FACT SHEET
(Pursuant to NAC 445A.236)

Permittee: City of Elko
1751 College Ave
Elko NV 89801

Permit No.: NEV2003515

Facility: Ruby View Golf Course
Ruby View Dr.
North of I-80 within the city limits of Elko,
Latitude: 40º 51' 21" North
Longitude: 115º 45' 33" West
T34N, R55E, Sections 3 & 11

General: This 18-hole golf course is located north of I-80 within the city limits of Elko. The site has been irrigated since the mid-1980s with treated effluent supplied by the City of Elko Water Reclamation Facility (NEV20014), as authorized by that permit. There are up to 120 acres on the golf course that are irrigated by treated effluent. The treated effluent meets Category B reuse criteria pursuant to NAC 445A.276, with average and maximum fecal coliform concentrations less than 23 and 240 colony forming units (cfu)/100 ml, respectively. A 100-ft buffer zone is required while irrigating using the treated effluent. Since total nitrogen as N concentrations in the treated effluent typically range from 15 to 20 mg/l, the application rate using treated effluent is limited by the nitrogen uptake of the plants. The City of Elko also uses groundwater to supplement the treated effluent which allows the irrigation requirement to be met without exceeding the nitrogen load limit. The Effluent Management Plan (EMP) includes additional fertilizer applied in the calculation of the total nitrogen load.

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

Wellhead Protection Area: There is a municipal drinking water well located on the golf course which puts the reuse site within 3,000 feet of a municipal water supply well Drinking Water Protection Area. The well is considered moderately vulnerable to contamination.

Receiving Water Characteristics: The depth to groundwater is in excess of 100 ft. A municipal drinking water supply well for the course is located on site and provides water

meeting drinking water quality standards, with a nitrate concentration of 0.94 mg/l (as nitrogen). The two monitoring wells for the course, G2 and G4, are completed to depths of 109 ft and 55 ft, respectively, and are usually dry. When there is sufficient water in the monitoring well(s), representative sampling will be performed.

Rational for Permit Requirements: Application of effluent for irrigation purposes is governed by the water quality and nitrogen requirements of the plants, and by limitation of human contact based on the concentration of fecal coliform. The EMP was approved by NDEP in 1999 and provides the basis for limits on the annual application volume and total nitrogen load. Table I.A.2 shown below contains the permit effluent limits.

Table I.A.2

Parameter	Discharge Limitations		Monitoring Requirements
	30 Day Average	Monthly Total	
Application Rate	monitor & report (MGD) (1)	monitor & report (MG/month) (2)	flow meter
Annual Application Volume	876 acre・ft/yr (3)(4)		flow meter
Annual Nitrogen Load	210 lb N/acre・yr (5)		calculation

(1) For the purpose of determining the fees required by NAC 445A.232, 0.5 MGD < 876 AFY < 1 MGD.
(2) Monthly application rates approved in the EMP shall be used as a guide.
(3) 110% of estimated irrigation requirement from the EMP.
(4) Report cumulative yearly total in each Discharge Monitoring Report (DMR).
(5) Annual nitrogen total load limit includes effluent and fertilizer.

Monitoring wells are intended to detect impacts to groundwater from reuse or disposal of effluent. Table I.A.3 shown below contains the monitoring requirements for each of the monitoring wells.

Table I.A.3

Parameters	Groundwater Limitations	Monitoring Requirements	
		Measurement Frequency	Sample Type
Groundwater Elevation and Depth to Water, ft	m & r (1)	quarterly	measurement
Nitrate as N, mg/l	m & r	quarterly	discrete
Total Kjeldahl Nitrogen as N, mg/l	m & r	quarterly	discrete
Total Nitrogen as N, mg/l	10 (2)	quarterly	discrete
Total Dissolved Solids, mg/l	m & r	quarterly	discrete
Chloride, mg/l	m & r	quarterly	discrete

(1) Monitor and report. (2) See Part I.A.4.

Schedule of Compliance: The Permittee shall achieve compliance with the discharge limitations upon issuance of the permit. If NDEP makes any additions or modifications to the approved schedule of compliance, the Permittee shall implement and comply with the provisions of the new schedule of compliance.

Procedures for Public Comment: Notice of the Division's intent to issue Discharge Permit NEV2003515 authorizing irrigation at Ruby View Golf Course using treated effluent is being sent to the **Elko Daily Free Press** for publication. The notice is being mailed electronically to interested persons on our contact list. Anyone wishing to comment on the proposed permit must submit written comments to NDEP within (30) days of the publication date. The comment period can be extended at the discretion of the Administrator. The deadline for receipt of all written comments is **June 11, 2009, by 5:00 pm.**

A public hearing on the proposed determination can be requested by the applicant, any affected state or interstate agency, the Regional Administrator, or any interested agency, person, or group of persons. The request must be filed within the comment period and indicate the interest of the person filing the request and the reasons why a hearing is warranted. Any public hearing the Administrator determines 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.

Proposed Determination: NDEP has made the tentative determination to issue the proposed discharge permit for a five-year term.

Prepared by: Steve McGoff, P.E.
Staff Engineer III
Bureau of Water Pollution Control
May 6, 2009