



NEVADA DIVISION OF ENVIRONMENTAL PROTECTION  
Underground Injection Control

**FACT SHEET**

(pursuant to NAC 445A.874)

**Permittee Name:** Nugget Casino Resort LLC  
**Parent Corporation:** Century Casinos Inc.  
**Project Name:** Nugget Casino Resort Tower 2 - Permanent Dewatering and Remediation  
**Permit Type:** Underground Injection Control Individual Permit  
**Injection Well Type:** UIC Class V Injection Well (drain-field)  
**Injection Fluid:** Remediated groundwater  
**Permit:** UNEV2002202  
**Proposed Action:** Renewal  
**Associated Permits:** NEV96000 (replaced by UNEV2002202)

**Description of Discharge**

Address: 1100 Nugget Avenue, Sparks, Washoe County, Nevada 89431  
Public Land Survey System (Township, Section, Range): NE¼, NW¼ of Section 8, T19E, R20N, MDB&E  
Latitude: 39° 32' 00" N  
Longitude: 119° 45' 39.88" W

**Characteristics**

The discharge is groundwater collected from a basement dewatering system and subsequently treated by Granular Activated Charcoal (GAC) filtration prior to discharge into a drain-field (UIC Class V injection well) ~580 feet west of Tower 2. Since 2003, concentrations of perchloroethylene (PCE), or *tetrachloroethylene*, in the discharged fluid ranged from below the detection limit to as high as 3.8 micrograms per liter (µg/l), reported in February 2007. *Trichloroethylene* (TCE) and total petroleum hydrocarbon (TPH) levels have remained below their detection limits since 2003. Nitrate as nitrogen concentration ranges from approximately 1-13 milligram per liter (mg/l). Chloroform, a potential disinfection byproduct from drinking- and waste-water treatment, has also been detected and is treated by the GAC filtration process.

**Synopsis**

2/2025: Public Notice of renewal application posted with draft permit for 30-day comment period.

4/1/2023: Change of ownership from Marnell Gaming, LLC to Century Casinos Inc.

5/6/2016: Change of Ownership from Sheltie Op Co., Inc. to Marnell Gaming LLC.

12/13/2013: Change of Ownership from John Ascuaga to Sheltie Op Co Inc.

2009 and earlier: The applicant operated a basement dewatering system to service Nugget Casino Resort - Tower #2, located at 1100 Nugget Avenue in Sparks. Water collected in the basement sump is treated and discharged through a leach field to groundwater (waters of the State of Nevada). The leach field is located in the Nugget parking lot west of 14th St., ~580 ft. west of Tower #2.

Due to the change in UIC Program regulations for the definition of a well to include subsurface fluid distribution systems, the Nugget was issued an Underground Injection Control (UIC) permit for the drain-field dewatering system in 2003 - formerly covered under Groundwater Discharge permit NEV96000.

Environmental impacts from this operation include the potential discharge of PCE, TCE, TPH, and nitrates



to groundwater below the drain-field, hydraulically upgradient of the sump system. To mitigate these potential impacts, the Permittee has installed a treatment system to remove particulates, volatile organic compounds (VOC's), and petroleum hydrocarbons upstream of the drain-field. The system consists of a Harmsco Hurricane Particulate Filter for solids removal in addition to a series of two 2000-pound GAC filters for VOC removal. The carbon media in each of the GAC filters was removed and replaced by Waterlink Barnebey Sutcliffe on April 25, 2000, and again during the third quarter of 2007 by Calgon Carbon Corporation. A sampling program to monitor discharged water is presented in the Sampling and Monitoring section of the permit (Part I.A.3).

The dewatering/collection system consists of perforated piping adjacent to the exterior side of the building perimeter footings and below the basement slab. Water collected in the subsurface piping is gravity drained to a basement sump containing two, alternating, 100-gallon per minute (gpm), float-activated sump pumps. The sump pumps transfer the water to an activated carbon treatment system and then to boost pumps located in the Nugget parking facility sump on the west side of 14th street, and then to the infiltration field. The GAC filters are alternated on a routine basis to optimize the service life of the media. To optimize conveyance efficiency, effluent is directed to a second sump equipped with booster pumps to lift effluent to an infiltration field located west of 14th Street. Monitoring equipment includes an in-line totalizing flow meter on the influent side of the GAC filters, and two sampling ports situated on the influent and effluent side of the GAC filters, respectively.

The primary disposal site, a 40-foot square infiltration field, was constructed with a closed loop perforated pipe system. The booster pumps were designed to deliver the effluent to a distribution box with essentially no residual pressure. The water infiltrates through 4 ½ feet of drain rock, underlain with native coarse sands and gravels.

If the flow rate entering the sump exceeds 200 gpm, the 100 gpm pumps will be replaced with two 750 gpm pumps. An emergency by-pass valve to the City of Sparks storm drain system was installed with a separate totalizing flow meter and seal. Average monthly flow rates have ranged from 4 - 102 gallons per minute (gpm) since 2003, with higher rate occurred during month of October 2008.

Available documents: The O&M Manual (January 1997) on file at NDEP is out dated. The Manual will be updated as required in Part I.A.6 of the permit to meet the revised monitoring requirements and address potential replacement of current sump pumps with higher volume (e.g., 750 gpm) pumps.

### **Receiving Water**

Shallow groundwater in the area is known to contain PCE, TCE, nitrates, TPH, and Nitrates. Analyses of groundwater samples collected during construction-dewatering activity indicated the presence of PCE  $\leq 25$   $\mu\text{g}/\text{l}$ , and nitrate (as nitrogen)  $\leq 29$   $\text{mg}/\text{l}$ . Since January 1996, the local depth to groundwater around the tower was approximately 13 to 20 feet below ground surface. Groundwater in the surrounding area is assumed to flow southward toward the Truckee River.

Numerous drinking water and irrigation wells surround the site. The nearest drinking water well is located approximately ¼-mile west of the Nugget. Five wells—four drinking water wells and one irrigation well—are located between ¼- and ½-mile of the site to the northwest, west, and southwest.

### **Flow**

Since 2003, typical flow rates have ranged from 4-102 gpm.

The volume of discharge is anticipated to be variable, with flows under 200 gpm. A potential maximum flow of 1,500 gpm could occur if groundwater elevations significantly increase due to a cessation of groundwater remediation operations at the Sparks Marina (formerly Helms Pit) and significant precipitation in the area, or under severe flood conditions. If the rate of flow entering the sump exceeds 200 gpm and the 100 gpm pumps were to be replaced with two 750 gpm pumps, the Permittee is required to notify and obtain approval from NDEP for the change to higher-volume pumps.



### **Procedures for Public Comment**

Pursuant to NAC 445A.890.5 through NAC 445A.877, public notice of Underground Injection Control permit applications and proposed drafts is being posted on the NDEP website, and mailed to any interested persons on our mailing list, to (1) solicit written comments or objections to determinations of the Director regarding the application or permit and (2) provide the opportunity for a public hearing, if the Director determines that there is a significant level of interest from the applicant, any affected state, any affected interstate agency, the regional administrator, or any interested agency, person, or group of persons. A hearing 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 determines to be appropriate. All public hearings must be conducted to accordance with NAC 445A.238 and the final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Any person wishing to submit comments or request a hearing must do so by email/mail, which must be sent/postmarked or hand delivered within thirty (30) days to:

Department of Conservation & Natural Resources  
Nevada Division of Environmental Protection  
Bureau of Water Pollution Control | Permits Branch  
Attn: Underground Injection Control Permit Writer  
901 S. Stewart Street, Suite 4001  
Carson City, NV 89701

### **Proposed Determination**

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

### **Rationale for Permit Requirements**

Monitoring is required to ensure that the level of treatment being provided is adequate to satisfy the Maximum Contaminant Levels for drinking water and to ascertain whether or not design capacity is being approached.

### **Proposed Effluent Limitations, Schedule of Compliance, and Special Conditions**

The schedule of compliance is located in Part I.B.1 through Part I.B.3 of the permit. No special conditions have been set forth in the permit. Prior to discharge to the infiltration field, the treatment system effluent will be monitored according to the following schedule and effluent limitations presented below:



### Monitoring Requirements

<b>Monitoring Parameters</b>	<b>Sampling Location/List</b>	<b>Discharge Limitations</b>	<b>Monitoring Requirements</b>	
			<b>Frequency</b>	<b>Sample Type</b>
Flow (gal, gpm)	FM1 <sup>1</sup> (Figs. 1, 2)	200 gpm (30-day average)	Continuous (rec. daily <sup>3</sup> )	Meter
Bypass Flow (gal, gpm)	FM2 <sup>2</sup> (Figs. 1, 2)	Monitor & Report	Continuous (rec. daily <sup>3</sup> )	Meter
Volatile Organic Compounds <sup>4</sup>	Sample Port NUGEFF (Fig. 2) EPA Method 8240 (Extended)	Drinking Water Standards	Quarterly	Discrete
Total Organic Carbon <sup>4</sup>	Sample Port NUGEFF (Fig. 2)	Monitor & Report	Quarterly	Discrete
Dissolved Organic Carbon <sup>4</sup>	Sample Port NUGEFF (Fig. 2)	Monitor & Report	Quarterly	Discrete
Total Petroleum Hydrocarbons <sup>4</sup>	Sample Port NUGEFF (Fig. 2)	Monitor & Report	Quarterly	Discrete
Nitrate as N	Sample Port NUGEFF (Fig. 2)	Monitor & Report	Quarterly	Discrete
Water Table Depth (ft/in <i>or</i> m/cm)	Leach Field Piezometer (Fig. 1)	Monitor & Report	<sup>2</sup> Monthly	Discrete

1. Totalizing flow meters on dewatering system piping.
2. Flow meter on emergency by-pass piping downstream of sump.
3. If the treatment system discharge exceeds one-half the infiltration field design capacity, the measurement frequency will be modified to once per week for one (1) month; if data for this period indicates proper operation, the measurement frequency will be returned to a quarterly basis.
4. See attached sample analyte lists in the draft permit.