

STATE OF NEVADA
DIVISION OF ENVIRONMENTAL PROTECTION

AUTHORIZATION TO INJECT/DISCHARGE

In compliance with the provisions of the Nevada Revised Statutes (NRS) 445A and the Underground Injection Control (UIC) Regulations in the Nevada Administrative Codes (NAC) 445A.810 to 445A.925, inclusive, the Permittee is authorized to inject and discharge from a facility described below in accordance with limitations, requirements and other conditions specified in the permit.

Permit Number: UNEV87064

Facility Name: Peppermill Casinos, Inc.
Facility Address: 2707 S. Virginia St., Reno, NV 89502

Permittee: Peppermill Casinos, Inc.
Permittee Address: 90 W. Grove St., Ste. 600, Reno, NV 89502

Address of Wells: 2707 S. Virginia St., Reno, NV 89502

Legal Description: T19N/R19E, Sec. 24, ¼ Sec. NE, ¼ Sec. SW
Latitude/Longitude: 39.2946.1, -119.4757.8

Facility Description:

This permit covers one (1) injection wells	
<u>Approved Wells</u>	<u>Year Approved</u>
1. Peppermill #9	2010 - injection

This permit shall become effective: **January 19, 2026 (Tentative)**
This permit shall expire at midnight: **January 19, 2031 (Tentative)**

The UIC renewal application is due 180 days prior to permit expiration
Permit originally was issued on May 18, 1988.

Lisa Aleman
UIC Permit Writer
Nevada Division of Environmental Protection

Date: _____

TABLE OF CONTENTS

AUTHORIZATION TO INJECT	i
PART I PERMIT SPECIFIC CONDS	1
A. SCHEDULE OF COMPLIANCE	1
I.A.1 Achieving Compliance	1
I.A.2 Modification	1
B. INJECTATE LIMITATIONS	1
I.B.1 Permitted Injections	1
I.B.2 Permitted Wells and Configuration	1
I.B.3 Injectate Limitations	2
I.B.4 Operating Conditions	2
I.B.5 Prohibited Discharges and Injections	2
I.B.6 Notification of Permitted Activity	2
I.B.7 Chemical Additives	2
PART II. PERMIT COMPLIENCE	
REQUIREMENTS AND STANDARDS	3
A. MECHANICAL INTEGRITY TESTING	3
II.A.1 Tests for Mechanical Integrity	3
II.A.2 Frequency	3
II.A.3 Loss or Failure to Demonstrate Mechanical Integrity	3
II.A.4 MIT Proposals	3
II.A.5 Forty Eight (48) hour Notice	3
II.A.6 MIT Summary Report	4
B. MONITORING REQUIREMENTS	4
II.B.1 Minimum Requirements for Sampling and Monitoring	4
II.B.2 Facility Sampling Requirements.....	5
II.B.3 Additional Monitoring by Permittee	5
II.B.4 Modification of Monitoring Frequency, Location and Sample Type	5
C. REPORTING AND RECORDKEEPING REQUIREMENTS	5
II.C.1 Semi-Annual Reports	5
II.C.2 Recording of Results	6
II.C.3 Workovers	6
II.C.4 Records Retention	6
II.C.5 Certification of Documents Submitted to the Director	6
II.C.6 Availability of Reports	6

PART III. PERMIT MANAGEMENT AND RESPONSIBILITIES	7
A. MANAGEMENT REQUIREMENTS	7
III.A.1 Change in Injection or Discharge	7
III.A.2 Noncompliance Notification	7
III.A.3 Spills	7
III.A.4 Facilities Operation	7
III.A.5 Duty to Mitigate	7
III.A.6 Bypassing	8
III.A.7 Annual and Renewal Fees	8
III.A.8 Plugging and Abandonment	8
B. RESPONSIBILITIES	8
III.B.1 Right of Entry and Inspection of Premises	8
III.B.2 Transfer of Ownership or Control	8
III.B.3 Permit Modification, Suspension or Revocation	9
III.B.4 Civil and Criminal Liability	9
III.B.5 Duty to comply	9
 ATTACHMENTS & FIGURES	
 Table 1 - Schedule of Compliance	 1
 ATTACHMENT 1	
Table 2 - Required Sampling	10
Table 3 - Required Monitoring	11
 ATTACHMENT 2 Reporting Templates	
Table 4	13
Table 5	13
Table 6	13
 ATTACHMENT 3 - Notifications to the Division	
Table 7- Permittee Shall Notify the Division When	14

PART I. PERMIT SPECIFIC CONDITIONS

I.A SCHEDULE OF COMPLIANCE

I.A.1 Achieving Compliance - The Permittee shall achieve compliance with the conditions, limitations and requirements of **Table 1** and this permit at the commencement of relevant activity.

I.A.2 Modification - The Administrator may, upon the request of the Permittee, and after public notice, revise or modify a schedule of compliance in an issued permit if he determines good and valid cause exists for such revision.

Table 1 - Schedule of Compliance		
Requirement	NAC Reference	Date from UNEV93212 Renewal
Update Operation and Maintenance Manual. (See NDEP Form "UIC Minimum Info Requirements for O&M manual" on the Underground Injection Control website home page)	NAC 445A.869	Within 180 days
Submit a plugging and abandonment report for IW-5	NAC 445A.923	Within 45 days of conclusion of well closure

I.B INJECTION LIMITATIONS

I.B.1 Permitted Injection - During the period beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to inject:

- a. Geothermal water naturally produced from the Moana Geothermal resource Area Reservoir into well #9 (IW-9).

I.B.2 Permitted Wells and Configuration - The Permittee is permitted to inject into the wells listed on page 1 of this permit, and the Nevada Division of Environmental Protection (Division) may, upon technical review, approve other wells for injection upon receiving a request for modification by the Permittee.

a. Peppermill Injection Well #9

- i. **Authorized Injection zone:** 2000 – 4421 feet below ground surface into the Moana Geothermal resource Area Reservoir.
- ii. Total Depth: 12-1/4" hole drilled to 3900'
- iii. Casing: 30" 0.5" Conductor set at 55' ground level (GL). 20" Casing is set at 483 and cemented to the surface. 13-3/8" casing set at 2202' and is cemented to the surface.
- iv. Liner: 9-5/8" B&P BTC liner set on bottom. Liner adaptor at 2091'. Perforated

Interval: 2361'-3859'

I.B.3 Injection Limitations - Injectate shall be limited by the Permittee as specified below:

- b. The injection pressure shall not exceed **450 psig** for IW-9 measured at the wellheads, as calculated per NAC 445A.911.2. (maximum allowable pressures were lowered in late 2009 due to issues with wells)
- c. **At no time shall injection pressures or rates cause breakthrough or surfacing of injection fluids occur.** If breakthrough occurs, injection shall cease immediately into well(s) directly related to breakthrough.

I.B.4 Operating Conditions— the following operating conditions shall always be maintained:

- b. Extraction, surface conveyance and injection shall be accomplished by a completely closed system(s) to prevent the introduction of any foreign materials into the injectate waters.
- c. All measures will be taken to prevent foreign materials from entering the dewatering sump. Chemicals or other hazardous materials shall not be stored in the dewatering sump room. Only water from the dewatering system may enter sump.
- d. A sign stating "**Dumping of any material into sump and Storage of any material in this room is prohibited by state law**" shall be posted on the door of the dewatering sump room upon issuance of this permit.
- e. All well cellars shall be properly maintained, clean of debris and sediment build up, and free of standing water.

I.B.5 Prohibited Discharges and Injections – The following discharges and injections are prohibited:

- a. No person may inject a fluid which degrades the physical, chemical or biological quality of the aquifer into which the fluid is injected
- b. Discharges to the ground surface are not permitted under this permit. Injection practices shall not cause injectate or groundwater to surface at or near the injection wells.
- c. Geothermal fluids shall be disposed in such a manner that they do not present a hazard to the public, livestock, wildlife or the beneficial use of the waters of the State. At no time shall a baseline groundwater value or federal and state drinking water standard, whichever is higher, be exceeded.
- d. The introduction of any chemical additive to the injectate or surface discharge waters requires written authorization from the Division using UIC Form U240.

I.B.6 Notification of Permitted Activity - The Permittee shall comply with the conditions of **Table 1** of this permit and notify the Division in accordance with **Table 1** upon occurrence of any activity listed.

I.B.7 Chemical Additives - The introduction of any chemical additive to the injectate or surface discharge waters requires written authorization from the Division using UIC Form U240. The use of any type of chemical additive may require modification of monitoring requirements.

PART II. PERMIT COMPLIENCE REQUIREMENTS AND STANDARDS

II.A MECHANICAL INTEGRITY TESTING

- II.A.1 Tests for Mechanical Integrity** - The Permittee shall conduct mechanical integrity tests (MITs) per NAC 445A.917-918 on Peppermill #9. These tests must demonstrate there are no significant leaks in the injection well casing (Part 1 Internal) and demonstrate there is no significant fluid movement behind the casing (Part 2 External) including checks for leaks and behind-casing flow at all key locations such as casing shoes, liner tops, liner laps, and above the top of liner or casing perforations. The Division may, by written notice, require the Permittee to demonstrate mechanical integrity if loss of mechanical integrity is evidenced by well failure or by other information.
- II.A.2 Frequency** – The Permittee shall conduct mechanical integrity tests (MIT) on the injection wells
- prior to initial use of the injection well
 - at least once every five (5) years on all
 - per Division MIT policy
 - The Division may, by written notice, require the Permittee to demonstrate mechanical integrity if loss of mechanical integrity is evidenced by well failure or by other
- II.A.3 Loss or Failure to Demonstrate Mechanical Integrity** - If the holder of the permit or the Division finds that the injection well fails to demonstrate mechanical integrity during a test or a loss of mechanical integrity becomes evident during operation, the operation of the injection well must be stopped immediately and may not be resumed until approved by the Division.
- II.A.4 MIT Proposals** - Submit MIT Proposals for each injection well to demonstrate the integrity of the well to the Division forty-five (45) days prior to the test(s) being conducted to receive approval of said methodology and plan. MIT Proposals shall include:
- Permit number and facility name.
 - Identify which internal and external MIT tests are the best for each injection well covered by this permit based on the static and maximum flowrate conditions and well construction.
 - Include proposed testing flowrates and pressures.
 - Submit an MIT Procedure. Reference the requirements of the MIT Summary Report below to ensure the plan contains how field notes will be taken, information is recorded, and discussion on testing interpretation and conclusions.
 - Include a copy of any approved U240 form relevant to the chemicals being used for the test(s), if any.
 - Provide the most recent, up to date, annotated well(s) diagrams and schematics.
 - Include signature block and certify the MIT Proposal contents to be accurate and correct.
- II.A.5 Forty-Eight (48) hour Notice** - Give 48- hour notice to the Division as to the date and time of the test(s) for the Division staff or their representatives to witness the test.

II.A.6 MIT Summary Report - Compile and submit the MIT Summary Report, including relevant logs and interpretative reports, to the Division within ninety (90) days after the completion of the test. The MIT Summary Report shall contain the following information:

- b. Permit number and facility name.
- c. Conditions of the injection well(s) prior to the test (e.g. static, injecting at ### gpm, etc.)
- d. Conditions of the well(s) during the test(s), such as, but not limited to, operating conditions of the well, water level, changes in status/conditions of the well during the test, anomalies witnessed prior to or during the test, gauge calibration and condition for any gauges used, etc.; and
- e. Interpretation and conclusions of the test results stating whether each well meets the internal and external regulatory requirements in the UIC regulations. This part should be done in conjunction with the service company.
- f. include the most up to date, annotated, well completion diagram for each well.
- g. Chemical safety data sheet for any chemicals injected during the test.
- h. Use UIC MIT Form U111 to document the test for each individual well.

II.B MONITORING REQUIREMENTS

II.B.1 Minimum Requirements for Sampling and Monitoring

- a. Definition: “grab” sample means either a single discrete sample or individual samples collected over a period of time not exceeding fifteen (15) minutes
- b. A laboratory certified by the State of Nevada shall perform analyses. Testing methods for constituents shall be EPA or Division approved and meet drinking water analysis requirements.
- c. The detection/reporting limits for each of the required monitoring analytes must be at least as low as primary or secondary drinking water standards when applicable.
- d. When sampling for radioactive constituents, ensure the laboratory reports only the adjusted gross alpha, as the drinking water standard of 15 pCi/L is an adjusted standard that subtracts radon and uranium from the total activity. Uranium is added in List 2 to verify value and additional activity.
- e. **The UIC Program requires inorganic analyses of metals for "Total Metals"** in which samples are not filtered and are preserved with a weak acid in the field. Any exceptions to this policy shall be requested and pre-approved by the UIC program prior to the sampling event. It shall be clearly stated on all reports which analyses were performed and if the sample was filtered/unfiltered or acidified/non-acidified.
- f. All gauges used for compliance with this permit shall be calibrated pursuant to O&M manual and documented in the monitoring reports.
- g. Water samples shall be 1) collected by grab method, and 2) unfiltered for metals analysis, unless otherwise approved by the Division in writing.
- h. Annual samples shall be collected during the same month each year.
- i. All UIC water samples shall be collected using UIC Form U230, and the completed U230 forms submitted for each water sample with the UIC report.
- j. Test procedures for the analyses of required constituents shall comply with applicable analytical methods cited in 40 CFR 141 and under state of Nevada Drinking Water Program approved analytical methods, under which such procedures may be required,

unless other procedures are approved by the Administrator.

- k. Monitoring points or constituents may be increased or decreased by the Division for good cause. Requests by Permittee to change any sampling and/or monitoring requirements must be made in writing.

II.B.2 Facility Sampling Requirements- Samples are to be taken in compliance with the monitoring requirements specified below:

- a. Samples shall be taken at the injection wellhead of injection well 9 and analyzed for the parameters and frequencies listed in **Table 4** of Attachment 1.
- b. The Permittee shall monitor for the items in **Table 3** in Attachment 1, and report as specified in **Part II.A.**

II.B.3 Additional Monitoring by Permittee - If the Permittee monitors any constituent at the locations(s) designated herein more frequently than required by this permit, or monitors additional constituents than required by this permit, using approved analytical methods as specified above, the results of such monitoring results shall be made available to the Division upon request.

II.B.4 Modification of Monitoring Frequency, Location and Sample Type - After considering monitoring data, stream flow, discharge flow and receiving water conditions, the Division may, for just cause, modify the monitoring frequency, location and/or sample type by issuing an Order to the Permittee.

II.C REPORTING AND RECORDKEEPING REQUIREMENTS

II.C.1 Semi-Annual Reports - The Permittee shall submit **semi-annual reports due July 28 and January 28 of each year**, whether actively injecting or not, which contain the UIC Permit number and the following data:

- a. The first reporting period is January through June. The second reporting period is July through December. Monitoring results and other requirements obtained during the previous reporting period shall be summarized for each month and reported no later than the **last day of the month following the completed reporting period.**
- b. Signed copies of these, and all other reports required herein, shall be submitted to the UIC Program at the following address:

Division of Environmental Protection
Bureau of Water Pollution Control
Attn: Injection Monitoring Report
901 South Stewart Street, Suite 4001
Carson City, NV 89701

II.C.2 Recording of Results - For each measurement or sample taken pursuant to the requirements of this permit, the Permittee shall record the following information using the U230 form:

- a. The exact place, date, and time of sampling.
- b. The data of the analysis were performed.

- c. The person(s) who performed the analyses.
- d. The analytical techniques or methods used.
- e. The results of all required analyses; and,
- f. The precision and accuracy of the analytical data.

II.C.3 Workovers - The Permittee shall give thirty (30) day advance notice to the Division of any planned workover of any of the injection wells.

II.C.4 Records Retention - All records and information resulting from the monitoring activities required by this permit, including all records and analyses performed and calibration and maintenance of instrumentation and recordings from continuous monitoring instrumentation shall be retained for a minimum of three (3) years or longer if required by the Director.

II.C.5 Certification of Documents Submitted to the Director - All applications, reports and information submitted to the Director must be signed and certified to be correct and true by the owner or the operator (NAC 445A.859).

II.C.6 Availability of Reports - Except for data determined to be confidential under NRS 445A.665, all reports prepared in accordance with the terms of this permit shall be available for public inspection. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in NRS 445A.710.

PART III. PERMIT MANAGEMENT AND RESPONSIBILITIES

III.A MANAGEMENT REQUIREMENTS

- III.A.1 Change in Injection or Discharge** - All injections or discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any constituent identified in this permit more frequently than or at a level more than that authorized shall constitute a violation of the permit. Any anticipated facility expansions, or treatment modifications which will result in new, different, or increased injections or discharges must be reported by submission of a new application or, if such changes will not violate the limitations specified in this permit, by notice to the permit issuing authority of such changes. Following such notice, the permit may be modified to specify and limit any constituents not previously limited.
- III.A.2 Noncompliance Notification** – Written notification shall be provided as soon as possible but no later than twenty-four (24) hours after the event of noncompliance.
- a. **5-Day Report:** A written Report shall be submitted to the Underground Injection Control Program of the Division within five (5) days if, for any reason, the permittee is unable to or does not comply with the conditions, requirements and limitations specified in this permit. The permittee shall provide the Administrator or their representative with the following information:
- i. The exact dates, times, and duration of noncompliance
 - ii. The specific cause of noncompliance and exact location
 - iii. An estimated volume unauthorized discharge if applicable
 - iv. Identification of which injection well(s) are affected
 - v. The corrective actions taken and anticipated time of continuance. Steps taken or planned to reduce, eliminate, and prevent recurrence of noncompliance
- III.A.3 Spills** - The permittee is responsible for carrying out notification in the event of a spill. If the permittee has acknowledged that a spill greater than 25 gallons or 3 cubic yards has occurred, notify the Division by calling the **NDEP Spill Hotline, 1-888-331-6337 or an online submission on the NDEP web page** as soon as possible and no later than one working day from the time of discovery. The permittee shall promptly notify the Administrator in writing of each spill, in accordance with the procedure specified in Part III.A.2 above
- III.A.4 Facilities Operation** - The Permittee shall always be maintained in good working order and operate as efficiently as possible, all treatment or control facilities, devices or systems installed or used by the Permittee to achieve compliance with the terms and conditions of this permit and shall be in conformance with the plans and specifications filed with the Division. All solid, toxic or hazardous waste shall be disposed of in accordance with the rules and regulations of this Division. All spills and releases shall be reported as required by Nevada Revised Statutes.
- III.A.5 Duty to Mitigate** - The Permittee shall take all reasonable steps, including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying injection or discharge, to minimize any adverse

impact to waters of the State resulting from noncompliance with any limitations specified in this permit.

III.A.6 Bypassing - Any diversion from or bypass of facilities necessary to maintain compliance with the terms and conditions of this permit is prohibited except where unavoidable to prevent loss of life or severe property damage. The Division will have the final authority in the determination of whether a discharge is deemed unavoidable. The Permittee shall promptly notify the Administrator in writing, of each such diversion or bypass, in accordance with the procedure specified in Part III.A.2 above.

III.A.7 Annual and Renewal Fees - The Permittee shall submit the annual review and services fee in accordance with NAC 445A.872 no later than July 1st every year following permit issuance until the permit is terminated.

III.A.8 Plugging and Abandonment - An approved plan for plugging and abandonment has been submitted to the Division and is included as an attachment to this permit. If the Permittee or the Division determines at a future date that the plugging and abandonment plan requires modification, the modified plan, upon approval by the Division, will be incorporated into this permit.

III.B RESPONSIBILITIES

III.B.1 Right of Entry and Inspection of Premises – To enforce the provisions of any regulation, order or permit issued thereunder, the Director or authorized representative of the Department may, upon presenting proper credentials, pursuant to NRS 445A.655.

- a. Enter any premises in which any act violating NRS 445A.300 to 445A.730, inclusive, originates or takes place or in which any required records are required to be maintained;
- b. At reasonable times, have access to and copy any records required to be maintained
- c. Inspect any equipment or method for continuing observation
- d. Have access to and sample any discharges or injection of fluids into waters of the State which result directly or indirectly from activities of the owner or operator of the premises where the discharge originates or takes place or the injection of fluids through a well takes place.

III.B.2 Transfer of Ownership or Control – In the event of any change in ownership or control, the Permittee shall notify the succeeding owner of the existence of this permit and enter into a written agreement containing a specific date for the transfer, a copy of which shall be submitted to the Division. Until notice is given by the Division that the permit is transferred, the most recent owner or operator is responsible for complying with permit conditions. The following shall proceed:

- a. The new Permittee shall complete and file a UIC Change of Ownership Form and submit proof of financial responsibility at least thirty (30) days before the transfer is made.
- b. The Administrator may require modification, or revocation with subsequent reissuance of the permit, to change the name of the permittee and incorporate such other requirements as may be deemed necessary.

- III.B.3 Permit Modification, Suspension or Revocation** - After notice and opportunity for hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:
- a. Violation of any terms or conditions of this permit.
 - b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts, or
 - c. A change in any condition that requires either a temporary reduction, permanent reduction or elimination of the injection or discharge.
- III.B.4 Civil and Criminal Liability**
- a. Nothing in this permit shall be construed to relieve the Permittee from civil or criminal penalties for noncompliance.
 - b. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation.
 - c. The issuance of this permit does not convey any property rights, in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.
- III.B.5 Duty to comply** - The Permittee shall comply with all provisions of the UIC regulations, Nevada Administrative Code (NAC) 445A.810 through 445A.925, and all pertinent laws and regulations. Nothing in this permit relieves the Permittee from responsibilities, liabilities or penalties established by any other State, federal or local jurisdiction.

ATTACHMENT 1

UIC Monitoring Report Summary and Checklist

UIC Permit UNEV8706

Please submit this completed page with every monitoring report.

- Please check to ensure **all** conditions required by the UIC permit are in the report.
- Check off each item below that is in the report.

Sampling must occur during any six-month period (January through June or July through December) if discharge occurs at any time during that period. Sampling for the six-month period of January through June shall occur in April and sampling for July through December shall occur in October.

Sampling for metals shall be collected unfiltered, preserved with an acid in the field and analyzed as "Total Recoverable Metals." Any exceptions to this policy must be requested and pre-approved by the UIC program prior to sampling. It must be clearly stated on all reports which analyses were used.

Reports are due **semi-annually** by **July 28th** and **January 28th** of each year for the previous six-month period.

TABLE 2: Required Sampling

PARAMETER	LOCATION	FREQUENCY ¹	LIMITATIONS
Total Dissolved Solids, mg/L	IW-9	Semi-Annually, taken in October & April	Monitor and Report
Electrical Conductivity, μ mhos/cm	IW-9	Semi-Annually, taken in October & April	Monitor and Report
pH, standard units, (abbrev. S.U.)	IW-9	Semi-Annually, taken in October & April	Monitor and Report
Arsenic, mg/L	IW-9	Semi-Annually, taken in October & April	Monitor and Report
Bicarbonate, mg/L	IW-9	Semi-Annually, taken in October & April	Monitor and Report
Boron, mg/L	IW-9	Semi-Annually, taken in October & April	Monitor and Report
Calcium, mg/L	IW-9	Semi-Annually, taken in October & April	Monitor and Report
Chloride, mg/L	IW-9	Semi-Annually, taken in October & April	Monitor and Report
Fluoride, mg/L	IW-9	Semi-Annually, taken in October & April	Monitor and Report
Lithium, mg/L	IW-9	Semi-Annually, taken in October & April	Monitor and Report
Potassium, mg/L	IW-9	Semi-Annually, taken in October & April	Monitor and Report
Magnesium	IW-9	Semi-Annually, taken in October & April	Monitor and Report
Silica, mg/L	IW-9	Semi-Annually, taken in October & April	Monitor and Report
Sodium, mg/L	IW-9	Semi-Annually: Oct. & Apr.	Monitor and Report

		October	
Sulfate, mg/L	IW-9	Annually, taken in October	Monitor and Report

¹ If sample cannot be taken in month required, sample shall be collected once injection is resumed.

Table 3: Required Monitoring

PARAMETER	LOCATION	FREQUENCY
a. Chemical analyses	Each injection well which has operated in that calendar year	As described in Table 2 of Attachment 1.
b. Production volume, gallons per production well	Each production well operated anytime in the reporting period	Record current totalizer flow value weekly at totalizing gauge in the production line.
c. Injection rate, gpm ¹	Each injection well operated anytime in the reporting period.	Record both current totalizer flow value and instantaneous gpm value twice weekly on Mondays and Thursdays at instantaneous /totalizing gauge located in the injection line.
d. Injection pressure, psig ²	Each injection well operated anytime in the reporting period.	Record pressure value twice weekly on Mondays and Thursdays at an instantaneous gauge located at the injection wellhead.
e. Injection temperature, degrees Fahrenheit	Each injection well operated anytime in the reporting period.	Record temperature value weekly at a gauge located at the injection wellhead.
f. Chemicals used, amount used monthly, amount in storage	Chemical Application Point and Chemical Storage	Calculate monthly usage, and volume on-site at end of month

¹ gpm: gallons per minute

² psig: pounds per square inch gauge

All gauges used for compliance with this permit shall be calibrated pursuant to the O&M manual and documented in the monitoring reports

1. ____ The results of the chemical analyses as required above:
2. ____ For each month in the reporting period, the total volume produced for each geothermal production well in gallons.
3. ____ For each month in the reporting period, the total volume of fluid injected into each well in gallons per month and the average, lowest and highest injection rate reported in gallons per minute (gpm). Report data for each well separately.
4. ____ For each month in the reporting period, the average, lowest and highest injection pressure reported in psig for all wells (reported separately).
5. ____ For each month in the reporting period, the average, lowest and highest injection temperature reported in degrees Fahrenheit for all geothermal injection wells. If no injection has occurred, report the non-injection status and the reason the system is not in operation.

6. _____ Summary narrative analysis of monitoring activities for the reporting period. The narrative shall include, but not be limited to, any problems encountered that had or have the potential to affect the well integrity or the water quality, the type of action taken, any spills or releases at the site, and all tests performed on the wells within the project area.
7. _____ Plot of injection rate vs. time and injection pressure vs. time for IW-9 that covers at least the preceding 24 months. Rate and pressure readings shall be taken at the same time. Rate shall be plotted with weekly gallons/minute readings.
8. _____ A list of all chemicals additives used that come into contact with injected water. Report product name, monthly amount/volume used, current application rate, and amount of chemical stored on-site as of the report date.

The purpose of this checklist is to assist the Permittee and U/C program staff in ensuring that all permit conditions for monitoring are submitted.

ATTACHMENT 2 – Reporting Templates

TABLE 4 - Production Volume and Production Rates 1 st (Or 2 nd) Semi Annual Period For YR 20xx (Attachment 1 Item 3)								
Production Volumes	Well #	Units	Jan(Jul)	Feb(Aug)	Mar(Sept)	Apr(Oct)	May(Nov)	Jun(Dec)
	PW A	GAL						
Production Rate (mean average) per well and grouped by power plant with plant total								
	PW A	GPM						
Note: The Permittee may add more rows as necessary to accommodate additional production wells. The Permittee will substitute the actual production well numbers for the placeholders above.								

TABLE 5 - Injection Volume And Injection Rates 1 st (or 2 nd) Semi Annual Period for YR 20XX (Attachment 1 Item 4)								
Injection Volumes/Flows	Well #	Units	Jan(Jul)	Feb(Aug)	Mar(Sept)	Apr(Oct)	May(Nov)	Jun(Dec)
IW A	Min	GPM						
	Mean	GPM						
	Max	GPM						
Note: The Permittee may add more rows as necessary to accommodate additional injection wells. The Permittee will substitute the actual injection well numbers for the placeholders above. If the permit does not require recordkeeping of minimum and mean injection flows, then the Permittee will place “N/A” in the cell.								

TABLE 6 - Injection Temperatures (°f) And Highest Injection Pressure (Psig) 1 st (or 2 nd) Semi Annual Period for YR 20XX (Attachment 1 Item 5)								
		Units	Jan(Jul)	Feb(Aug)	Mar(Sept)	Apr(Oct)	May(Nov)	Jun(Dec)
IW A	Highest Pressure	PSIG						
	Average Temperature	°F						
Note: The Permittee may add rows to accommodate additional injection wells. The Permittee will substitute actual injection well numbers for the placeholders above.								

ATTACHMENT 3- Notifications to the Division

TABLE 7 -Permittee shall notify the Division When			
Activity	Time Frame	Required Action to NDEP	Approval required
Construction of new, or conversion of existing well to, injection well		Submit Sundry Notice to NDOM, see NDEP website for any required documentation, or contact NDEP with questions about MIT testing. Provide approved Sundry Notice to NDEP.	NDOM approval
Initial injection to well	30 days prior notice to NDEP	UIC Completion Report – UIC Form U120, including mechanical integrity test, and submit water sample results.	Written approval to inject from NDEP after submission of Completion Report.
Any modification of injection well	Before work over	Submit Sundry Notice to NDOM, see NDEP website for any required documentation, or contact NDEP with questions about MIT testing.	NDOM approval NDEP written approval
	Before placing well back into service.	Submit completion report to NDEP, water sample if necessary.	
Testing of injection well / MITs	45 days prior notice	Submit proposal to NDEP.	NDEP written approval
Construction of production well	within 60 days after completion of work	Submit well schematic with entry info, and results of water sample(s) of produced well water to NDEP.	n/a
Major modification of production well	within 60 days after completion of work	Submit updated well schematic, and results of water sample from well (examples: deepening, perforate casing, etc.).	n/a
Chemical Treatment of Water or Tracer tests	30 days prior notice	Submit UIC Form U240 to NDEP.	NDEP written approval
Well Stimulation/ Acidization		Submit Sundry Notice to NDOM.	NDOM approval