



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

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET

(pursuant to NAC 445A.236)

Applicant: Utilities Inc. of Central Nevada
1240 E. State Street, Suite 115
Pahrump, Nevada 89048

Permit: NEV97016

Location: Calvada North Plant #2/Plant "F" Wastewater Treatment Plant
Leslie Street and Avellaneda Street, Calvada Valley North, Unit #3, Block 8, Lot 1
Pahrump, Nye County, Nevada 89048
Latitude: 36° 18' 3.33"N; Longitude: 116° 2' 48.71"W
SW1/4, NW1/4 Section 17, T. 19S., R. 53E., MDB&M

Flow: The current plant facility has a 30-day average flow limit of 0.050 Million Gallons per Day (MGD).

Wellhead Protection: This facility is not within a 6,000-foot Drinking Water Protection Area.

Public Water Supply: There are no public supply wells within one mile of this facility.

Corrective Actions Sites: There are no Bureau of Corrective Actions sites within one mile of the wastewater treatment plant.

General:

The Permittee has applied for renewal of a permit to discharge from Plant "F" to groundwaters of the State via infiltration in rapid infiltration basins (Outfall 001) and land application via onsite effluent reuse irrigation (Outfall 002). The existing Upflow Sludge Blanket Filtration (USBF) package treatment plant is a 0.050 MGD plant. The USBF plant is designed to treat domestic wastewater.

The plant will be operated in accordance with the approved Operations and Maintenance Manual (O&M) for the facility. This plant is designed to treat wastewater to meet secondary treatment standards as defined by NAC 445A.275. The facility produces denitrified and disinfected effluent meeting the 30-day average standard of 2.2 CFU/100 ml fecal coliform for reuse category Class B

effluent, as defined by NAC 445A.276. There is a 55' X 80' HDPE lined storage basin on site which can be used as a flow equalization basin for influent wastewater flows to mitigate peak flow events and stormwater.

Discharge Limitations and Monitoring Requirements:

Utilities, Inc. Plant F provides secondary-treated, denitrified effluent that conforms to Category B requirements for fecal coliform. The discharge limitations are in Table I.1 below:

Table I.1: Discharge Limitations

PARAMETERS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	30-Day Average	Daily Maximum	Measurement Frequency	Sample Type
Flow, MGD (Outfall 001)	M&R	M&R	Continuous	Flow Meter
Flow, MGD (Outfall 002)	M&R	M&R	Continuous	Flow Meter
Total Eff. Flow, MGD (001+002)	0.050	M&R	Monthly	Composite
BOD5, mg/L (Effluent)	30.0	30.0	Monthly	Composite
TSS, mg/L (Effluent)	30.0	30.0	Monthly	Composite
Total Nitrogen as N, mg/L (Effluent)	10.0	10.0	Monthly	Composite
pH, Standard Units	Between 6.0 and 9.0		Monthly	Composite
Fecal Coliform, (CFU/100 mL)	2.2	23	Monthly	Discrete

Receiving Water Characteristics:

The receiving water is the groundwater of the State of Nevada. Based on historic data, the groundwater in the immediate area is potable and a drinking water source. Depth to groundwater is about 90-100 feet below ground surface.

Groundwater Monitoring:

- a. All monitoring wells shall be capped and locked to prevent public access and tampering.
- b. The groundwater monitoring wells shall be sampled quarterly with a discrete sample and analyzed for TDS, chlorides, Total Nitrogen as N, and groundwater elevation and submitted in accordance with Part I.B.2 of the permit. If the Total Nitrogen as N levels measured in the groundwater directly beneath or downgradient of the reuse site increase to 7.0 mg/L, as a result of effluent reuse, the Effluent Management Plan shall be revised to provide management practices which increase the nitrogen uptake by vegetation and/or adjust the plant operations to improve denitrification. If the Total Nitrogen as N levels increase to 9.0 mg/L, the Permittee shall take all corrective actions necessary to ensure that there is no further degradation of groundwater. If the Total Nitrogen as N levels increase to 10.0 mg/L, the discharge to groundwater shall cease.

Table I.2: Groundwater Monitoring

PARAMETERS	GROUNDWATER LIMITATIONS	MONITORING REQUIREMENTS	
Monitoring Well #1 and #2		Measurement Frequency	Sample Type
Total Dissolved Solids, mg/L	Monitor and Report	Quarterly	Discrete
Total Nitrogen as N, mg/L	10.0	Quarterly	Discrete
Chloride, mg/L	Monitor and Report	Quarterly	Discrete
Groundwater Elevation, feet	Monitor and Report	Quarterly	Discrete
Static Water Level, feet	Monitor and Report	Quarterly	Discrete

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.

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

- b. By MM DD, 2012 (60 days), two copies of a new Operations and Maintenance Manual (O&M) shall be submitted to the Division for review and approval. Interim wastewater handling shall be noted in the document. A Sludge Management Plan shall also be included in the O&M Manual. If sludge is disposed to locations other than approved landfill sites, said plan must also address Part 40 CFR Section 503 of the federal regulations.
- c. By MM DD, 2012 (60 days), two copies of a new Effluent Management Plan (EMP) shall be submitted to the Division for review and approval. The EMP must be stamped and signed by a Professional Engineer registered in the state of Nevada. The EMP shall include information in accordance with WTS-1B. A groundwater monitoring plan shall also be included in the EMP as an Appendix.
- d. By MM DD, 2012 (60 days), the Permittee shall submit documentation showing that a cross-connection control inspection, performed by a certified cross-connection control specialist, has been completed.

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 are not degraded. The flow is limited to the maximum capacity of the USBF system used by Utilities, Inc. The five-day Biochemical Oxygen Demand, Total Suspended Solids, and pH limits are set in accordance with the limitations set in NAC 445A.275.

Proposed Determination:

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

Procedures for Public Comment:

The notice of the Division's intent to reissue a permit authorizing the facility to discharge to groundwaters of the State of Nevada subject to the conditions contained within the permit is being sent to the **Pahrump Valley Times** and 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 30 days following the date of the newspaper publication 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 U.S. 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 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.

Prepared by: Robert E. Wimer, Jr., E.I.
July, 2012