NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET
(pursuant to NAC 445A.236)

Permittee Name: Coyote Springs Water Resources General Improvement District
1001 South Valley View Boulevard
Las Vegas, NV 89153

Permit Number: NEV2007501

Location: Coyote Springs Water Reclamation Facility (WRF)
11502 State Route 168
Coyote Springs, Clark County, Nevada 89037

Latitude: 36° 23' 20" N; Longitude: 114° 55' 26" W
Section 23, T13S, R63E, M.D.M.

Well Head Protection: The facility is not within a 2-, 5-, or 10-year well-head protection program capture zone. The facility is not within the 6,000-foot buffer zone for any public water supply well. The nearest public water supply well is more than 1.5 miles distant.

Corrective Actions Sites: There is no Bureau of Corrective Actions remediation site located within a one-mile radius of the facility.

General: The applicant seeks to renew the existing discharge permit that will expire on October 25, 2012. The original permit authorized discharges of treated effluent from an initial 0.020 million gallons per day (MGD) wastewater treatment plant for Phase I of the project and a 2.1 MGD wastewater treatment plant for Phase II of the project. In the permit renewal, the applicant will modify the original discharge permit by constructing one package wastewater treatment plant in Phase I with a capacity of 0.05 MGD (50,000 gallons per day). Phase 1A will authorize the construction of one additional separate package treatment plant with a combined capacity of 0.10 MGD (100,000 gallons per day). Phase 1B will authorize construction of an additional separate package treatment plant with a combined capacity of 0.15 MGD (150,000 gallons per day). The total capacity of the combined three separate package treatment plants in Phases 1, 1A and 1B will be 0.15 MGD or 0.05 MGD per unit. Phase 2 will increase the discharge capacity to 2.1 MGD by constructing a new

treatment plant.

The first package treatment plant will be designed to discharge treated effluent meeting Category A reuse standards from the WRF directly to the golf course lake (Outfall 002) with an onsite emergency effluent storage lagoon provided for a maximum of four days storage. As flows increase, treated effluent will be stored in the first of three onsite storage ponds (Outfall 006), or distributed to the golf course irrigation ponds (Outfall 001), or utilized for approved irrigation and/or construction water. Other irrigated sites may include common areas, parks and streetscapes. Two HDPE lined storage ponds, with areas of 2.6 acres and 6.5 acres, are to be located at the WRF to supply treated effluent supplemented and blended with raw water (discharged to the storage lakes via an air-gap) to the golf course irrigation lakes 1A and 6A for irrigation.

The treatment plant in the original discharge permit was designed to treat the effluent using a suspended growth activated sludge process for treatment followed by membrane bioreactors and
disinfection. This treatment plant is now the proposed Phase 2 treatment plant. The new package plant design for Phases 1, 1A and 1B will use a Bio-Chip moving bed biological reactor followed by filtration and disinfection. The treated effluent will be able to meet 10 mg/L BOD and 10 mg/L TSS and less than 10 mg/L Total Nitrogen as N. The plant will produce a tertiary treated effluent that is denitrified and disinfected to meet Category A effluent (NAC 445A.425) of 2.2 MPN/CFU/100 mL total coliform. The facility will be operated in accordance with the terms and conditions of the permit and the Division approved Operations and Maintenance Manual (O & M) for each package plant in the WRF.

Receiving Water Characteristics: The receiving water is the groundwater of the State of Nevada. Based on historic data, the groundwater ranges from 352 to 438 feet measured in three nearby wells, and it is potable.

Flow: Phase 1 will authorize discharges of treated effluent up to 0.05 MGD. Phase 1A will add an additional 0.05 MGD of capacity. Phase 1B will authorize an additional 0.05 MGD of capacity for a total combined capacity of 0.15 MGD. Phase 2 will authorize discharges of treated effluent up to 2.1 MGD.

Procedures for Public Comment: The Notice of the Division's intent to issue a permit authorizing the facility to operate, 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 may do so in writing for a period of 30 days following the date of the public notice. All comments regarding this permit must be received or postmarked by **5:00 PM on July 30, 2012.** 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 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 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.

Proposed Determination: The Division has made the tentative determination to reissue the proposed permit for a 5-year period.

Proposed Effluent Limitations, Special Conditions, and Schedule of Compliance

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

Table 1: Plant Discharge Limitations

PARAMETER		DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
		30-Day Average	Daily Maximum	Measurement Frequency	Sample Type
Flow, MGD (Influent) (Total Capacity)	Phase 1	0.05	0.17	Continuous	Influent Flow Meter
	Phase 1A	0.10	0.34		
	Phase 1B	0.15	0.51		
	Phase 2	2.10	9.70		
Outfall 001 Flow, MGD (Effluent)	Phase 1	0.05	0.17	Continuous	Effluent Flow Meter
	Phase 1A	0.10	0.34		
	Phase 1B	0.15	0.51		
	Phase 2	2.10	9.70		
Outfall 002 – All Phases Flow, MGD (Effluent)		Monitor & Report	Monitor & Report	Continuous	Effluent Flow Meter
Outfall 003 – All Phases Flow, MGD (Effluent)		Monitor & Report	Monitor & Report	Continuous	Effluent Flow Meter
BOD_5, mg/L (Influent)		Monitor & Report		Quarterly	Composite

BOD_5, mg/L (Effluent)	10	45	Monthly	Discrete
TSS, mg/L (Influent)	Monitor & Report		Quarterly	Composite
TSS, mg/L (Effluent)	10	45	Monthly	Discrete
Total Nitrogen as N, mg/L (Effluent)	10		Quarterly	Discrete
Arsenic, µg/L (Effluent)	10		Quarterly	Discrete
pH, Std. Units (Effluent)	Between 6.0 – 9.0		Monthly	Discrete
Total Coliform, c.f.u. or mpn/100 mL (effluent)	2.2	23	Monthly	Discrete

Notes: MGD – Million Gallons per Day mg/L – milligrams per liter
µg/L – micrograms per liter or parts per billion
mpn – most probable number cfu – colony forming units

Schedule of Compliance: The Permittee shall comply with the following items:

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 that the Administrator may make in approving the schedule of compliance.

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

b. Prior to the Phase I treatment plant reaching 85 percent of its capacity, design plans for the Phase IA treatment plants shall be submitted to NDEP for review and approval;

c. Prior to Phase IA reaching 85 percent of its combined capacity, design plans for the Phase IB treatment plants shall be submitted to NDEP for its review and approval;

d. Prior to Phase IB reaching 85 percent of its combined capacity, design plans for the Phase 2 treatment plant shall be submitted to NDEP for its review and approval and fees shall be paid for the additional capacity in Phase 2, if applicable;

e. A revised Operations and Maintenance Manual (O & M) that follows the requirements of NDEP's WTS-2 shall be submitted to the Division for review and approval 90 days after the Phase I plant is operational, 90 days after the Phase IA plants are operational and 90 days after the Phase IB plants are operational. A Sludge Management Plan shall also be included in the O & M Manuals;

f. A Letter of Certification wet-stamped and signed in non-black ink by a Nevada Registered Professional Engineer stating that all plant elements

have been constructed in accordance with Division approved plans for both the Phase IA and the Phase IB facilities shall be submitted to the Division within 30 days of completion of each plant's construction. A copy of the as-built plans for each new plant facility and its related infrastructure shall also be included with the Certification Letter; and

g. NDEP shall be notified no later than 14 days after the completion of construction of each separate treatment plant from Phase I, Phase IA, Phase IB and Phase 2 stating that construction of the treatment plant is complete and the plant is operational.

Rationale for Permit Requirements: Monitoring is required to assess the level of treatment being provided, to determine when design capacity is being approached and to ensure that groundwaters of the State are not degraded.

Prepared by: Steve McGoff, P.E.
Staff Engineer III
Bureau of Water Pollution Control
Nevada Division of Environmental Protection
June 21, 2012