



**FACTSHEET**  
**(pursuant to NAC 445A.236)**

**Permittee Name:** ELKO COUNTY FAIR BOARD

1094 13TH STREET  
ELKO, NV 89801

**Permit Number:** NS2007509

**Permit Type:** GROUNDWATER DISCHARGE

**Designation:** GROUNDWATER

**New/Existing:** EXISTING

**Location:** ELKO COUNTY FAIRGROUNDS, ELKO  
1090 13TH STREET, ELKO, NV 89801  
LATITUDE: 40.844444, LONGITUDE: -115.761111  
TOWNSHIP: 34N, RANGE: 55E, SECTION: 10

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	IRRIGATION	Land Application Site		40.844444	-115.761111	GROUNDWATER
002	DUST CONTROL	Land Application Site		40.844444	-115.761111	GROUNDWATER
003	SUM OF OUTFALLS 001 & 002	Sum		40.844444	-115.761111	GROUNDWATER

**Permit History/Description of Proposed Action**

The Permittee, Elko County Fair Board, has applied for the renewal of Permit NS2007509 for the Elko County Fairgrounds (ECF), located at 1090 13th Street, in the City of Elko, Elko County, Nevada. The Permittee proposes to continue to use reclaimed water for dust control and irrigation within the fairground's boundary.

This permit was first issued on April 24, 2008. The most recent permit was issued on April 01, 2015, and expired on March 31, 2020; the permit has been administratively continued since.

**Facility Overview**

The Elko County Fairgrounds (ECF) utilizes reclaimed water supplied by the City of Elko Water Reclamation Facility (CEWRF Permit NS0020014).

The reclaimed water is delivered from the CEWRF and conveyed to the ECF via a 12-inch transmission pipeline, to which the ECF has connected a 6-inch pipeline. The flow enters the site via the pipeline and is quantified by a totalizing flow meter. A water truck fill station is located downstream of the flow meter. Two 3-inch diameter irrigation connections are located in the infield re-use areas. The irrigation connections provide reclaimed water to both Infield Reuse Areas No. 1 and No. 2, with Area No. 1 being 5.0 acres in size and Area No. 2 being 2.3 acres in size. The ECF parcel is relatively flat, especially both the horse track and infield portions, with the parcel gently sloping from the northwest corner to the southeast corner of the property. The infield reuse areas are bound on all sides by the horse track and the rodeo arena and are lower in elevation by comparison. This elevation difference allows for containment of any possible ponding

that may occur during irrigation or normal storm events. The ECF is irrigated with a hand-moved spray irrigation system with dispersion nozzles, with daily irrigation occurring during the months of March through October each year, and little to no irrigation from November through February.

The site's Reclaimed Water Management Plan (RWMP) (formerly known as an Effluent Management Plan) was last reviewed and approved by the Division on July 21, 2015. The Technical, Compliance, and Enforcement (TCE) Branch of the Bureau of Water Pollution Control requires RWMPs be updated every two (2) permit cycles which equates to every ten (10) years; therefore, an updated RWMP will need to be submitted to the Division for review and approval by July 21, 2025. The RWMP shall follow guidance document, WTS1B General Design Criteria for Preparing a Reclaimed Water Management Plan.

### **Outfall Summary**

Outfall 001 - this outfall is for the use of reclaimed water for irrigation of the two racetrack infield areas.

Outfall 002 - this outfall is for dust control within the boundary of the facility.

Outfall 003 - this outfall is the sum of both Outfalls 001 and 002.

### **Effluent Characterization**

Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from the years July 2019 to June 2024, was reviewed as part of this permit renewal process. The long-term average discharge flow rate for Outfall 001 was 9,064 gallons per day (GPD), based on the period of applied use being approximately 57% of the year, as determined utilizing monthly numbers reported during the five-year period. The daily maximum discharge flow rate for Outfall 001 is limited to 0.10 million gallons per day (MGD), equivalent to 100,000 gallons per day (GPD).

The CEWRF provides tertiary treated, denitrified, and disinfected reclaimed water which meets Category B bacteriological quality per Nevada Administrative Code (NAC) 445A.276 to the Elko County Fairgrounds; therefore, the reclaimed water should meet, at a minimum, a maximum 30-day geometric mean for fecal coliform of 2.2 colony forming units (CFU) / 100 mL and a maximum daily number of 23 CFU / 100 mL. The long-term average for the daily maximum fecal coliform reported was 3.94 CFU / 100 mL.

The average level of total nitrogen reported during July 2019 through June 2024 period was 8.72 mg/L, below the Profile 1 level of concern of 10 mg/L.

### **Pollutants of Concern**

Pollutants of concern are any pollutants or parameters that are believed to be present in the discharge and could affect or alter the physical, chemical, or biological condition of the receiving water. Common pollutants of concern for denitrified reclaimed water are fecal coliform and total nitrogen.

### **Receiving Water**

Receiving water is groundwater of the State. Depth to groundwater at the site is approximately 89 feet below ground surface (bgs) based on a review of static water levels from wells located within 0.25 mile of the ECF, along with the reported static water level at Elko County Well #18, being approximately 89 feet below ground surface. Depth information is based on associated well logs found on the Division of Water Resources' website.

### **Compliance History**

The facility was in substantial compliance during the July 2019 to June 2024 reporting period.

### **Proposed Effluent Limitations**

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

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Prior to Reuse	001	Continuous	METER
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Prior to Reuse	001	Continuous	METER

**Re-use Discharge Limitations Table for Sample Location 002 (Dust Control) To Be Reported Monthly**

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Prior to Reuse	002	Continuous	METER
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Prior to Reuse	002	Continuous	METER

## Re-use Discharge Limitations Table for Sample Location 003 (Irrigation & Dust Control) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Coliform, fecal general	30 Day Geometric Mean		<= 2.2 Colony Forming Units per 100ml T (CFU/100mL)	Prior to Reuse	003	Weekly	DISCRT
Coliform, total general	Daily Maximum		<= 23 Colony Forming Units per 100ml T (CFU/100mL)	Prior to Reuse	003	Weekly	DISCRT
Flow rate	30 Day Average	<= 0.1 Million Gallons per Day (Mgal/d)		Prior to Reuse	003	Continuous	METER
Flow rate	Daily Maximum <sup>[1]</sup>	<= 0.1 Million Gallons per Day (Mgal/d)		Prior to Reuse	003	Continuous	METER
Nitrogen, total <sup>[2]</sup>	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	003	Monthly	DISCRT

### Notes (Re-use Discharge Limitations Table):

1. Permittee is allowed to monitor flow by recording flow at the totalizing meter on a daily or weekly basis.
2. Sample results to be reported by the Permittee may be obtained from the CEWRF (NS0020014). Reclaimed water quality shall be in accordance with the limits set forth in permit NS0020014.

### Summary of Changes From Previous Permit

As confirmed by the current City of Elko WRF superintendent via email, the plant was upgraded in 2012-2014 to an activated sludge process changing the reclaimed water to a treated level of bacteriological Category "B" reuse water. Based on this enhanced level of treatment, and associated delivery to the fairgrounds, the parameters on the permit's Reuse Discharge Limitation Table have been updated to reflect NAC 445A.276 Category B bacteriological quality requirements. The table has been revised to show an updated permit limit of 2.2 CFU / 100 mL for the 30-day geometric mean for fecal coliform along with an updated permit limit of 23 CFU / 100 mL for the daily maximum for fecal coliform.

Outfall 003's Reuse Discharge Limitation Table for the annualized Flow Total of 10.4 MGD for Irrigation and Dust Control has been removed to adhere to current Division reporting requirements.

### Technology Based Effluent Limitations

Technology based effluent limitations are not applicable to this permit.

**Water Quality Based Effluent Limitations**

Water quality based effluent limitations are not applicable to this permit.

**Proposed Water Quality Based Effluent Limits (monthly/weekly/daily)**

Water quality based effluent limitations are not applicable to this permit.

**Basis for Effluent Limitations**

Fecal coliform and total nitrogen are required to be monitored to assess the quality of reclaimed water being applied and for the protection of human health and the environment.

**Anti-backsliding**

None of the proposed permit limits were changed to a less restrictive limit compared to those in the previous permit.

**Antidegradation**

The Division has developed an antidegradation regulation that is applied on a statewide basis, and which meets the statutory requirements of Nevada's water pollution control law found at Nevada Revised Statute (NRS) 445A.520 and NRS 445A.565 and is consistent with the federal antidegradation policy found at Title 40 in the Code of Federal Regulations (CFR) § 131.12. The objective of the Division's antidegradation regulation is to prevent degradation of Nevada's surface waters and maintain the unique attributes and special characteristics and water quality associated with high-quality waters.

As this permit is for discharges to groundwater, and not surface water, the new antidegradation rule is not applicable. There are currently no specific water quality standards that have been formally adopted by the State for groundwater, however, data reviewed during the renewal process does not indicate the potential for degradation of the groundwater from the reclaimed water discharged within the compliance limits of the proposed permit.

**Special Conditions**

There are no special approvals/conditions associated with this permit.

## SA – Special Approvals / Conditions Table

There are no Special Approval / Condition items
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**Discharges From Future Outfalls/ Planned Facility Changes**

The Permittee does not anticipate discharges from any future outfalls or any others changes to the facility.

**Corrective Action Sites**

There are three (3) active Bureau of Corrective Action (BCA) sites located within a one mile radius of the discharge location. The first site (6-000317) had a confirmed release of gasoline and diesel from an underground storage tank along with a gasoline release from a non-storage tank structure, the second site (6-000009) had a confirmed release of gasoline, and the third site (6-000176) had a confirmed release of solvents. BCA has confirmed, that based on the permit's flow rate and distance to these sites, that there will be no impact on the groundwater plumes.

**Wellhead Protection Program**

The nearest Public Water Supply (PWS) well is located approximately 1250 feet to the southeast of the outfalls. There are several more PWS wells located to the east and west. The outfalls are located within a Drinking Water Protection area, which is defined by a 3,000-foot radius around the well. The outfalls are not located in a Wellhead Protection Area, which represents an approximate 10-year capture zone of a well. The risk of contamination is minimal as the direction of the groundwater flow is away from the wells and the wells are in a confined aquifer.

**Schedule of Compliance:**

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit two copies (one electronic and one hard copy) of an updated Reclaimed Water Management Plan (RWMP), formerly known as an Effluent Management Plan, for review and approval by the Division. The RWMP shall follow guidance document WTS1B: General Design Criteria of Preparing a Reclaimed Water Management Plan.	7/21/2025

**Deliverable Schedule:**

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	4/28/2025
2	Annual Report	Annually	1/28/2026

**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 mailed to interested persons on our mailing list and will be posted on our website at <https://ndep.nv.gov/posts>. Anyone wishing to comment on the proposed permit can do so in writing until 5:00 P.M. **12/6/2024**, 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 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/re-issue the proposed 5-year permit.

Prepared by: **Melissa Marr**

Date: **10/31/2024**

Title: **Staff II Engineer**