



FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: CITY OF ELKO
1751 COLLEGE AVENUE
ELKO, NV - 89801

Permit Number: NS2003515

Location: RUBY VIEW GOLF COURSE, ELKO
2100 RUBY VIEW DRIVE, ELKO, NV - 89801
LATITUDE: 40.855833, LONGITUDE: -115.759167
TOWNSHIP: 34N, RANGE: 55E, SECTION: 3 & 11

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Outfall City	Outfall State	Outfall Zip	Outfall County	Latitude	Longitude	Receiving Water
001	IRRIGATION	External Outfall		ELKO	NV	89801	ELKO	40.855833	-115.759167	GROUNDWATER
002	G-2	Monitoring Well		ELKO	NV	89801	ELKO	40.8550	-115.7590	GROUNDWATER
003	G-4	Monitoring Well		ELKO	NV	89801	ELKO	40.8550	-115.7590	GROUNDWATER

General:

This permit renewal allows for the continued discharge of tertiary-treated effluent supplied by the City of Elko Water Reclamation Facility (CEWRF) for irrigation of the Ruby View Golf Course (RVGC) in Elko, Nevada. Spray irrigation is used to irrigate up to 120 acres with an estimated 250 acre-feet per year of reclaimed water at an average discharge rate of 800,000 gallons per day (gpd). The CEWRF has authorized the RVGC to use up to 300 acre-feet of reclaimed water per year.

Discharge Characteristics:

The CEWRF supplies tertiary-treated, denitrified, disinfected reclaimed water that meets Category C quality (NAC 445A.276).

Receiving Water:

The receiving water is groundwater of the State underlying the reuse site. The groundwater depth at the RVGC is more than 100 feet below ground surface.

Summary of Changes From Previous Permit:

The requirements to monitor the discharge for total kjeldahl nitrogen as nitrogen, total oxidized nitrogen as nitrogen (nitrate + nitrite), and ammonia as nitrogen have been removed. These nitrogen species are used to calculate the total nitrogen, and the requirement to monitor total nitrogen quarterly has been retained. Likewise, the requirements to monitor the groundwater monitoring wells for nitrate as nitrogen and total kjeldahl nitrogen as nitrogen have been removed.

For consistency with other similar permits, the requirement to monitor the total nitrogen applied in pounds per acre per year has been removed.

The flow rate limit of 876 acre-feet per year has been changed to 800,000 gallons per day.

The requirement to install new groundwater monitoring wells MW-1 and MW-2 as replacements for existing groundwater monitoring wells G-2 and G-4, or to drill existing monitoring wells G-2 and G-4 deeper has been added to ensure that the groundwater underlying the RVGC is not negatively impacted by the permitted discharge.

Due to the new naming conventions at the Nevada Division of Environmental Protection (NDEP), Bureau of Water Pollution Control, the permit number has been changed from NEV2003515 to NS2003515. This change does not reflect a change in the type of permit being issued.

Proposed Effluent Limitations:

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

Groundwater Monitoring Wells Table for Sample Location G-2 (Monitoring Well) To Be Reported Quarterly

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Depth to water level ft below landsurface	Quarterly Maximum	M&R Feet (ft)		Groundwater	002	Quarterly	VISUAL ^[1]
Chloride (as Cl)	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	002	Quarterly	DISCRT
Nitrogen, total	Quarterly Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	002	Quarterly	DISCRT
Solids, total dissolved	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	002	Quarterly	DISCRT

Notes (Groundwater Monitoring Wells Table):

- 1. Field measurement

Groundwater Monitoring Wells Table for Sample Location G-4 (Monitoring Well) To Be Reported Quarterly

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Depth to water level ft below landsurface	Quarterly Maximum	M&R Feet (ft)		Groundwater	003	Quarterly	VISUAL ^[1]
Nitrogen, total	Quarterly Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	003	Quarterly	DISCRT
Solids, total dissolved	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	003	Quarterly	DISCRT
Chloride (as Cl)	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	003	Quarterly	DISCRT

Notes (Groundwater Monitoring Wells Table):

1. Field measurement

Re-use Discharge Limitations Table for Sample Location 001 (External Outfall) To Be Reported Monthly

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Daily Maximum	<= 800,000 Gallons per Day (gal/d)		Prior to Reuse	001	Continuous	METER
Coliform, fecal general ^[1]	Daily Maximum		<= 240 Colony Forming Units per 100ml T (CFU/100mL) ^[2]	Prior to Reuse	001	Weekly	DISCRT
Coliform, fecal general ^[1]	30 Day Average		<= 23 Colony Forming Units per 100ml T (CFU/100mL) ^[2]	Prior to Reuse	001	Weekly	DISCRT
Nitrogen, total ^[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Monthly	DISCRT
Nitrogen, total ^[1]	30 Day Average		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Monthly	DISCRT
Flow rate	30 Day Average	M&R Gallons per Day (gal/d)		Prior to Reuse	001	Continuous	METER

Notes (Re-use Discharge Limitations Table):

1. Sample results to be reported by the Permittee may be obtained from the CEWRF (NS0020014).
2. In accordance with NAC 445A.276, fecal coliform may be reported in c.f.u. or mpn/100mL.

Rationale for Permit Requirements:

Flow rate is monitored in order to prevent ponding, runoff, and degradation of the underlying groundwater.

Fecal coliform is monitored to ensure that the concentration of fecal coliform in the treated effluent does not exceed the allowable concentration for Reuse Category C in accordance with NAC 445A.276.

Total nitrogen is monitored to prevent leaching and degradation of the underlying groundwater.

Groundwater monitoring is required to detect impacts to groundwater from the permitted discharge activity.

Fecal Coliform:

30-Day Average ≤ 23 c.f.u. or mpn/100mL

Daily Maximum ≤ 240 c.f.u. or mpn/100mL

Special Conditions:

Substantial compliance with the current permit is a condition of permit renewal.

SA – Special Approvals / Conditions Table

Item #	Description
1	If new monitoring wells (MW-1 and MW-2) are installed, quarterly sampling of each monitoring well (MW-1 and MW-2) shall begin within 30 days of well completion.
2	If new monitoring wells (MW-1 and MW-2) are installed, existing groundwater monitoring wells G-2 and G-4 shall be abandoned and plugged in accordance with NAC 534 within 30 days of the completion of monitoring wells MW-1 and MW-2.
3	If the existing monitoring wells (G-2 and G-4) are abandoned and plugged, the Permittee shall notify the Division's Bureau of Water Pollution Control within 30 days of the abandonment and plugging of monitoring wells G-2 and G-4.
4	If a daily maximum limit of 10 mg/L is established for the concentration of total nitrogen in the treated effluent discharged by the CEWRF under permit NS0020014, the RVGC may request, as a minor modification, that the Division remove groundwater monitoring requirements from permit NS2003515.

Flow:

Daily Maximum Flow Rate \leq 800,000 gpd

Corrective Action Sites:

The following three Bureau of Corrective Actions remediation sites are located within one mile of the RVGC:

6-000009
6-000031
6-000317

The BCA has indicated that it does not anticipate continued reuse activities to affect remediation activities at these sites.

Wellhead Protection Program:

The RVGC is located within 5-, 10-, and >25-year Wellhead Protection Areas (WHPA). The RVGC is also located within the 6,000 ft. and 3,000 ft. Drinking Water Protection Area (DWPA) for multiple wells and partially located within the 1,000 ft., and 150 ft. DWPA for one well. Continued reuse activities are not expected to impact any WHPA or DWPA.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit a new Effluent Management Plan (EMP) to the Division. The EMP shall be prepared and wet-stamped by a Nevada Registered Professional Engineer in accordance with guidance document <i>WTS-1B: General Criteria for Preparing an Effluent Management Plan</i> .	1/1/2016
2	The Permittee shall submit to the Division for review, a plan for the installation of two new monitoring wells (MW-1 and MW-2) at the golf course, or a plan to drill existing monitoring wells G-2 and G-4 sufficiently deep enough to allow successful sampling of the groundwater underlying the RVGC.	10/1/2016
3	The Permittee shall install the new monitoring wells (MW-1 and MW-2) at the golf course or shall drill the existing monitoring wells (G-2 and G-4) deeper. The monitoring wells shall be constructed in accordance with "WTS-4: Guidance Document for the Design and Construction of Groundwater Monitoring Wells" (NDEP, Revised July 2012).	10/1/2017
4	The Permittee shall submit a copy of the well log and as-built drawings for each of the completed monitoring wells (MW-1 and MW-2) or for the deepened existing monitoring wells (G-2 and G-4).	11/1/2017

Deliverable Schedule:

DLV– Deliverable Schedule for Reports, Plans, and Other Submittals

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly Discharge Monitoring Reports	Quarterly	1/28/2016
2	Annual Report	Annually	1/28/2016

Procedures for Public Comment:

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to groundwater of the State of Nevada subject to the conditions contained within the permit, is being sent to the **Reno Gazette Journal, Elko Daily Free Press** 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 until 5:00 P.M. **9/22/2015**, a period of 30 days following the date 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 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 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 to 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 / re-issue the proposed 5-year permit.

Prepared by: **Alan Pineda**

Date: **8/14/2015**

Title: **Staff I Associate Engineer**