all results for all parameters quarterly. Analyze using EPA Method 8260B.
6. Sample monthly, and report all results, maximum, and mean values quarterly. If a single reading exceeds 5 µg/l, submit a letter to NDEP, and prepare a revised dewatering plan. If a single reading exceeds 8 µg/l, reduce dewatering discharge rate, and submit revised dewatering plan to Compliance Coordinator and Permit Writer for approval. If a single reading exceeds 10 µg/l, cease dewatering discharge, notify NDEP, and implement the NDEP-approved revised dewatering plan, before resuming dewatering discharge.

gpm: gallons per minute MGD: Million gallons per day

M&R: Monitor and Report
mg/l: milligrams per liter
SV: Single Value
TPH: Total Petroleum Hydrocarbons
VOC: Volatile Organic Compounds
S.U.: standard pH units
µg/l: micrograms per liter
TDS: Total Dissolved Solids
MTBE: Methyl tertiary butyl ether
PCE: Tetrachloroethylene

Rationale for Permit Requirements: The Division has established the monitoring requirements in Table 1 above to ensure that downstream water quality is not degraded as a result of project activities.

Flow: Daily maximum (and 30-day average) is set at 1,000 gpm; 1.44 MGD. The rationale for the daily maximum discharge was explained in the Flow section of this fact sheet.

pH: 6.5 - 9.0, standard pH units per standards stipulated in NAC 445A.199.

TDS: M&R. 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.

TPH: 1.0 mg/L. The limit is the State standard for remediation projects.

VOC: Monitor and Report. Limits set for the specific VOCs in the table.

MTBE: 20 µg/L. The limit is the State standard for remediation projects.

Benzene: 5.0 µg/L. The limit is set per requirements listed in NAC 445A.144.

Toluene: 100 µg/L. The limit is the State standard for remediation projects.

Ethylbenzene: 100 µg/L. The limit is the State standard for remediation projects.

Xylenes, total: 200 µg/L. The limit is the State standard for remediation projects.

PCE: 5.0 µg/l. The limit is the State standard for remediation projects. PCE is a known contaminant up-gradient of the project area. It is not likely that PCE concentrations above background will be noted in the discharge, but monthly sampling will ensure that downstream water quality is not adversely impacted. If a single reading exceeds 5 µg/l the Permittee is required to submit a letter to NDEP, and formulate a revised dewatering plan. If a single reading exceeds 8 µg/l, the Permittee will reduce dewatering discharge rates and submit the revised dewatering plan to the Compliance Coordinator and Permit Writer for approval. If a single reading exceeds 10 µg/l, the Permittee will cease dewatering, notify NDEP, and implement the NDEP-approved revised dewatering plan, before resuming dewatering discharge.

Perchlorate: M&R. The requirement to sample monthly is due to plumes in the vicinity, to ensure that the dewatering is not impacting remediation facilities, nor degrading water quality downstream.

Schedule of Compliance: The Permittee shall implement and comply with the provisions of the schedule of compliance after approval by the Administrator, including in said implementation and

compliance, any additions or modifications which the Administrator may make in approving the schedule of compliance:

- The Permittee shall achieve compliance with the effluent limitations upon issuance of the permit.

- **No less than fourteen days prior to the first discharge authorized by this permit**, the Permittee shall submit written notice of commencement of discharge.

- Within 90 days of the permit issue date (**MM DD, 2010**), the Permittee shall submit to the Division, for review and approval, an updated **Dewatering Discharge Plan (Plan)** for the proposed shallow groundwater dewatering and discharge activities. Before implementing changes to an approved Plan, the Permittee shall submit proposed changes to the Division for review and approval.

- Within 90 days of the permit issue date (**MM DD, 2010**), the Permittee shall submit to the Division, for review and approval, a **Sampling and Analysis Plan** (**SAP**). The SAP shall summarize the sampling, analytical, monitoring, notification procedures and data reporting to be conducted for Outfall 001 sampling location. Before implementing changes to an approved SAP, the Permittee shall submit proposed changes to the Division for review and approval.

Proposed Determination: The Division has made the tentative determination to issue the proposed permit for a period of five (5) years.

Procedures for Public Comment: The Notice of the Division's intent to issue a NPDES permit for a five-year period, authorizing this facility to discharge into the Pittman Wash, 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 for a period of thirty (30) days following the date of publication of the public notice in the newspaper. The comment period can be extended at the discretion of the Administrator. The deadline date and time by which all comments are to be submitted (via postmarked mail or time-stamped faxes, e-mails, or hand-delivered items) to the Division is **November 15, 2010 by 5:00 P.M.**

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator 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 determines 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.

Prepared by: Jeryl R. Gardner, P.E.
Date: October, 2010