

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET

(pursuant to NAC 445A.236)

Permittee: Pioneer Center for the Performing Arts
100 South Virginia Street
Reno, Nevada 89501

Permit: NV0023299

Location: 100 South Virginia Street
Reno, Washoe County, Nevada 89501
Latitude: 39° 31' 28" North
Longitude: 119° 48' 45" West

Flow: 30,000 Gallons per day (gpd)

Receiving Water: Truckee River

Corrective Actions Sites:

There are eight corrective actions sites within a one-mile radius of the permitted facility. One is administered by Bureau of Corrective Actions (BCA) and seven are administered by Washoe County District Health Division. Seven of the sites are associated with remediation of petroleum based hydrocarbons (gasoline, diesel, motor oil, heating oil, etc.) One is associated with non-PCB mineral oil. During the time that the facility has been discharging (2003 to present), no volatile organic compounds or petroleum hydrocarbons have been detected in the discharge. BCA and WCDHD have indicated no expected impact from the Pioneer Center for the Performing Arts discharge.

Well Head and Drinking Water Supply Protection:

The permitted facility is within the 3000' Drinking Water Protection Area (DWPA) around one public water supply well. This well, Truckee Meadows Water Authority (TMWA) High Street Well, has a designation of high vulnerability to surface contamination. As this permitted discharge is to surface waters of the State and not to groundwaters, no impact from the discharge is expected. The permitted facility is also within the 10-year capture zone of the TMWA Wellhead Protection Area.

General:

The Pioneer Center for the Performing Arts has applied for a National Pollutant Discharge Elimination System (NPDES) permit for the discharge of groundwater collected in a passive foundation dewatering system to the Truckee River. Groundwater water is discharged for the sole purpose of maintaining groundwater levels below the sub-grade structures of the Pioneer Center. Discharged water is not used in any industrial or commercial process and is non-contact water that is pumped directly from the wet well (sump) of the sub-grade, gravity-feed drain system into the storm-drain system leading to the Truckee River.

Collected groundwater is intermittently pumped from the wet well of the dewatering system into the

storm drain segment that extends east along Mill Street, tying into a north-south lateral that conveys storm water to the Truckee River. The discharge to the Truckee is at the intersection of the Truckee River and Center Street. Water is pumped to the storm drain using a two (2) horsepower (Hp) sump pump that operates as needed at approximately 50 gallons per minute (gpm).

Receiving Water Characteristics:

Groundwater is discharged to the Truckee River via the City of Reno storm drain system. Truckee River at East McCarran standards, NAC 445A.186, apply to this river reach. Waters of the Truckee River are potable and of good quality, and listed beneficial uses for this reach of the Truckee River include: irrigation; watering of livestock; recreation involving contact with the water; recreation not involving contact with the water; industrial supply; municipal or domestic supply, or both; propagation of wildlife; and propagation of aquatic life. For this reach, the aquatic life of major concern are all life stages of mountain whitefish, rainbow trout, and brown trout (NAC 445A.183).

Discharge Flow and Characteristics:

Discharge flow is based on pump times and operating specifications. During the period from January 2004 through June 2009 (current permit period), the following discharge flow and quality were reported:

PARAMETER	PERMIT LIMIT	AVERAGE	MAXIMUM	MINIMUM
Flow (gallons per day)				
30-Day Average	30,000	21439	24441	17640
Daily Maximum	M & R	22491	24882	18000
Nitrate as N (mg/l)	2.0	0.292	0.39	0.19
Total Phosphorus (mg/l)	0.10	0.035	0.04	0.02
Total Dissolved Solids (mg/l)	500	93.6	120	76
pH (Standard Units)	6.5 to 9.0	7.352	7.75	7.1
Total Ammonia (mg/l)	M & R	<0.1	<0.1	<0.1
Volatile Organic Compounds (µg/l)	M & R	<1.0	<1.0	<1.0

During the period from January 2004 through June 2009, the discharge from dewatering activities at the Pioneer Center has met the Truckee River Requirements to Maintain Existing Higher Quality (RMHQ) for pH, Total Phosphorus, and Total Dissolved Solids (Single Value), and the Water Quality Standards for Beneficial Use (WQS) for Nitrate as N and Total Ammonia. Additionally, no Volatile Organic Compounds were detected at the reporting limit of 1.0 µg/l.

Proposed Effluent Limitations: During the period beginning on the effective date of this permit and lasting until the permit expires, the Permittee is authorized to discharge from Outfall 001, which is the discharge of the wet well to the City of Reno storm drain system, and ultimately to the Truckee River.

- a. Effluent samples and/or measurements taken in compliance with the monitoring requirements specified below shall be collected at:

EFF: At the discharge of the wet well, prior to conveyance to the City of Reno storm drain.

- b. The discharge of treated groundwater from Outfall 001 shall be limited and monitored as specified below:

PARAMETERS	EFFLUENT DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	30-Day Average	Daily Maximum	Measurement Frequency	Sample Type
Total Flow (gpd)	30,000	Monitor & Report	Monthly ¹	Calculation ²
Nitrate-N (mg/l)	-----	2.0	Annually ³	Discrete
Total Phosphorus-P (mg/l)	-----	0.10	Annually ³	Discrete
Total Dissolved Solids (mg/l)	-----	500	Annually ³	Discrete
pH (Standard Units)	6.5 – 9.0		Annually ³	Discrete
Total Ammonia (mg/l)	Monitor & Report		Annually ³	Discrete
Volatile Organic Compounds ⁴ (µg/l)	Monitor & Report		Twice During Permit Period (2011 and 2013) ³	Discrete

¹ Reported quarterly.

² Calculated based on pump timer readings.

³ Reported in the fourth quarter monitoring report.

⁴ Volatile Organic Compounds analyzed using EPA Method 8260B.

gpd: Gallons per day.

mg/L: Milligrams per liter.

-N: As nitrogen.

-P: As phosphorus.

SU: Standard units.

Rational for Permit Requirements:

Flow: Discharge flow is limited by the design specifications and the operation parameters of the pump system. Normal operation discharges approximately 18,000 gpd; however, the permit specifies 30,000 gpd as a 30-day average to accommodate typical groundwater variations. A daily maximum has not been specified to accommodate heavy seasonal variation, however, maximum flow rates must be reported.

Nitrate as N: This monitoring parameter is included in the proposed permit in accordance with the beneficial use standard listed under NAC 445A.186.

Total Phosphorus as P: Currently, Total Phosphates as P are limited in NAC 445A.186. However, this water quality standard has been interpreted and applied as a Total Phosphorus as P limit. This monitoring parameter is included in the proposed permit in accordance with the anticipated beneficial use standard listed under NAC 445A.186.

Total Dissolved Solids (TDS): This monitoring parameter is included in the proposed permit in

accordance with the beneficial use standard listed under NAC 445A.186.

pH: This effluent limitation is required to confirm compliance with the pH water quality standard and for use in determining compliance with the effluent limitation for total ammonia.

Total Ammonia as N: This parameter is limited by the Total Ammonia as nitrogen (-N) water quality standard equations found in NAC 445A.118. Using the maximum reported pH and the maximum temperature to account for the worst case scenario, the acute water quality criteria for total ammonia for freshwater aquatic life would be approximately 8.11 mg/L and the chronic water quality criteria for total ammonia would be approximately 1.17 mg/L at a temperature of 30° Celsius. Total Ammonia has not been detected in the discharge at a reporting limit of 0.1 mg/l.

Volatile Organics: The downtown Reno area has been known to be the subject of site investigation and groundwater remediation activities due to current and historic commercial and industrial property uses. Although current analyses do not suggest the presence of industrial pollutants, sentinel monitoring on a bi-annual basis is considered prudent to ensure the long-term absence of this variety of compounds.

Schedule of Compliance and Special Conditions:

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. The Permittee shall implement and/or execute the following scheduled compliance requirements:

- a. The Permittee shall achieve compliance with the effluent limitations upon issuance of the permit.
- b. **By MMM DD, 2010**, the Permittee shall submit to the Division any Operations and Maintenance (O&M) Manual updates or minor revisions as required. If no updates are required, the Permittee shall submit a letter to the Division stating that condition.

Proposed Determination:

The Division has made the tentative determination to issue the proposed permit for a five-year period. Per Nevada Administrative Code 445A.232, this project is categorized as a *Discharge from Remediation, Dewatering, other than the discharge to ground water from the dewatering of a mine, or from a Power Plant, a Manufacturing or Food Processing Facility or any other Commercial or Industrial Facility – Less than 50,000 gallons of process water daily.*

Procedures for Public Comment:

Notice of the Division's intent to issue a permit authorizing the facility to discharge to water of the State of Nevada, subject to the conditions contained within the permit, is being sent to the **Reno Gazette Journal** for publication. Notice is also 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 public notice, and must be postmarked, faxed, or E-mailed by **5:00 p.m. on November 30, 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, the Regional Administrator, 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 reason(s) why a hearing is warranted.

Any public hearing held by the Administrator will be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings will 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: Janine O. Hartley, P.E.
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