



STATE OF NEVADA

Department of Conservation & Natural Resources

Jim Gibbons, Governor

Allen Biaggi, Director

DIVISION OF ENVIRONMENTAL PROTECTION

Leo M. Drozdoff, P.E., Administrator

FACT SHEET (pursuant to NAC 445A.236)

Permittee Name:

Quality Utilities Company
500 N. Rainbow, Suite 300
Las Vegas, Nevada 89107

Permit Number: NEV97019

Description of Discharge: Quality Utilities will store treated effluent (reclaimed water) from the wastewater treatment plant in a lined storage pond and then use the reclaimed water to spray irrigate grass in the common area and a nine-hole executive golf course within the proposed development.

Location: Quality Utilities Company proposed wastewater treatment plant is located south of the proposed Oasis at Shangri-La development, approximately four (4) miles west of Pahrump near the intersection of State Highway 372 and Woodchips Street in Pahrump, Nye County.

Latitude: 36° 11' 24" N; Longitude 116° 03' 01" W
SE1/4 of Section 19, T20S, R53E, MDB&M

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

Wellhead Protection Area: The proposed wastewater treatment facility site is located within 6,000 feet of a municipal water supply well Drinking Water Protection Area, but outside the wellhead capture zone for the public supply well.

Characteristics: Quality Utilities plans to install a modified activated sludge wastewater treatment plant that will have primary, secondary and tertiary treatment. The design capacity for Phase I will be 0.100 MGD design, followed by an additional capacity of 0.100 MGD plant for Phase II. The total design capacity for Phase III will be 0.500 MGD. Each package treatment plants will be designed to use a modified activated sludge operation to treat domestic sewage generated from the service area within the Oasis at Shangri-La development and will meet secondary treatment standards with denitrification. This proposed service area will include apartments, an RV Park, single-family dwellings, a golf course and a casino resort complex. Each treatment plant will be located inside a building and will be a duplicate plant configured with identical treatment trains. Effluent will be disinfected before it is discharged into a lined storage pond and then used on the re-use sites via spray irrigation.

Flow: Phase I of the treatment plant has a flow limitation of 0.100 MGD. Upon Division approval, this permit allows increased flows not to exceed 0.200 MGD in Phase II and 0.500 MGD in Phase III.

Proposed Effluent Limitations: Plant effluent discharge limitations are as follows:

Plant Discharge Limitations

PARAMETER	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	30-day Average	Daily Maximum	Measurement Frequency	Sample Type
Effluent Flow: Outfall 001				
Phase I		0.100 MGD	Continuous	Meter
Phase II		0.200 MGD	Continuous	Meter
Phase III		0.500 MGD	Continuous	Meter
Effluent Flow: Outfall 002	Monitor & Report	Monitor & Report	Continuous	Meter
BOD ₅ – Influent	Monitor & Report	Monitor & Report	Monthly	Composite
BOD ₅ – Effluent (mg/L)	10	15	Monthly	Composite
TSS – Influent	Monitor & Report	Monitor & Report	Monthly	Composite
TSS – Effluent (mg/L)	10	15	Monthly	Composite
Total Nitrogen as N (mg/L)	10	10	Monthly	Composite
pH (SU)	Between 6.0 and 9.0 Standard Units		Monthly	Discrete
Fecal Coliform (CFU/100 mL)	2.2	23	Monthly	Discrete

MGD: Million gallons per day; mg/L: Milligrams per liter; as N: As Nitrogen; CFU/100 mL: Colony forming units/100 milliliters
TSS: Total Suspended Solids

Groundwater Monitoring

Parameters	Groundwater Limitations	Sample Locations	Monitoring Requirements	
		Sample Location	Measurement Frequency	Sample Type
Depth to Water (feet)	Monitor & Report	Each Well	Quarterly	Discrete Measurement
Groundwater Elevation (amsl)	Monitor & Report	Each Well	Quarterly	Discrete Measurement
Total Nitrogen as N (mg/L)	10	Each Well	Quarterly	Discrete
Nitrate as N (mg/L)	Monitor & Report	Each Well	Quarterly	Discrete
Total Dissolved Solids (TDS) (mg/L)	Monitor & Report	Each Well	Quarterly	Discrete
Chloride (mg/L)	Monitor & Report	Each Well	Quarterly	Discrete

amsl: Above mean sea level ft/ft: foot per foot (vertical to horizontal) mg/L: milligrams per liter as N: as Nitrogen

Additionally, an annual water balance and nitrogen balance are required.

General: Quality Utilities proposes to manage and operate the wastewater treatment plant(s). The facilities will be located south of the Oasis at Shangri-La development near the intersection of Woodchips Street and State Highway 372, in Pahrump, Nye County. The facilities are proposed to be built with planned expansions as needed. Each treatment plant will be enclosed entirely in a building to control odors. The treatment facilities are individual package treatment plants that will
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discharge secondary-treated effluent to a future lined golf course pond (Outfall 001) for storage and then for re-use on a grassed common area and the planned golf course areas via spray irrigation (Outfall 001a). Two (2) monitoring wells, MW-1 and MW-2, are planned to be installed downgradient of the re-use site. All solid waste screening and sewage sludge will be disposed of in a manner approved by the Division and Nye County.

No negative environmental impacts are anticipated as a result of the issuance of this permit.

Receiving Water Characteristics: The receiving waters are groundwaters of the State of Nevada. Based on historical data, groundwater in the area is of drinking water quality. The depth to groundwater averages 50 feet in the immediate area of the facility site.

Procedures for Public Comment: The notice of the Division's intent to issue (renew) a permit authorizing the facility to discharge to the groundwaters of the State of Nevada subject to the conditions contained within the permit is being sent to the *Las Vegas Review Journal* and the *Pahrump Valley News* 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 the public notice, by **Month XX, 2009**. 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, 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 scheduled by the Administrator 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.

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

Schedule of Compliance and Special Conditions: Following is a list of the compliance items for this permit:

- a. The Permittee shall achieve compliance with the effluent limitations upon issuance of the permit;
- b. An O&M Manual shall be submitted to the Division for review and approval no later than 180 days after construction of the wastewater treatment plant is completed. The O&M Manual shall describe plant operations in each phase of the project with appropriate revisions for each. A Sludge Management Plan shall be included in the O&M Manual. If sludge is disposed at locations other than approved landfill sites, said plan must also address Part 40, Section 503 of the Code of Federal Regulations;

- c. The EMP shall be submitted to NDEP within ninety (90) days from the effective date of this permit for Division approval. The Permittee shall not use any reclaimed water for irrigation prior to receiving Division approval of the EMP. The EMP shall include information in accordance with WTS-1, *Guidance Document for Effluent Management Plan for Reuse of Wastewater Effluent*, NDEP February, 1993;
- d. Pursuant to NAC 445A.285(2), the Permittee shall submit a letter from Nye County within ninety (90) days from the effective date of this permit that states Nye County's approval of the location of the proposed wastewater treatment facility;
- e. Final design plans and specifications for Phase I of the proposed treatment plant shall be submitted to NDEP for review and approval within ninety (90) days from the effective date of this permit;
- f. Final design plans and specifications for Phases II and III of the proposed treatment plant shall be submitted to NDEP for review and approval prior to construction of the additional phases of the treatment plant;
- g. Plans and specifications shall be submitted to NDEP for construction of the lined storage pond for reclaimed water within ninety (90) days from the effective date of this permit;
- h. No construction shall begin on any phase of the treatment plant until the design plans and specifications have been approved by the Division;
- i. The locations for MW-1 and MW-2 shall be approved by the Division and installed within 180 days from the effective date of this permit. A groundwater monitoring plan shall be included in the EMP; and
- j. A certification that each phase of the project has been constructed in accordance with the plans approved by NDEP shall be provided by a Nevada Registered Professional Engineer within 30 days of completion of each phase of approved work.

Rational for Permit Requirements: Groundwater monitoring is required to assess the level of treatment being provided and to ensure the Waters of the State are not degraded. Required parameters are monitored to ensure effluent re-use requirements are maintained.