

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

UNDERGROUND INJECTION CONTROL

Permit No. UI-0000026

Owner: City of Columbia
Address: 310 East Walnut, Columbia, MO 65203

Continuing Authority: Same as above
Address: Same as above

Facility Name: Columbia Well #10
Facility Address: 2615 Scott Blvd., Columbia, MO 65203

Legal Description: NE ¼, NE ¼, Sec. 29, T48N, R13W, Boone County
UTM Coordinates: X = 551853, Y = 4308763

Receiving Stream: Overland flow to Hinkson Creek (U)
First Classified Stream and ID: Hinkson Creek (P)(01007)
USGS Basin & Sub-watershed No.: (10300102-120002)

FACILITY DESCRIPTION

Underground Injection – SIC #4941
Injection of treated and disinfected ground water into a 1,360 feet deep well for later withdrawal.
Design injection flow is 1.15 MGD.

June 10, 2011

Effective Date

Sara Parker Pauley, Director, Department of Natural Resources

June 9, 2016

Expiration Date

John Madras, Director, Water Protection Program

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 2 of 6	
					PERMIT NUMBER UI-0000026	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Injected Water</u>						
Total Dissolved Solids	mg/L	*		*	once/quarter**	grab
Chloramines	µg/L	*		*	once/quarter**	grab
<u>Withdrawal Water</u> – (before re-disinfection)						
Total Dissolved Solids	mg/L	*		*	once/quarter	grab
Chloramines	µg/L	*		*	once/quarter	grab
MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY ; THE FIRST REPORT IS DUE <u>October 28, 2011</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Part I</u> STANDARD CONDITIONS DATED <u>October 1, 1980</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

* Monitoring requirement only.

** See table below for quarterly sampling:

Sample discharge at least once for the months of:	Report is due:
January, February, March (1st Quarter)	April 28
April, May, June (2nd Quarter)	July 28
July, August, September (3rd Quarter)	October 28
October, November, December (4th Quarter)	January 28

C. SPECIAL CONDITIONS

1. This permit does not allow for the surface discharge of any water. If permittee desires to discharge water to the surface, a different Missouri State Operating Permit must first be obtained.
2. By next renewal of this permit conduct an internal mechanical integrity check of the well using any method approved by the Division of Geology and Land Survey (DGLS). Submit results to the DGLS and the Water Protection Program (WPP).
3. By next renewal of this permit conduct a geochemical modeling study of the native groundwater and injected fluids and their interaction with the surrounding geologic media. The purpose of this study is to ensure that aquifer storage and recovery operations are not reducing the porosity or permeability of the aquifer. Contact the DGLS for study requirements. Submit results of the study to the DGLS and the WPP.

STANDARD CONDITIONS FOR UNDERGROUND INJECTION CONTROL PERMIT

GENERAL CONDITIONS

Section A – MONITORING AND REPORTING

1. Representative Sampling

- a. Samples and measurements taken as required herein shall be representative of the nature and volume.

Monitoring results shall be recorded and reported, postmarked no later than the 28th day of the month following the completed reporting period. Signed copies of these, and all other reports required herein, shall be submitted to the appropriate regional office and the Division of Geology and Land Survey, P.O. Box 250, Rolla, Missouri 65401.

2. Definitions

Definitions as set forth in the Missouri Clean Water Law and Missouri Clean Water Commission Definition Regulation 10 CSR 20-2.010 shall apply to terms used herein.

3. Test Procedures

Test procedures for the analysis of pollutants shall be in accordance with the Missouri Clean Water Commission Effluent Regulation 10 CSR 20-7.015.

4. Recording of Results

- a. For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- i. The date, exact place, and time of sampling or measurements;
- ii. The individual(s) who performed the sampling or measurements;
- iii. The date(s) analyses were performed;
- iv. The individual(s) who performed the analyses;
- v. The analytical techniques or methods used; and
- vi. The results of such analyses.

- b. The Missouri Clean Water Law provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or both. 644.076.2 RSMo.

- c. Calculations of all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

5. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Monitoring Report Form. Such increased frequency shall also be indicated.

Section A – MONITORING AND REPORTING (continued)

6. Records Retention

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

SECTION B – MANAGEMENT REQUIREMENTS

1. Noncompliance Notification

- a. If, for any reason, the permittee does not comply with or will be unable to comply with any daily maximum limitation specified in this permit, the permittee shall provide the Department with the following information, in writing within five (5) days of becoming aware of such condition:
 - i. A description of the violation and cause of noncompliance, and
 - ii. The period of noncompliance, including exact dates and times or, if not corrected, that anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncompliance.
- b. Twenty-four hour reporting. The permittee shall report any noncompliance, which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

2. Facilities Operation

Permittees shall operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions.

3. Adverse Impact

The permittee shall take all necessary steps to minimize any adverse impact to waters of the state resulting from noncompliance with any limitations specified in this permit or set forth in the Missouri Clean Water Law and Regulations (hereinafter the Law and Regulations), including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

4. Removed Substances

Solids, sludge, filter backwash, or other pollutants removed in the course of treatment or control of waters shall be disposed of in a manner such as to prevent any pollutants from entering waters of the state unless permitted by the Law, and a permanent record of the date and time, volume and methods of removal and disposal of such substances shall be maintained by the permittee.

SECTION B – MANAGEMENT REQUIREMENTS (continued)

5. Right of Entry

For the purpose of inspecting, monitoring, or sampling the injection wells, point source, water contaminant source, or wastewater treatment facility for compliance with the Clean Water Law and these regulations, authorized representatives of the Department shall be allowed by the permittee, upon presentation of credentials and at reasonable times:

- a. to enter upon permittee's premises in which an injection well, point source, water contaminant source, or wastewater treatment facility is located or in which any records are required to be kept under terms and conditions of the permit;
- b. to have access to, or copy any records required to be kept under terms and conditions of the permit;
- c. to inspect any monitoring equipment or method required in the permit;
- d. to inspect any collection, treatment, or discharge facility covered under the permit; and
- e. to sample any wastewater at any point in the collection system or treatment process.

6. Permits Transferable

- a. Subject to section (3) of 10 CSR 20-6.010 an operating permit may be transferred upon submission to the Department of an application to transfer signed by a new owner. Until such time as the permit is officially transferred, the original permittee remains responsible for complying with the terms and conditions of the existing permit.
- b. The Department, within thirty (30) days of receipt of the application shall notify the new permittee of its intent to revoke and reissue or transfer the permit.

7. Availability of Reports

Except for data determined to be confidential under the Missouri Clean Water Commission Regulation for Public Participation, Hearings and Notice to Governmental Agencies 10 CSR 20-6.020, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. As required by statute, operating data shall be subject to the imposition of criminal penalties as provided for in Section 644.076 of the Law.

8. Permit Modifications

- a. Subject to compliance with statutory requirements of the Law and Regulations and applicable Court Order, 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:
 - i. violation of any terms or conditions of this permit or the Law;
 - ii. having obtained this permit by misrepresentation or failure to disclose fully all relevant facts;
 - iii. a change in any circumstances or conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge, or
 - iv. any reason set forth in the Law and Regulations.

SECTION B – MANAGEMENT REQUIREMENTS (continued)

9. Civil and Criminal Liability

Except as authorized by statute nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

10. State Laws

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 statute or regulations.

11. Property Rights

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 or violation of federal, state or local laws or regulations.

12. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for a new permit 180 days prior to expiration of this permit.

13. Signatory Requirement

All reports or information submitted to the Director shall be signed.

14. Rights Not Affected

Nothing in this permit shall affect the permittee's right to appeal or seek a variance from applicable laws or regulations as allowed by law.

15. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

Missouri Department of Natural Resources
Statement of Basis
For the Purpose of Renewal
Columbia Well #10
Permit #: UI0000026

A Statement of Basis (Statement) gives pertinent information regarding the applicable regulations and rationale for the development of the NPDES Missouri State Operating Permit (operating permit). Statements of Basis are required for all operating permits for which a Fact Sheet is not required. Statements of Basis briefly describe, among other items, the derivation of the effluent limitation and the reasons for operating permit's Special Conditions. Fact Sheets should be developed for any permit that requires complex calculations or special conditions; and this is particularly true for permit conditions based on Best Professional Judgment (BPJ).

A Statement is not an enforceable part of an operating permit.

Part I – Facility Information

Facility Description:

Aquifer Storage and Recovery Well

Comments:

The facility will be switching from chlorine to chloramines for disinfection.

Part II – Operator Certification Requirements

As per [10 CSR 20-6.010(8) Terms and Conditions of a Permit], permittees shall operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions and regulations. Operators or supervisors of operations at regulated wastewater treatment facilities shall be certified in accordance with [10 CSR 20-9.020(2)] and any other applicable state law or regulation. As per [10 CSR 20-9.010(2)(A)], requirements for operation by certified personnel shall apply to all wastewater treatment systems, if applicable, as listed below:

Not Applicable ; This facility is not required to have a certified operator.

Part III – Rationale and Derivation of Effluent Limitations & Permit Conditions

Total Dissolved Solids (TDS). Monitoring is required to ensure that TDS in the aquifer are being maintained as close as feasibly possible to native groundwater TDS levels. 10 CSR 20-7.015 (7).

Chloramines. Monitoring is being included to track the concentrations of this non-native chemical in the aquifer.

COMPLIANCE AND ENFORCEMENT:

Enforcement is the action taken by the Water Protection Program (WPP) to bring an entity into compliance with the Missouri Clean Water Law, its implementing regulations, and/or any terms and conditions of an operating permit. The primary purpose of the enforcement activity in the WPP is to resolve violations and return the entity to compliance.

Not Applicable ;

The permittee/facility is not currently under Water Protection Program enforcement action.

SCHEDULE OF COMPLIANCE (SOC):

A schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements (actions, operations, or milestone events) leading to compliance with the Missouri Clean Water Law, its implementing regulations, and/or the terms and conditions of an operating permit.

Not Applicable ;

Part IV – Administrative Requirements

On the basis of preliminary staff review and the application of applicable standards and regulations, the Department, as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions contained herein and within the operating permit. The proposed determinations are tentative pending public comment.

Date of Statement of Basis: March 7, 2011

ALAN MOREAU, ENVIRONMENTAL SPECIALIST III
NPDES PERMITS UNIT
PERMITTING AND ENGINEERING SECTION
WATER PROTECTION PROGRAM
(573) 522-2553
alan.moreau@dnr.mo.gov