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1000 SW Jackson St., Suite 400  
Topeka, KS 66612-1367



Phone: 785-296-1535  
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Lee A. Norman, M.D., Secretary

Laura Kelly, Governor

August 16, 2021

Bonner Springs, City of  
Chuck Staples  
PO Box 38  
Bonner Springs, KS 66012

RE: Kansas Public Notice No. KS-Q-21-69  
Kansas Water Pollution Control Permit  
Permit No. M-KS06-OO02  
Bonner Springs Wastewater Treatment Plant

Dear Permittee:

The enclosed public notice and draft permit pertain to the referenced pending Kansas Water Pollution Control Permit and Authorization to Discharge under the National Pollutant Discharge Elimination System (NPDES).

Regulations require this department to issue a public notice to inform interested persons of the agency's intent to issue a Kansas/Federal Water Pollution Control Permit. The notice allows a 30-day period for comment by the applicant or other interested parties. If response to the notice indicates significant interest, a public hearing may be held. Please post the draft permit and the public notice in a conspicuous public place in your place of business (if a private business) or other public building (if a governmental entity) until the Comments Due Date identified in the public notice.

Also, please note that if the permit requires routine monitoring and reporting, the table under section A will contain a new term called "EDMR code". This term stands for Electronic Discharge Monitoring Report and is an addition to the permits to allow all permittees, in the future, to report the discharge monitoring report data electronically instead of on paper.

Any comments you have regarding the proposed permit should be sent to this office. If you have any questions, please contact me at (785) 296-5513.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Beezhold".

Michael Beezhold  
Permits & Compliance

NE - District  
FM- Permit File



KANSAS WATER POLLUTION CONTROL PERMIT AND  
AUTHORIZATION TO DISCHARGE UNDER  
THE NATIONAL POLLUTANT DISCHARGE  
ELIMINATION SYSTEM

Pursuant to the Provisions of Kansas Statutes Annotated 65-164 and 65-165, the Federal Water Pollution Control Act as amended, (33 U.S.C. 1251 et seq; the "Act"),

Owner: Bonner Springs, City of

Owner's Address: 205 E. 2nd  
P.O. Box 38  
Bonner Springs, Kansas 66012

Facility Name: Bonner Springs Wastewater Treatment Plant

Facility Location: 12021 Kaw Drive  
Bonner Springs, Kansas 66012  
SE $\frac{1}{4}$ , NW $\frac{1}{4}$ , SE $\frac{1}{4}$ , Section 28, Township 11S, Range 23E,  
Wyandotte County, Kansas  
Latitude: 39.06329 Longitude: -94.8605

OUTFALL Location: Latitude: 39.06308 Longitude: -94.86115

Receiving Stream: Kansas River  
Basin: Kansas River Basin

DRAFT

is authorized to discharge from the wastewater treatment facility described herein, in accordance with effluent limits and monitoring requirements as set forth herein.

This permit is effective \_\_\_\_\_ and supersedes the previously issued water pollution control permit M-KS06-0002 and expires \_\_\_\_\_.

FACILITY DESCRIPTION:

1. Extended aeration activated sludge plant
2. Two oxidation ditches
3. Two final clarifiers
4. Gravity sludge thickening
5. Belt press dewatering
6. UV disinfection of effluent
7. Design flows:
  - Average Daily, 1.4 MGD
  - Peak Wet Weather Daily, 3.5 MGD

\_\_\_\_\_  
Secretary, Kansas Department of Health and Environment

\_\_\_\_\_  
Date

**A. EFFLUENT LIMITS AND MONITORING REQUIREMENTS**

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in this permit. The effluent limits shall become effective on the dates specified herein. Such discharges shall be controlled, limited, and monitored by the permittee as specified. There shall be no discharge of floating solids or visible foam in other than trace amounts.

Monitoring reports shall be submitted on or before the 28<sup>th</sup> day of the following month. In the event no discharge occurs, notification is still required.

<u>Parameter</u>	<u>Final Limits</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
<b><u>Monitoring Location 001AG (EDMR code: INF001AG) - Influent to the Treatment Plant</u></b>			
Biochemical Oxygen Demand (5-Day)-mg/l	Monitor	Once Monthly	24-Hour Composite
Total Suspended Solids-mg/l	Monitor	Once Monthly	24-Hour Composite
Total Phosphorus (as P)-mg/l	Monitor	Once Monthly	24-Hour Composite
Total Kjeldahl Nitrogen (as N)-mg/l	Monitor	Once Monthly	24-Hour Composite
<b><u>Outfall 001A1 (EDMR code: EFF001A1) - Effluent at effluent sampling point</u></b>			
Biochemical Oxygen Demand (5-Day) <sup>1</sup>		Once Monthly	24-Hour Composite
Weekly Average-mg/l	45		
Monthly Average-mg/l	30		
Total Suspended Solids <sup>1</sup>		Once Monthly	24-Hour Composite
Weekly Average-mg/l	45		
Monthly Average-mg/l	30		
Ammonia (as N)-mg/l		Once Monthly	24-Hour Composite
<b>Jan, Feb, Mar.</b>			
Daily Maximum	17.4		
Monthly Average	17.4		
<b>April</b>			
Daily Maximum	13.9		
Monthly Average	12.0		
<b>May</b>			
Daily Maximum	8.7		
Monthly Average	7.9		
<b>June</b>			
Daily Maximum	5.9		
Monthly Average	5.5		
<b>July</b>			
Daily Maximum	4.2		
Monthly Average	3.9		
<b>August</b>			
Daily Maximum	4.4		
Monthly Average	4.2		

A. EFFLUENT LIMITS AND MONITORING REQUIREMENTS (continued)Outfall 001A1 (EDMR code: EFF001A1) - Effluent at effluent sampling point (continued)

Ammonia (as N)-mg/l (continued)		Once Monthly	24-Hour Composite
<b>September</b>			
Daily Maximum	5.8		
Monthly Average	5.4		
<b>October</b>			
Daily Maximum	10.8		
Monthly Average	9.6		
<b>November</b>			
Daily Maximum	17.4		
Monthly Average	15.3		
<b>December</b>			
Daily Maximum	18.2		
Monthly Average	18.2		
E.coli - Colonies/100 ml		Once Monthly	Grab
<b>November thru March</b>			
Monthly Geometric Average	2358		
<b>April 1 thru October 31</b>			
Weekly Geometric Average	4348		
Monthly Geometric Average	262		
pH - Standard Units	6.0-9.0	Once Monthly	Grab
Total Phosphorus (as P) <sup>4</sup>		Once Monthly	24-Hour Composite
Monthly Avg. Concentration - mg/l	Monitor		
Monthly Avg. Load - lbs/day	Monitor		Calculated <sup>3</sup>
Total Kjeldahl Nitrogen as N-mg/l <sup>2</sup>	Monitor	Once Monthly	24-Hour Composite
Nitrate + Nitrite (as N)-mg/l <sup>2</sup>	Monitor	Once Monthly	24-Hour Composite
Total Nitrogen (TKN + NO <sub>3</sub> + NO <sub>2</sub> ) (as N) <sup>2,4</sup>		Once Monthly	Calculated <sup>3</sup>
Monthly Avg. Concentration -mg/l	Monitor		
Monthly Avg. Load - lbs/day	Monitor		
Flow - MGD	Monitor	Daily	Meter

Outfall 001W1 (EDMR Code: EFF001W1) - Effluent at Sampling Point 001A1

Whole Effluent Toxicity Test	See Biomonitoring and Priority Pollutants G.1
Priority Pollutant Scan	See Biomonitoring and Priority Pollutants G.2

A. EFFLUENT LIMITS AND MONITORING REQUIREMENTS (continued)

Parameter	Interim Limits	Final Limits	Measurement Frequency	Sample Type
<u>TMDL Calculation 001TT (EDMR code: TMDL001TT) - Annual Average Calculations at Effluent Outfall 001A1</u>				
Total Phosphorus (as P) <sup>4,5</sup>			Monthly	Calculated <sup>3</sup>
Annual Avg. Concentration-mg/l	Monitor	Monitor		
Annual Avg. Load - lbs/day	Monitor	11.7		
Total Nitrogen (as N) <sup>4</sup>			Monthly	Calculated <sup>3</sup>
Annual Avg. Concentration-mg/l	Monitor	Monitor		
Annual Avg. Load - lbs/day	Monitor	Monitor		

1. Minimum removal of 85% required for Biochemical Oxygen Demand (5-Day) and Total Suspended Solids. If inhibited Biochemical Oxygen Demand (5-Day) test is used, limits are 5 mg/l less than shown.
2. Permittee shall sample for these tests on the same day. The Minimum Reportable Limit (MRL) for TKN is 1 mg/l and for nitrate + nitrite is 0.1 mg/l. Values less than the MRL shall be reported using the less than sign (<) with the MRL value but for purposes of calculating and reporting the total nitrogen result, less than values shall be defaulted to zero.
3. The values for parameters shown as "Calculated" will be calculated by the on-line eDMR program. The values cannot be entered into the on-line eDMR program by the permittee. In addition to these calculated values, for parameters with Annual Daily Mass reporting requirements, the permittee will see monthly average values calculated by the eDMR program and displayed in the raw data tables. The monthly average parameter short name and (parameter code) for total phosphorus is T-P MA (KS665) and for total nitrogen is T.N2 MA (KS600) in mg/l and lbs/day. The monthly averages are required intermediary calculated values used for purposes of calculating the annual averages and are shown for purposes of checking those calculations. The annual average calculations are for a rolling 12-month time period calculated on a monthly basis.
4. See D. Special Conditions
5. See Schedule of Compliance.

B. STANDARD CONDITIONS

In addition to the specified conditions stated herein, the permittee shall comply with the attached Standard Conditions dated March 1, 2018.

C. SLUDGE DISPOSAL

Sludge disposal shall be in accordance with the 40 CFR Part 503 Sludge Regulations.

#### D. SPECIAL CONDITIONS

This wastewater treatment facility is not designed and built to provide for nutrient removal. However, other similar wastewater treatment facilities have been able to achieve nutrients goals with operational changes and with little bought equipment. The permittee will operate the treatment facility to maximize the level of nutrient removal with the intent of achieving the following target effluent levels:

- A. Total Nitrogen  $\leq$  10.0 mg/l as an annual average goal.
- B. Total Phosphorus  $\leq$  1.0 mg/l as an annual average goal.
- C. Total Phosphorus  $\leq$  11.7 pounds/day as an annual average limit.

These target concentration values (mg/l) are not to be considered as effluent limits for this permit. However, the total phosphorus mass loading (lbs/day) value is an enforceable permit limit through the special conditions and schedule of compliance of this permit. The annual averages are for a rolling 12-month time period calculated on a monthly basis.

KDHE reserves the right to reopen this permit to impose limits for nutrients pursuant to Kansas law when such criteria are adopted in the Kansas Surface Water Quality Standards.

#### E. SCHEDULE OF COMPLIANCE

A Total Maximum Daily Load for total phosphorus has been adopted in the Kansas Surface Water Quality Standards including a Waste Load Allocation for the Bonner Springs Wastewater Treatment Plant. The final total phosphorus mass loading limit for Annual Rolling Average 001TT is imposed through the special conditions and following schedule of compliance of this permit.

Through a contract with KDHE, the facility has been referred to receive operational training for nutrient removal. The permittee shall implement the operational changes as recommended by the technical assistance providers. The Final limits for Outfall 001TT as presented in Part A "Effluent Limits and Monitoring Requirements" will be effective April 1, 2024.

#### F. ADDITIONAL INFORMATION

EPA has promulgated a final rule requiring regulated entities to report DMR data electronically. Also, KAR 28-16-63 requires permittees to report NPDES data in a form required by KDHE. KDHE has developed electronic reporting tools to assist permittees in complying with the EPA electronic reporting rule and KAR 28-61-63. Unless a waiver has been approved by KDHE, permittees are required to submit reports electronically.

#### G. BIOMONITORING AND PRIORITY POLLUTANTS

##### 1. Whole Effluent Toxicity:

- a. Chronic Whole Effluent Toxicity (WET) testing on a 24-hr composite sample of the effluent shall be conducted in calendar year 2022 and annually thereafter. The 25% Inhibition Concentration, IC25, shall be equal to or greater than 11% effluent. Test results less than 11% are violations of this permit. The test procedures shall use the seven-day static renewal test method in accordance with the EPA document, Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, fourth edition, October 2002 using test organisms Pimephales promelas (fathead minnow) and Ceriodaphnia dubia (water flea) within a dilution series containing 0%, 11%, 25%, 50%, 75%, and 100% effluent. KDHE reserves the right to increase or decrease testing frequency based upon compliance history and toxicity testing results.
- b. If the WET test results indicate the IC25 is equal to or greater than 11% effluent, the effluent has passed the toxicity test. Samples results shall be submitted to [kdhe.dmr4kdhe@ks.gov](mailto:kdhe.dmr4kdhe@ks.gov) within 30 days of receipt of the results.

G. BIOMONITORING AND PRIORITY POLLUTANTS (continued)

c. If the WET test results indicate the IC25 is less than 11% effluent, the effluent has failed the toxicity test and the permittee shall immediately notify KDHE by telephone at (785) 296-5517 and submit to KDHE a copy of the test report within five days of receipt of the information. KDHE reserves the right to require the permittee to take such actions as are reasonable to identify and remedy any identified or predicted toxic conditions in the receiving stream outside of the mixing zone which is caused by the permittee's effluent.

d. Permittee shall also test a portion of the same effluent sample used for the WET test for the following substances (required minimum reportable limit are in parenthesis):

Antimony (10 µg/L)*	Nickel (10 µg/L)*
Arsenic (10 µg/L)*	Selenium (5 µg/L)*
Beryllium (5 µg/L)*	Silver (2 µg/L)*
Cadmium (2 µg/L)*	Thallium (10 µg/L)*
Chromium (10 µg/L)*	Zinc (20 µg/L)*
Copper (10 µg/L)*	Ammonia as "N" (0.2 mg/l)
Lead (5 µg/L)*	Total Hardness as CaCO3 mg/l
Mercury (0.2 µg/L-Cold Vapor Method)	

e. The permittee shall coordinate sampling for this test with other requirements of this permit. The permittee shall use a laboratory approved by KDHE for Whole Effluent Toxicity testing.

2. Priority Pollutant Scan

Permittee shall conduct a Priority Pollutant Scan on the effluent for the parameters listed in Table I, Priority Pollutant Scan, on the following pages. The Priority Pollutant Scan shall be conducted once in calendar year 2022, once in calendar year 2024, and once in calendar year 2026. Samples results shall be submitted to [kdhe.dmr4kdhe@ks.gov](mailto:kdhe.dmr4kdhe@ks.gov) within 30 days of receipt of the results.

Sample type shall be 24-hour composite except for Volatiles which shall be a grab sample. See Biomonitoring and Priority Pollutants G.1.d. for minimum detection limits for certain metals in the Priority Pollutant Scan.



**Table I - Priority Pollutant Scan\***

<u>Metals (µg/l)</u>	<u>Base/Neutral (µg/l)</u>	<u>Acid Compounds (µg/l)</u>
Total Antimony	Acenaphthene	2-chlorophenol Total Arsenic
Total Arsenic	Acenaphthylene	2,4-dichlorophenol
Total Beryllium	Anthracene	2,4-dimethylphenol
Total Cadmium	Benzidine	2,4-dinitrophenol
Total Chromium	Benzo(a) anthracene	2-nitrophenol
Total Copper	Benzo(a)pyrene	4-nitrophenol
Total Lead	Benzo(k)fluoranthene	Parachlorometa cresol
Total Mercury	Benzo (ghi) perylene	Pentachlorophenol
Total Nickel	Benzo (b) fluoranthene	Phenol
Total Selenium	Bis(2-chloroethoxy)methane	4,6-dinitro-o-cresol
Total Silver	Bis(2-chloroethyl)ether	2,4,6-trichlorophenol
Total Thallium	Bis(2-ethylhexyl)phthalate	
Total Zinc	Bis(2-chloroisopropyl) ether	<u>Volatiles (µg/l)</u>
	1,2-diphenylhydrazine	Acrolein
	Fluoranthene	Acrylonitrile
	Fluorene	Benzene
	Nitrobenzene	Bromoform
	N-nitrosodimethylamine	Carbon Tetrachloride
	N-nitrosodi-n-propylamine	Chlorobenzene
	N-nitrosodiphenylamine	Chlorodibromomethane
	Phenanthrene	Chloroethane
	Pyrene	2-chloroethylvinyl ether
	1,2,4-trichlorobenzene	Chloroform
	4-bromophenyl phenyl ether	Dichlorobromomethane
	Butyl benzyl phthalate	1,1-dichloroethane
	2-chloronaphthalene	1,2-dichloroethane
	4-chlorophenyl phenyl ether	1,1-dichloroethylene
	Chrysene	1,2-dichloropropane
	Dibenzo(a,h) anthracene	1,3-dichloropropylene
	1,2-dichlorobenzene	Ethylbenzene
	1,3-dichlorobenzene	Methyl bromide
	1,4-dichlorobenzene	Methyl chloride
	3,3-dichlorobenzidine	Methylene chloride
	Dimethyl phthalate	1,1,2,2-tetrachloroethane
	Diethyl phthalate	Tetrachloroethylene
	Di-n-butyl phthalate	Toluene
	2,4-dinitrotoluene	1,2 trans-dichloroethylene
	2,6-dinitrotoluene	1,1,1-trichloroethane
	Di-n-octyl phthalate	1,1,2-trichloroethane
	Hexachlorobenzene	Trichloroethylene
	Hexachlorobutadiene	Vinyl chloride
	Hexachlorocyclopentadiene	
	Hexachloroethane	<u>Miscellaneous</u>
	Indeno (1,2,3-cd) pyrene	Total Cyanide (mg/l)***
	Naphthalene	Asbestos (ent/l)
	Isophorone	2,3,7,8-TCDD (Dioxin) (µg/l)

\* Testing not required for pollutants with a strike-through.

\*\* Scientific name is hexachlorocyclohexane

\*\*\* The total cyanide analysis must include preliminary treatment of the sample to avoid NO<sub>2</sub><sup>-</sup> interference. See Standard Methods for the Examination of Water and Wastewater, 22nd Edition, 4500-CN B. Preliminary Treatment of Samples.

STANDARD CONDITIONS FOR  
KANSAS WATER POLLUTION CONTROL AND  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMITS

1. Representative Sampling and Discharge Monitoring Report Submittals:

- A. Samples and measurements taken as required herein shall be representative of the quality and quantity of the monitored discharge. Test results shall be recorded for the day the samples were taken. If sampling for a parameter was conducted across more than one calendar day, the test results may be recorded for the day sampling was started or ended. All samples shall be taken at the locations designated in this permit, and unless specified, at the outfall/monitoring location(s) before the wastewater joins or is diluted by any other water or substance.
- B. Monitoring results shall be recorded and reported on forms acceptable to the Division and submitted no later than the 28th day of the month following the completed reporting period. Signed and certified copies of other reports, required herein, prepared in accordance with KAR 28-16-59, may be faxed to 785.559.4257, e-mailed as scanned attachments to [kdhe.dmr4kdhe@ks.gov](mailto:kdhe.dmr4kdhe@ks.gov), or sent by U.S. mail to:

Kansas Department of Health & Environment  
Bureau of Water-Technical Services Section  
1000 SW Jackson Street, Suite 420  
Topeka, KS 66612-1367

2. Definitions:

- A. Unless otherwise specifically defined in this permit, the following definitions apply:
1. The "Daily Maximum" is the total discharge by weight or average concentration, measurement taken, or value calculated during a 24-hour period. The parameter, pH, is limited as a range between and including the values shown.
  2. The "Weekly Average" is the arithmetic mean of the value of test results from samples collected, measurements taken, or values calculated during four monitoring periods in each month consisting of calendar days 1-7, 8-14, 15-21 and 22 through the end of the month.
  3. The "Monthly Average", other than for E. coli bacteria, is the arithmetic mean of the value of test results from samples collected, measurements taken, or values calculated during a calendar month. The monthly average is determined by the summation of all calculated values or measured test results divided by the number of calculated values or test results reported for that parameter during the calendar month. The monthly average for E. coli bacteria is the geometric average of the value of the test results from samples collected in a calendar month. The geometric average can be calculated by using a scientific calculator to multiply all the E. coli test results together and then taking the nth root of the product where n is the number of test results. Non-detect values shall be reported using the less than symbol (<) and the minimum detection or reportable value. To calculate average values, non-detects shall be defaulted to zero (or one for geometric averages). Greater than values shall be reported using the greater than symbol (>) and the reported value. To calculate average values, the greater than reported value shall be used in the averaging calculation.
- B. A "grab sample" is an individual sample collected in less than 15 minutes. A "composite sample" is a combination of individual samples in which the volume of each individual sample is proportional to the flow, or the sample frequency is proportioned to the flow rate over the sample period, or the sample frequency is proportional to time.
- C. The terms "Director", "Division", and "Department" refer to the Director, Division of Environment, Kansas Department of Health, and Environment, respectively.
- D. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of an in-plant diversion. Severe property damage does not mean economic loss caused by delays in production.
- E. "Bypass" means the intentional diversion of waste streams from any portion of the treatment facility.

3. **Schedule of Compliance:** No later than 14 calendar days following each date identified in the "Schedule of Compliance," the permittee shall submit via mail, e-mail or fax per paragraph 1.B above, either a report of progress or, in the case of specific action being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements, or, if there are no more scheduled requirements, when such noncompliance will be corrected.
4. **Test Procedures:** All analyses required by this permit shall conform to the requirements of 40 CFR Part 136, unless otherwise specified, and shall be conducted in a laboratory accredited by the Department. For each measurement or sample, the permittee shall record the exact place, date, and time of measuring/sampling; the date and time of the analyses, the analytical techniques or methods used, minimum detection or reportable level, and the individual(s) who performed the measuring/sampling and analysis and, the results. If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved procedures, the results shall be included in the Discharge Monitoring Report form required in 1.B. above. Such increased frequencies shall also be indicated.
5. **Change in Discharge:** All discharges authorized herein shall be consistent with the permit requirements. The discharge of any pollutant not authorized by this permit or of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of this permit. Any anticipated facility expansions, production or flow increases, or production or wastewater treatment system modifications which result in a new, different, or increased discharge of pollutants shall be reported to the Division at least one hundred eighty (180) days before such change.
6. **Facilities Operation:** The permittee shall always properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the requirements of this permit and Kansas and Federal law. Proper operation and maintenance also include adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the requirements of this permit. The permittee shall take all necessary steps to minimize or prevent any adverse impact to human health or the environment resulting from noncompliance with any effluent limits specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge. When necessary to maintain compliance with the permit requirements, the permittee shall halt or reduce those activities under its control which generate wastewater routed to this facility.

7. **Incidents:**

"Collection System Diversion" means the diversion of wastewater from any portion of the collection system.

"In-Plant Diversion" means routing the wastewater around any treatment unit in the treatment facility through which it would normally flow.

"In-Plant Flow Through" means an incident in which the wastewater continues to be routed through the equipment even though full treatment is not being accomplished because of equipment failure for any reason.

"Spill" means any discharge of wastewater, sludge or other materials from the treatment facility other than effluent or as more specifically described by other "Incidents" terms.

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance or anticipated noncompliance with permit effluent limits because of factors beyond the reasonable control of the permittee, as described by 40 C.F.R. 122.41(n).

8. **Diversions not Exceeding Limits:** The permittee may allow any diversion to occur which does not cause effluent limits to be exceeded, but only if it also is for essential maintenance to assure efficient operation. Such diversions are not subject to the Incident Reporting requirements shown below.
9. **Prohibition of an In-Plant Diversion:** Any in-plant diversion from facilities necessary to maintain compliance with this permit is prohibited, except: (a) where the in-plant diversion was unavoidable to prevent loss of life, personal injury, or severe property damage; (b) where there were no feasible alternatives to the in-plant diversion, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime and (c) the permittee submitted a notice as required in the Incident Reporting paragraph below. The Director may approve an anticipated in-plant diversion, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above.

10. **Incident Reporting:** The permittee shall report any unanticipated collection system diversion, in-plant diversion, in-plant flow through occurrences, spill, upset, or any violation of a permitted daily maximum limit within 24 hours from the time the permittee became aware of the incident. A written submission shall be provided within 5 days of the time the permittee became aware of the incident. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance, including exact dates and times; and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. An Incident Report form is available at [www.kdheks.gov/water/tech.html](http://www.kdheks.gov/water/tech.html).

For an anticipated incident or any planned changes or activities in the permitted facility that may result in noncompliance with the permit requirements, the permittee shall submit written notice, if possible, at least ten days before the date of the event.

For other noncompliance, the above information shall be provided with the next Discharge Monitoring Report.

11. **Removed Substances:** Solids, sludges, filter backwash, or other pollutants removed in the course of treatment of water shall be utilized or disposed of in a manner acceptable to the Division.
12. **Power Failures:** The permittee shall provide an alternative power source sufficient to operate the wastewater control facilities or otherwise control pollution and all discharges upon the loss of the primary source of power to the wastewater control facilities.
13. **Right of Entry:** The permittee shall allow authorized representatives of the Division of Environment or the Environmental Protection Agency upon the presentation of credentials, to enter upon the permittee's premises where an effluent source is located, or in which are located any records required by this permit, and at reasonable times, to have access to and copy any records required by this permit, to inspect any facilities, monitoring equipment or monitoring method required in this permit, and to sample any influents to, discharges from or materials in the wastewater facilities.
14. **Transfer of Ownership:** The permittee shall notify the succeeding owner or controlling person of the existence of this permit by certified letter, a copy of which shall be forwarded to the Division. The succeeding owner shall secure a new permit. This permit is not transferable to any person except after notice and approval by the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary.
15. **Records Retention:** Unless otherwise specified, all records and information resulting from the monitoring activities required by this permit, including all records of analyses and calibration and maintenance of instruments and recordings from continuous monitoring instruments, shall be retained for a minimum of 3 years, or longer if requested by the Division. Biosolids/sludge records and information are required to be kept for a minimum of 5 years, or longer if requested by the Division. Groundwater monitoring data, including background samples results, shall be kept for the life of the facility regardless of ownership.
16. **Availability of Records:** Except for data determined to be confidential under 33 USC Section 1318, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. Effluent data shall not be considered confidential. Knowingly making any false statement on any such report or tampering with equipment to falsify data may result in the imposition of criminal penalties as provided for in 33 USC Section 1319 and KSA 65-170c.
17. **Permit Modifications and Terminations:** As provided by KAR 28-16-62, after notice and opportunity for a hearing, this permit may be modified, suspended or revoked or terminated in whole or in part during its term for cause as provided, but not limited to those set forth in KAR 28-16-62 and KAR 28-16-28b through g. The permittee shall furnish to the Director, within a reasonable amount of time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish upon request, copies of all records required to be kept by this permit. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

18. **Toxic Pollutants:** Notwithstanding paragraph 17 above, if a toxic effluent standard or prohibition (including any schedule of compliance specified at such effluent standards) is established under 33 USC Section 1317(a) for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition. Nothing in this permit relieves the permittee from complying with federal toxic effluent standards as promulgated pursuant to 33 USC Section 1317.
19. **Administrative, Civil and Criminal Liability:** The permittee shall comply with all requirements of this permit. Except as authorized in paragraph 9 above, nothing in this permit shall be construed to relieve the permittee from administrative, civil or criminal penalties for noncompliance as provided for in KSA 65-161 et seq., and 33 USC Section 1319.
20. **Oil and Hazardous Substance Liability:** 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 to which the permittee is or may be subject to under 33 USC Section 1321 or KSA 65-164 et seq. A municipal permittee shall promptly notify the Division by telephone upon discovering crude oil or any petroleum derivative in its sewer system or wastewater treatment facilities.
21. **Industrial Users:** A municipal permittee shall require any industrial user of the treatment works to comply with 33 USC Section 1317, 1318 and any industrial user of storm sewers to comply with 33 USC Section 1308.
22. **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 infringements of or violation of federal, state, or local laws or regulations.
23. **Operator Certification:** The permittee shall, if required, ensure the wastewater facilities are under the supervision of an operator certified by the Department. If the permittee does not have a certified operator or loses its certified operator, appropriate steps shall be taken to obtain a certified operator as required by KAR 28-16-30 et seq.
24. **Severability:** The provisions of this permit are severable. If any provision of this permit or any circumstance is held invalid, the application of such provision to other circumstances and the remainder of the permit shall not be affected thereby.
25. **Removal from Service:** The permittee shall inform the Division at least three months before a pumping station, treatment unit, or any other part of the treatment facility permitted by this permit is to be removed from service and shall make arrangements acceptable to the Division to decommission the facility or part of the facility being removed from service such that the public health and waters of the state are protected.
26. **Duty to Reapply:** A permit holder wishing to continue any activity regulated by this permit after the expiration date, must apply for a new permit at least 180 days prior to expiration of the permit.
27. **Publicly owned treatment works (POTWs):** All POTWs shall provide adequate notice to the Director of the following per 40 CFR 122.42(b):
  - A. Any new introduction of pollutants into the POTW from a non-domestic source which would be subject to section 301 or 306 of the CWA ; and
  - B. Any substantial change in the volume or character of pollutants being introduced into a POTW by a non-domestic source.
  - C. For purposes of this paragraph, adequate notice shall mean within 30 days of the POTW being aware of the introduction of pollutants and shall include information on the quality and quantity of influent introduced into the POTW, and any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
28. **POTW regulated pretreatment program requirements:** For POTWs with an approved pretreatment program, the POTW shall:
  - A. Identify, in terms of character and volume of pollutants, any Significant Industrial Users discharging into the POTW subject to Pretreatment Standards under section 307(b) of CWA and 40 CFR part 403.
  - B. Provide to KDHE and EPA a written technical evaluation of the need to develop new local limits or revise existing local limits under 40 CFR 403.5(c)(1).
29. This permit may be reopened and modified if KDHE and/or EPA determines the permittee shall develop and approved pretreatment program that complies with 40 CFR, Part 403.

## FACT SHEET

DATE: July 27, 2021  
FACILITY: Bonner Springs MWWTP  
KANSAS PERMIT No.: M-KS06-0002  
FEDERAL PERMIT No.: KS0082881  
LOCATION: SE¼, NW¼, SE¼, Section 28, T11S, R23E,  
Wyandotte County, Kansas

**PROPOSED ACTION:** The proposed action consists of reissuance of a Kansas/NPDES Water Pollution Control permit for an existing wastewater treatment facility.

**EXISTING PERMIT:** The existing permit was issued for a design daily flow of 1.4 MGD and included technology base effluent limits for biochemical oxygen demand, total suspended solids and pH, and water quality-based limits for E. coli. Monitoring for ammonia, nutrients, lead and daily flow was required.

**FACILITY DESCRIPTION:** The facility is an extended aeration activated sludge plant consisting of two oxidation ditches, two final clarifiers, gravity sludge thickening and a belt filter dewatering press, and UV disinfection of effluent. The facility receives domestic wastewater from residential and commercial areas and industrial wastewater from local manufacturers.

**RECEIVING STREAM:** The Bonner Springs Wastewater Treatment Plant discharges to the Kansas River HUC 10270104 (Segment 2). Pursuant to the Kansas Surface Water Quality Standards K.A.R 28-16-28 (b-g), the first classified stream is the Kansas River. The Kansas River (Segment 2) is designated for special aquatic life use, domestic water supply, food procurement, groundwater recharge, industrial water supply, irrigation use, livestock watering, and primary "B" contact recreation.

**PROPOSED LIMITS:** The proposed permit is based on a design average flow of 1.4 MGD to the Kansas River. The actual average two-year flow is 0.541 MGD. The permit retains the existing technology base effluent limits for biochemical oxygen demand, total suspended solids, and pH, and water quality-based limits for ammonia, E.coli. Monitoring will continue to be required for nutrients and daily flow. Since the average effluent flow is 0.541 MGD, this permit is being reissued in accordance with the Basinwide Permit Planning Procedure, with sampling frequency of monthly for conventional pollutants, monthly for nutrients, daily monitoring of effluent flow, and a reporting frequency of monthly. Effluent limits are required for biochemical oxygen demand, total suspended solids, ammonia, pH and E.coli.

Chronic Whole Effluent Toxicity and heavy metals testing will be required in calendar year 2022 and yearly thereafter. A Priority Pollutant Scan will be required to be performed in calendar years 2022, 2024, and 2026 during the life of the permit. KDHE retains the right to increase or decrease testing requirements based upon the test results and require the permittee to conduct investigations and correction of any toxic conditions caused in the receiving stream by the facility's effluent.

This facility was not designed to achieve nutrient removal. However, in keeping with the Kansas Nutrient Management Plan, a special condition requires the permittee to operate the facility to maximize the level of nutrient removal by reviewing possible changes in the operation of the facility to achieve target values of 10.0 mg/l total nitrogen and 1.0 mg/l total phosphorus as annual averages. Also, a special condition requires the permittee to operate the facility to maximize phosphorus removal to achieve the Total Phosphorus TMDL based Waste Load Allocation final limit of 11.7 pounds per

day as an annual rolling average. The total phosphorus mass loading limit will be effective as outlined in the schedule of compliance.

The basis of the effluent and monitoring applied in this NPDES permit are as follows:

Parameter/Frequency/Unit	Limit	Basis
Biochemical Oxygen Demand		
Weekly Average- mg/L	45	KS Surface Water Quality Standards
Monthly Average- mg/L	30	
Total Suspended Solids		
Monthly Average - mg/L	45	-EPA Secondary Treatment Regulation
Weekly Average - mg/L	30	
pH - standard units	6.0-9.0	-EPA Secondary Treatment Regulation
Ammonia - mg/L		
<b>January through March</b>		-KS Surface Water Quality Standards
Daily Maximum	17.4	
Monthly Average	17.4	
<b>April</b>		
Daily Maximum	13.9	
Monthly Average	12.0	
<b>May</b>		
Daily Maximum	8.7	
Monthly Average	7.9	
<b>June</b>		
Daily Maximum	5.9	
Monthly Average	5.5	
<b>July</b>		
Daily Maximum	4.2	
Monthly Average	3.9	
<b>August</b>		
Daily Maximum	4.4	
Monthly Average	4.2	
<b>Sept.</b>		
Daily Maximum	5.8	
Monthly Average	5.4	
<b>October</b>		
Daily Maximum	10.8	
Monthly Average	9.6	
<b>November</b>		
Daily Maximum	17.4	
Monthly Average	15.3	
<b>December</b>		
Daily Maximum	18.2	
Monthly Average	18.2	

E. coli - colonies/100 mL <b>November – March</b> Monthly Geometric Avg.	2358	-KS Surface Water Quality Standards
<b>April – October</b> Monthly Geometric Avg.	262	
Weekly Geometric Avg.	4348	
Total Phosphorus Monthly Avg. Concentration -mg/l Monthly Avg. Load – lbs/day	Monitor Monitor	-KS Nutrient Reduction Plan
Annual Avg. Concentration – mg/l Annual Avg. Load – lbs/day	Monitor 11.7	-Annual Conc. Goal of 1.0 mg/l -KS TP TMDL Listing
Nitrates + Nitrites (NO <sub>3</sub> +NO <sub>2</sub> ) – mg/L	Monitor	-KS Nutrient Reduction Plan
Total Kjeldahl Nitrogen (TKN) – mg/L	Monitor	-KS Nutrient Reduction Plan
Total Nitrogen (TKN + NO <sub>3</sub> + NO <sub>2</sub> ) Monthly Avg. Concentration -mg/l Monthly Avg. Load – lbs/day	Monitor Monitor	-KS Nutrient Reduction Plan
Annual Avg. Concentration – mg/l Annual Avg. Load – lbs/day	Monitor Monitor	-Annual Conc. Goal of 10.0 mg/l
Chronic Whole Effluent Toxicity - %Eff	≥ 11%	-KS Surface Water Quality Standards

**303(d) and TMDL LIST:** The 2020 Kansas Water Quality Limited Segments 303(d) List shows the receiving stream the Kansas River (Segment 2) is impaired by total suspended solids. Total suspended solids have permit limits. A TMDL has been written for biology, biological sediment, E.coli, and phosphorus, and the reissued permit has water quality-based limits for both Biochemical Oxygen Demand and E.coli/ Total phosphorus has a target concentration goal of 1.0 mg/l and a final mass loading limit of 11.7 lbs/day limit for the permittee to attain.

**SCHEDULE OF COMPLIANCE:** The proposed permit contains the following schedule of compliance:

A Total Maximum Daily Load for total phosphorus has been adopted in the Kansas Surface Water Quality Standards including a Waste Load Allocation for the Bonner Springs Wastewater Treatment Plant. The final total phosphorus mass loading limit for Annual Rolling Average 001TT is imposed through the special conditions and following schedule of compliance of this permit.

Through a contract with KDHE, the facility has been referred to receive operational training for nutrient removal. The permittee shall implement the operational changes as recommended by the technical assistance providers. The Final limits for Outfall 001TT as presented in Part A “Effluent Limits and Monitoring Requirements” will be effective April 1, 2024.

**WHOLE EFFLUENT TOXICITY (WET) TEST:** The Chronic Whole Effluent Toxicity (WET) Tests have been conducted each year as required. The 7-day chronic Fathead Minnows and Cladoceran tests as noted from the Pace Analytical Services, LLC results indicate the Bonner Springs effluent discharges were acceptable as described in EPA 821-R-02-13.

The WET test also includes testing for certain metals. The table below shows the detected metals.



<u>Parameter</u>	<u>Samples</u>	<u>Report Limit</u>	<u>Water Quality Limit</u>
Copper	16.9µg/l	10.0µg/l	65.0 µg/l
Zinc	135µg/l	50.0µg/l	466.0 µg/l

All metals detected tested below the Water Quality Based (WQB) effluent limits, therefore no further action is required. The proposed permit will require WET testing in calendar year 2022 and yearly thereafter.

PRIORITY POLLUTANT SCAN: The November 10, 2020 Priority Pollutant Scan (PPS) report by Pace Analytical Services, LLC showed 2 parameters detected above the PQL. The table below shows the detected parameters.

<u>Parameter</u>	<u>Sample</u>	<u>PQL</u>	<u>Water Quality Limit</u>
Copper	10.5 µg/l	10.0 µg/l	65.0 µg/l
Zinc	217 µg/l	50.0 µg/l	466 µg/l

Both effluent Zinc and Copper parameters tested below the WQB permit effluent limits. Therefore, no further action is required. The proposed permit will require a Priority Pollutant Scan in calendar years 2022, 2024, and 2026.

STORMWATER: There were no indication from the office file reports of adverse stormwater runoff.

SLUDGE: The sludge produced at this facility is disposed of at a permitted solid waste landfill. The sludge produced at this facility is subject to the 40 CFR Part 503 Sludge Regulations.

CERTIFIED OPERATOR: The facility employs multiple operators with the correct level of certification (Class III) for this size of treatment facility.

Prepared By: Frank S. Moreno

Date: July 27, 2021

