



GERALD WUETCHER
DIRECT DIAL: (859) 231-3017
DIRECT FAX: (859) 259-3517
gerald.wuetcher@skofirm.com

300 WEST VINE STREET
SUITE 2100
LEXINGTON, KY 40507-1801
MAIN: (859) 231-3000
FAX: (859) 253-1093

June 24, 2021

Ms. Linda C. Bridwell, P.E.
Executive Director
Kentucky Public Service Commission
P.O. Box 615
Frankfort, KY 40602-0615

Re: *McCreary County Water District – Revisions to Sewer Tariff*

Dear Ms. Bridwell:

McCreary County Water District (“McCreary District”) gives notice of a proposed revision to its Rules and Regulations pertaining to sewer service.

McCreary District’s regulations currently limit the maximum daily concentration of antimony in the wastewater discharge of a significant industrial user to 0.09 milligrams per liter (mg/l). Pursuant to the General Pretreatment Regulations, 40 CFR Part 403, McCreary District must periodically review its effluent discharge limitations for their technical basis and revise its Rules and Regulations if necessary to continue in compliance with federal and state regulations. In November 2020 McCreary District conducted a re-evaluation of its limits on antimony in significant industrial users’ discharges and determined that the limit could be increased to 9.61 mg/l. A copy of this re-evaluation is enclosed as Exhibit A. McCreary District submitted this re-evaluation to the Kentucky Division of Water (“KDOW”), which on November 24, 2020 gave conditional approval to the proposed revision to the maximum daily concentration limit. On January 6, 2021, the KDOW gave its final approval to the revision after completion of the 30-day public comment period on the proposal. A copy of the letter granting final approval is attached as Exhibit B.

McCreary District proposes to revise Sheet 24 of its “Rates, Charges, Rules and Regulations for Furnishing Sewer Service” to reflect the increased limit for antimony. No other revisions are proposed. A revised Sheet 24 is enclosed.

Pursuant to 807 KAR 5:011, Section 11, notice of the proposed tariff revisions was first published in *McCreary County Voice* on June 17, 2021 and will be published in the next two consecutive editions of that publication. A copy of the notice has also been posted to McCreary

Ms. Linda C. Bridwell, P.E.
June 24, 2021
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District's website. A copy of the notice is enclosed as Exhibit C. Evidence of the publication will be provided upon completion of the required notice.

McCreary District's Board of Commissioners has authorized the proposed revision. A copy of the resolution authorizing the proposed revising and directing the filing of the revised tariff sheet is enclosed as Exhibit D.


McCreary District proposes that the proposed versions become effective on July 14, 2021, or twenty days from the date of their submission. KRS 278.180 requires that a utility provide the Public Service Commission with notice of any change in its rate schedules at least thirty (30) days prior to its proposed effective date, but permits the Commission to shorten the notice period to twenty (20) days upon a showing of good cause.

McCreary District respectfully submits that good cause exists for the shortened period. The state agency with primary jurisdiction over water quality matters has approved the proposed revision. Residents of McCreary County were previously provided with published notice of the proposed revision and given the opportunity to comment on the proposal. No written comments were made. The shortened period will permit a major manufacturer in McCreary County to more quickly expand its operations, thus benefitting the local economy.

Please contact me if Commission Staff has any questions regarding the proposed revision or if additional information is required.

Sincerely,

Stoll Keenon Ogden PLLC



Gerald E. Wuetcher

GEW

Enclosures

1. Local Limits Evaluation
2. KDOW Letter of 01/06/2021
3. Revised Tariff Sheet
4. Published Notice
5. Board of Commissioners Resolution

McCREARY COUNTY WATER DISTRICT PRETREATMENT PROGRAM

LOCAL LIMITS EVALUATION

NOVEMBER 2020

PREPARED BY CYNTHIA LEASOR, PRINCIPAL ENGINEER

HALL ENVIRONMENTAL CONSULTANTS LLC

1376 DANVILLE LOOP 1 ROAD

NICHOLASVILLE, KENTUCKY 40356

859-885-3331

cleasor@hallenvironmental.net

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McCREARY COUNTY WATER DISTRICT PRETREATMENT PROGRAM

LOCAL LIMITS EVALUATION FOR ANTIMONY

I. INTRODUCTION

The McCreary County Water District (MCWD) owns and operates a municipal wastewater treatment plant (WWTP) treating domestic wastewater. An industrial user constructed a facility in the District and began discharging process wastewater to the MCWD treatment facility in 2019. In accordance with 401 KAR 5:055 and 40 CFR 403, MCWD is implementing an approved Pretreatment Program.

As part of this program, the MCWD Rules and Regulations contain wastewater discharge limitations, i.e., Local Limits, calculated to control the quantity and quality of the industrial process wastewater that is discharged to the municipal sanitary sewer system. This evaluation was conducted following the Kentucky Division of Water's amendment of the water quality standard for antimony.

MCWD will routinely conduct an evaluation of the Local Limits in order to ensure that the technical basis for each industrial discharge limit is adequate and the limits are protective of the receiving stream and WWTP treatment processes and biosolids. An evaluation is required at least once every five (5) years or with reapplication for the WWTP's KPDES permit. This evaluation has been conducted for the WWTP in accordance with state and federal regulations and is being submitted to the KDOW for review and approval.

II. EVALUATION PROCEDURE

The calculations used in this evaluation were performed using an EXCEL computer model developed to meet all requirements of 40 CFR 403, as well as being compatible with KDOW requirements. This computer model is designed to calculate the local limits in accordance with the KDOW's and the U.S. EPA's requirements, guidance and recommendations. The forms recommended by the KDOW and a copy of the results of this model are included in Attachment A of this report. The procedures that were followed and assumptions made during this reevaluation are described briefly in the following paragraphs.

A. Technical Criteria

This evaluation is technically based using four (4) different criteria to achieve and maintain the three (3) primary goals of the Federal Pretreatment Program.

These criteria are as follows:

- Kentucky Water Quality Standards - to protect the receiving stream;
- KPDES Permit Limitations – to maintain compliance with the WWTP's KPDES permit limits and protection of the receiving stream;
- Federal Biosolids Ceiling Criteria - to protect biosolids quality; and,
- Federal Inhibition Criteria - to protect the WWTP and its operations.

A brief description of each of these criteria and its basis is as follows:

- (1) Kentucky Water Quality Standards - Kentucky's water quality standards for antimony are used in this evaluation to ensure that the receiving water body, an unnamed tributary of Bridge Fork, is protected and warm water aquatic criteria are consistently achieved. These chronic and acute criteria were obtained from the DOW's Steady-State Wasteload Allocation Model (SSTWAM) for

the unnamed tributary of Bridge Fork. A copy of the SSTWAM model for the receiving water body is included in Attachment B.

- (2) **KPDES Permit Limitations** – Where applicable, the effluent permit limitations as given in the WWTP’s KPDES Permit No. KY0097837 are used in this evaluation to ensure that compliance with these limitations will be maintained consistently. A copy of the permit is included in Attachment C.
- (3) **40 CFR 503 Federal Biosolids Regulations** - The biosolids generated by the WWTP are currently being beneficial reused through land application at the MCWD’s permitted landfarm. Therefore, in order to protect the quality of the biosolids for final disposal using beneficial reuse, the federal biosolids ceiling criteria as contained in 40 CFR 503, given as “Ceiling Limits”, were used in this reevaluation.
- (3) **Inhibition criteria** - For this reevaluation, inhibition criteria were used to ensure the protection of the WWTP and its operations from upset and interference. The inhibition criterion for antimony was determined from site-specific data collected at the MCWD WWTP. Based upon Whole Effluent Toxicity (WET) testing as well as influent and effluent monitoring conducted at the WWTP throughout 2020, it was determined that a concentration greater than 6 mg/l caused toxicity to the microorganisms within the treatment systems of the WWTP and in addition, also caused WET in the effluent.

Since U.S. EPA guidance and recommendations do not offer inhibition criteria for antimony and site-specific data was available, the concentrations where toxicity was observed were used for this evaluation.

B. Domestic Concentrations

Domestic wastewater sampling was conducted on January 29, 2019 at the manhole located at the MCWD office. The analytical results from this sample event were used as background data for these calculations. A copy of the results is included in Attachment D. For the pollutant in question, there was no detection above the lab detection level. In accordance with EPA guidance as discussed in the *Local Limits Guidance Manual Appendices, July 2004*, since the concentration of antimony was less than detection, a value of one-half the detection level was used.

C. Removal Rates

For this reevaluation, the average removal efficiency for antimony for the WWTP was calculated from influent and effluent monitoring scans performed from May through August of 2020. Copies of the analytical results of these scans are available upon request. A summary of these scans is included in Attachment E.

WWTP personnel routinely conduct a toxic scan of the influent, effluent and biosolids semi-annually each year. For this evaluation, the removal efficiencies were calculated from the weekly sample events conducted

over the summer and the results are provided in the DOW form as required.

D. Safety Factor

A safety factor of fifty percent (50%) was used in determining the maximum allowable headworks loadings for the pollutant. This safety factor was used to provide protection against Whole Effluent Toxicity and to allow for additional protection for treatment systems and biosolids disposal. This is necessary due to the limited amount of site-specific data available for this evaluation. The minimum safety factor that would allow the necessary protection was selected.

The use of a safety factor also compensates for the inherent variations in average removal rates and flow rates that can occur over time. In addition, the safety factor protects a certain portion of the WWTP's capacity for both the addition of new industrial dischargers and future expansion.

E. Allocation Method

The Uniform Concentration Method was used to determine the final discharge limitations to be issued to the industrial user. This method is taken from U.S. EPA guidance and is recommended by the EPA for headworks loading allocations where no allocation concerns exist. In this method, the local limit for the pollutant is calculated using the total process industrial flow from the industrial user. The maximum allowable

headworks loading for the parameter is then allocated equally between all SIUs.

F. Industrial Information

All industrial data and information used in the evaluation is site-specific and was obtained from the sampling and analyses conducted at the Fibrotex facility located in McCreary County. There is only one (1) Significant Industrial User (SIU) regulated by the MCWD Pretreatment Program. This SIU is regulated as a significant industrial user, meaning that the facility is subject to the local limits as calculated by this evaluation.

Information regarding the SIU is as follows:

- (1) **Fibrotex USA** – This facility manufactures camouflage and concealment textile products for the military and is regulated as an SIU. Pollutants of concern include antimony and TSS.

III. TECHNICAL JUSTIFICATION OF LIMITS

Currently, the MCWD Rules and Regulations contain a local limit for antimony that is based on a water quality standard required by the DOW. However, this water quality standard was amended by DOW after a determination was made that a more accurate 7Q10 flow was available for the downstream drinking water intake. The local limit for antimony calculated here will be included in the MCWD Rules and Regulations after review and approval by DOW. The discharge limit calculated is a daily maximum limit based on the more stringent of the acute and chronic water quality criteria, biosolids disposal criteria and activated sludge inhibition.

The technical basis for the proposed local limit and the adequacy to protect the receiving water and WWTP systems is as follows:

Antimony – This pollutant has been determined to be a pollutant of concern in the discharge from the SIU. The current local limit of 0.09 mg/l has been determined to be overly stringent based upon the revision to the Kentucky Water Quality Standards. Therefore, MCWD is proposing to adopt the calculated limit of 9.61 mg/l as the daily maximum discharge limit for this pollutant. This limit will provide protection against pass-through, inhibition and upset as well as biosolids contamination. The technical basis for the proposed daily maximum limit is the Kentucky Chronic Water Quality Standard for antimony.

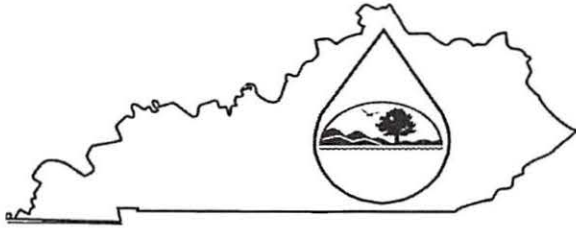
The local limit for antimony recommended for the MCWD WWTP is shown in Table 6 and Figure I of the attached DOW Local Limits Form. The proposed Sewer Use Rules and Regulations included in Section II of the Pretreatment Program shows the recommended discharge limit that will be implemented by the District following DOW approval. MCWD reserves the right to modify this local limit in the future should such a modification prove necessary as a result of changes in SIU status, state or federal regulations, WWTP performance or other conditions affecting the MCWD WWTP. MCWD will continue the Pretreatment Program's policy of strict enforcement of all local limits to ensure protection of the receiving stream, the WWTP and its personnel and the sanitary sewer treatment systems and biosolids.

ATTACHMENT A

**MCWD WWTP
LOCAL LIMITS EVALUATION - ANTIMONY**

KDOW LOCAL LIMITS EVALUATION FORM - 2020

MCCREARY COUNTY WATER DISTRICT PRETREATMENT PROGRAM
LOCAL LIMITS EVALUATION 2019



**KENTUCKY POLLUTANT DISCHARGE
ELIMINATION SYSTEM**

**Pretreatment Local Limits Re-evaluation
For Publicly Owned Treatment Works**

Publicly owned treatment works (POTW) with approved pretreatment programs must develop, implement and enforce technically based local limits in order to enforce specific and general prohibitions listed in 40 CFR 403.5 and to ensure that its discharges comply with state and federal requirements. In order to protect the operation of the POTW under review, to comply with regulatory requirements for the receiving waters of the Commonwealth, to satisfy local biosolids disposal requirements and to address any other operational concerns, local limits are based on site-specific conditions.

Federal and state regulations require a periodic review of local limits, and the local limits must continue to be developed as necessary. Site-specific conditions may change that trigger a re-evaluation. A change in water quality criteria, an upgraded or new wastewater treatment plant, a significant change in conditions at the POTW or with industrial users, POTW operational or performance problems, a change in biosolids disposal method, violations of KPDES permits or water quality effluent limits or other factors may also warrant the need to re-evaluate local limits. Also, federal regulations require a written technical evaluation of the need to revise local limits following permit issuance or reissuance. Local limit re-evaluations are a required condition of your Kentucky Pollutant Discharge Elimination System (KPDES) permit(s). Due to the five year duration of a KPDES permit, local limits should be re-evaluated every five years or earlier if warranted.

Please review this document carefully. Complete each of the tabs, as applicable, and please note all comments and instructions. Many of the fields in the calculation tables will pre-populate based on data from other sections of the spreadsheet.

CONTROL AUTHORITY INFORMATION

Name of Control Authority: **McCreary County Water District**
 Wastewater Treatment Plant Name(s): **MCWD WWTP**
 KPDES Number(s): **KY0097837**

LOCAL LIMITS RE-EVALUATION CONTACT INFORMATION

Name: **Cynthia Leasor**
 Title: **Principal Engineer/Pretreatment Coordinator**
 Phone: **859-885-3331**
 Email Address: cleasor@hallenvironmental.net
 Mailing Address: **Hall Environmental Consultants LLC**
 Street: **1376 Danville Road, Loop 1**
 City: **Nicholasville**
 State: **KY**
 Zip Code: **40356**

CERTIFICATION STATEMENT

Note: This certification statement must be signed by a duly authorized representative of the POTW.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: **Stephan Whitaker** Telephone number: **606-310-9604**
 Title: **Manager/Superintendent** Date:
 Signature:

**McCreary County Water District
MCWD WWTP**

WASTEWATER TREATMENT PLANT

WWTP DESCRIPTION	
Describe the treatment plant operations in this section (not in an optional narrative portion of the re-evaluation). Include all unit operations as well as systems for phosphorus removal and denitrification, if applicable. An additional WWTP schematic may be included.	
Water - Bar Screen, Oxidation Ditch, Clarifiers, Chlorination for disinfection, Dechlorination	
Solids - Aerobic digester, Belt press for dewatering, Disposal through land application	
See Attachment E for WWTP process schematic.	
Is the WWTP designed specifically to treat phosphorus removal?	No
Is the WWTP designed specifically for nitrification/denitrification?	No

FLOW INFORMATION	
WWTP design flow rate (mgd):	0.9
Annual average daily flow rate (mgd):	0.329
Local limits should be based on <u>average</u> flow rates to reflect current conditions.	
Numerical values must be entered for automatic calculations to calculate correctly in other tabs of the spreadsheet.	

HAULED WASTE	
Does the WWTP accept hauled industrial waste?	NO
Describe the designated discharge location:	N/A
If discharged into the collection system or at the headworks, indicate the average annual industrial hauled waste volume (mgd).	N/A
Does the WWTP accept any wastes identified as hazardous waste under Resource Conservation and Recovery Act (RCRA)?	NO
Note: In certain cases, hauled waste flows should be included in total POTW flow rates.	

COLLECTION SYSTEM & WORKER SAFETY CONCERNS
Describe any collection system or worker safety concerns:
N/A

COMMENTS

**McCreary County Water District
MCWD WWTP**

SLUDGE FLOW AND BIOSOLIDS

SLUDGE DISPOSAL	
Indicate the sludge flow to a digester (mgd)	0.05
Indicate the sludge flow to disposal (mgd)	0.05
Percent solids to disposal (%)	13
Method of sludge disposal	Land application
If other, describe the removal system:	

SLUDGE TOXICITY	
If sludge is being disposed of at a landfill, indicate date of last toxicity characteristic leaching procedure (TCLP) and attach a copy of the results.	N/A
Indicate the date of the last annual pretreatment scan and attach a copy of sludge sampling results even if they have been submitted with previous pretreatment annual reports.	N/A
If neither a TCLP nor a toxic scan has been conducted, please describe what method was used to demonstrate that the sludge is not considered to be hazardous waste.	
The WWTP biosolids complies with all requirements established by the Division of Waste Management (DWM) and is also in compliance with all land application regulations established in 40 CFR 503.	

BIOSOLIDS	
Is the POTW required to submit an Sewage Sludge Annual Report required by 40 CFR Part 503, to EPA Region VII?	Yes
If yes, include a copy of the of the most recent report with this re-evaluation, and the tab for 40 CFR Part 503 in this spreadsheet must be completed.	

COMMENTS

**McCreary County Water District
MCWD WWTP**

SAMPLING PLAN

WASTEWATER INFLUENT & EFFLUENT SAMPLING

Identify the source of WWTP influent and effluent sampling results. **Other**
The plan should include obtaining five (5) sets of results that are representation of the WWTP operations. The most current results that are available are to be used.¹

Was the hydraulic retention time considered? **Yes**

If the sampling has not already been conducted, please describe the plan to obtain the information:

DOMESTIC & COMMERCIAL SAMPLING

The sampling locations and number of samples taken should ensure that the data is representative of domestic and uncontrollable sources in the POTWs system. See the EPA Local Limits Development Guidance for suggested sampling frequencies.

Identify the source of the domestic/commercial sampling results. At a minimum, one sampling result should be used however additional results are suggested and the number will vary based on the size of the WWTP.

Sampling dates: **1/30/2019**

Sampling location: **Manhole at MCWD lift station**

SLUDGE SAMPLING

Identify the source of the sludge sampling results.² **Other**

If the sampling has not been conducted, please describe the plan to obtain the samples.

COMMENTS

Monitoring of the WWTP influent and effluent was conducted weekly during June and July 2020 following start-up of the industry and discharge of process wastewater to the WWTP.

¹ Analyses must be performed in accordance with methods specified in 40 CFR Part 136. Samples should be 24-hour composites except for parameters that require grab samples.

² Analyses must be performed in accordance with methods specified in 40 CFR Part 503.

McCreary County Water District
MCWD WWTP

Table 1
Local Limits Determination Based on SSTWAM Daily Max Limits

ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE							MAXIMUM LOADING		INDUSTRIAL		
Pollutant	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Removal Efficiency (%) (Rpotw)	NPDES Daily Limit (mg/l) (Ccrit)	Domestic Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety * Factor (%) (SF)
Antimony	0.035	0.329	69	0	0.0005	0.294	-	0.0012	-	-	50

- (Qind) Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.
- (Qpotw) POTW's average influent flow in MGD.
- (Rpotw) Removal efficiency across POTW as percent.
- (Ccrit) NPDES daily maximum permit limit for a particular pollutant in mg/l.
- (Qdom) Domestic/commercial background flow in MGD.
- (Cdom) Domestic/commercial background concentration for a particular pollutant in mg/l.
- (Lhw) Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).
- (Ldom) Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).
- (Lind) Maximum allowable industrial loading to the POTW in pounds per day.
- (Cind) Industrial allowable local limit for a given pollutant in mg/l.
- (SF) Safety factor as a percent.
- 8.34 Unit conversion factor
- Lhw = $8.34 * Ccrit * Qpotw / (1 - Rpotw)$

McCreary County Water District
MCWD WWTP

Table 2
Local Limits Determination Based on SSTWAM Monthly Average Limits

ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE							MAXIMUM LOADING		INDUSTRIAL		
Pollutant	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Removal Efficiency (%) (Rpotw)	NPDES Monthly (mg/l) (Ccrit)	Domestic Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Antimony	0.035	0.329	69	0.64	0.0005	0.294	5.6130	0.0012	2.8053	9.610	50

- (Qind) Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.
- (Qpotw) POTW's average influent flow in MGD.
- (Rpotw) Removal efficiency across POTW as percent.
- (Ccrit) NPDES monthly maximum permit limit for a particular pollutant in mg/l.
- (Qdom) Domestic/commercial background flow in MGD.
- (Cdom) Domestic/commercial background concentration for a particular pollutant in mg/l.
- (Lhw) Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).
- (Ldom) Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).
- (Lind) Maximum allowable industrial loading to the POTW in pounds per day.
- (Cind) Industrial allowable local limit for a given pollutant in mg/l.
- (SF) Safety factor as a percent.
- 8.34 Unit conversion factor
- Lhw = $8.34 * Ccrit * Qpotw / (1 - Rpotw)$

McCreary County Water District
MCWD WWTP

Table 3
Local Limits Determination Based on Activated Sludge Inhibition Level

ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE							MAXIMUM LOADING		INDUSTRIAL		
Pollutant	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Removal Efficiency (%) (Rprim)	Activated Sludge Inhibition Level (mg/l) (Ccrit)	Domestic Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Antimony	0.035	0.329	0	6	0.0005	0.294	16.4632	0.0012	8.2304	28.196	50

- (Qind) Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.
- (Qpotw) POTW's average influent flow in MGD.
- (Rprim) Removal efficiency across across primary treatment as percent.
- (Ccrit) Activated sludge threshold inhibition level, mg/l.
- (Qdom) Domestic/commercial background flow in MGD.
- (Cdom) Domestic/commercial background concentration for a particular pollutant in mg/l.
- (Lhw) Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).
- (Ldom) Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).
- (Lind) Maximum allowable industrial loading to the POTW in pounds per day.
- (Cind) Industrial allowable local limit for a given pollutant in mg/l.
- (SF) Safety factor as a percent.
- 8.34 Unit conversion factor
- Lhw = $8.34 * Ccrit * Qpotw / (1 - Rprim)$

Note: Rprim values are from the EPA Local Limits Guidance Document

McCreary County Water District
MCWD WWTP

Table 4
Local Limits Determination Based on US EPA 503 Sludge Regulations

ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE									MAXIMUM LOADING		INDUSTRIAL		
Pollutant	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Sludge Flow (MGD) (Qsldg)	Percent Solids (%) (PS)	Removal Efficiency (%) (Rpotw)	503 Sludge Criteria (mg/kg) (Cslcrit)	Domestic and Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Antimony	0.035	0.329	0.05	13	68.7142857		0.0005	0.294	-	0.0012	-	-	50

- (Qind) Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.
- (Qpotw) POTW's average influent flow in MGD.
- (Qsldg) Sludge flow to disposal in MGD.
- (PS) Percent solids of sludge to disposal.
- (Rpotw) Removal efficiency across POTW as a percent.
- (Cslcrit) 503 sludge criteria in mg/kg dry sludge.
- (Qdom) Domestic/commercial background flow in MGD.
- (Cdom) Domestic/commercial background concentration for a particular pollutant in mg/l.
- (Lhw) Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).
- (Ldom) Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).
- (Lind) Maximum allowable industrial loading to the POTW in pounds per day.
- (Cind) Industrial allowable local limit for a given pollutant in mg/l.
- (SF) Safety factor as a percent.
- 8.34 Unit conversion factor
- Lhw = $8.34 * Cslcrit * (PS/100) * Qsldg$
Rpotw

::

Note: 503 Sludge Criteria from 40 CFR 503.13, Ceiling Concentrations, should be used.

McCreary County Water District
MCWD WWTP

Table 5
Local Limits Determination Summary

Parameter	Limit Basis					Limiting Basis Most Stringent Limit (mg/l)	Proposed Pretreatment Limits			Current Local Limit Daily Max (mg/l)
	SSTWAM Daily Max (mg/l)	SSTWAM Monthly Avg (mg/l)	Activated Sludge Inhibition (mg/l)	Nitrification (mg/l)	40 CFR 503 Biosolids (mg/l)		Proposed Daily Max Limit (mg/l)	Technical Justification	Comments	
Antimony	-	9.61	28.20	-	-	9.61	9.61	SSTWAM Monthly Average		0.09

PROPOSED LIMIT SELECTION

When selecting proposed limits, the local limits should pass the "common sense test." Some of the questions to consider are: Can the POTW and dischargers comply with the limits? Are limits sensible in light of actual conditions at the treatment plant and past compliance experience? Are the limits above the method detection limits? Are the limits within the normal range for that pollutant? Is the ratio of the limit for hexavalent chromium to total chromium reasonable? Will the limits allow the industrial user to relax their pretreatment processes? Will the limits protect sludge quality? Will the limit cause the WWTP to fail bio-monitoring or toxicity testing? Are the limits so low as to detract potential new industrial users? Is public or industrial user response expected?

Note: In many cases, the proposed limits will NOT be the current local limits. Local limits must be based on current conditions and be technically justifiable and defensible. It is possible for limits to become less stringent as a result of the re-evaluation; however, if the calculated limits seem to be excessively high, there are ways to establish a reasonable limit. Please contact the Division if you have any questions.

*Limits for selenium and hexavalent chromium must be established. If 40 CFR Part 503 applies, a limit for molybdenum must be developed.

** Indicate if a limit for amenable/free cyanide or total cyanide is being proposed in the comment section.

NOTES

Please see the Technical Narrative section of this evaluation for justification of the proposed local limits.

ATTACHMENT B

MCWD WWTP

**RECEIVING STREAM WATER QUALITY CRITERIA (SSTWAM) FOR
ANTIMONY
FOR UNNAMED TRIBUTARY TO BRIDGE FORK**

ADMINISTRATIVE INFORMATION

Permit Writer Barry Elmore
Date Entered 10/13/2020
Facility Name McCreary County WWTP
KPDES No. KY 0097837
Outfall No. 1

Effluent Characteristics

Average Flow: 0.376 MGD 0.582043344 cfs
Hardness 97.46 mg/l
Acute/Chronic Ratio 0.1

Receiving Water Characteristics

Name UT to Bridge Fork
Flow: 7Q10 0 cfs
HM 0 cfs
Hardness 100 mg/l
pH 7.4 std units
Temperature 20 °C

Intake Water Characteristics

Name Cumberland Lake
Flow: 7Q10 115 cfs
HM 1,160 cfs

Additional Factors

Is the receiving water impaired for iron? n Y Or N
Is WET testing Required? y Y Or N
Does facility discharge to the Ohio River Main Stem? n Y Or N
Does facility have thermal discharge? n Y Or N

Intake flows interpolated by WLA coordinator between USGS gaging stations.

USGS03404000 Williamsburg
USGS03414000 Rowena

Effluent Characteristic	Units	Average Limitaion	Maximum Limitation	AvgJustification
Antimony	µg/L	640	N/A	Fish

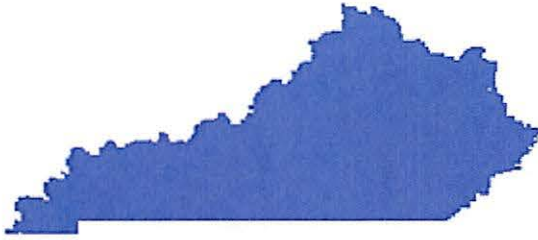
Barry Elmore
10/13/2020
McCreary County WWTP
KY 0097837

ATTACHMENT C

MCWD WWTP

**PERMIT LIMITS PAGE
KPDES PERMIT NO. KY0097837**

KPDES



**KENTUCKY POLLUTANT
DISCHARGE ELIMINATION
SYSTEM**

PERMIT

**AUTHORIZATION TO DISCHARGE UNDER THE
KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM**

PERMIT NO.: KY0097837

AGENCY INTEREST NO.: 3089

Pursuant to Authority in KRS 224,

McCreary County Water District
P.O. Box 488
Whitley City, Kentucky 42653

is authorized to discharge from a facility located at

McCreary county Water District WWTP #1 and #2
770 Sanitation Drive
Sterns, McCreary County, Kentucky

to receiving waters named

UT to Bridge Fork

in accordance with effluent limitations, monitoring requirements and other conditions set forth in this permit.

This permit shall become effective on August 1, 2019.

This permit and the authorization to discharge shall expire at midnight, July 31, 2024.

June 25, 2019

Date Signed

A handwritten signature in black ink, appearing to read "Peter T. Goodmann".

Peter T. Goodmann, Director
Division of Water

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1.1. Compliance Monitoring Locations (Outfalls)

The following table lists the outfalls authorized by this permit, the location and description of each, and the DOW assigned KPDES outfall number:

TABLE 1.					
Outfall No.	Outfall Type	Latitude (N)	Longitude (W)	Receiving Water	Description of Outfall
001	External	37.7914°	84.4713°	UT to Bridge Fork	Domestic Wastewater from a Publicly Owned Treatment Works which includes an Approved Pretreatment Program.

1.2. Effluent Limitations and Monitoring Requirements

Beginning on the effective date and lasting through the term of this permit, discharges from Outfall 001 shall comply with the following effluent limitations:

TABLE 2.									
EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs/day)		Concentrations				Frequency	Sample Type
		Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum		
Flow, Effluent	MGD	Report	Report ¹	N/A	N/A	N/A	N/A	Continuous	Recorder
Flow, Influent	MGD	Report	Report ¹	N/A	N/A	N/A	N/A	Continuous	Recorder
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Week	Grab
CBOD ₅ ² , Effluent	mg/l	112.6	168.8	N/A	15	22.5	N/A	1/Week	24-Hr Composite ³
CBOD ₅ ² , Influent	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Week	24-Hr Composite ³
CBOD ₅ ² Percent Removal ⁴	%	N/A	N/A	N/A	85	N/A	N/A	1/Month	Calculated ⁴
TSS ⁵ , Effluent	mg/l	225.1	337.7	N/A	30	45	N/A	1/Week	24-Hr Composite ³
TSS ⁵ , Influent	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Week	24-Hr Composite ³
TSS ⁵ , Percent Removal ⁴	%	N/A	N/A	N/A	85	N/A	N/A	1/Month	Calculated ⁴
Ammonia (as mg/l NH ₃ N)									
May 1 – October 31	mg/l	N/A	N/A	N/A	2.0	3.0 ¹	N/A	1/Week	24-Hr Composite ³
November 1 – April 30	mg/l	N/A	N/A	N/A	10	15 ¹	N/A	1/Week	24-Hr Composite ³
Dissolved Oxygen	mg/l	N/A	N/A	7.0	N/A	N/A	N/A	1/Week	Grab
E. Coli ⁶	#/100 ml	N/A	N/A	N/A	130 ⁷	240 ⁸	N/A	1/Week	Grab

TABLE 2.									
EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs/day)		Concentrations				Frequency	Sample Type
		Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum		
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.011	0.019 ¹	N/A	1/Week	Grab
Total Nitrogen ⁹ , Effluent	mg/l	N/A	N/A	N/A	Report	Report ¹	N/A	1/Week	24-Hr Composite ³
Total Nitrogen ⁹ , Influent	mg/l	N/A	N/A	N/A	Report	Report ¹	N/A	1/Week	24-Hr Composite ³
Total Phosphorus, Effluent									
May 1 – October 31	mg/l	N/A	N/A	N/A	1.0	1.5 ¹	N/A	1/Week	24-Hr Composite ³
November 1 – April 30	mg/l	N/A	N/A	N/A	2.0	3.0 ¹	N/A	1/Week	24-Hr Composite ³
Total Phosphorus, Influent	mg/l	N/A	N/A	N/A	Report	Report ¹	N/A	1/Week	24-Hr Composite ³
Chronic WET ¹⁰	TU _c	N/A	N/A	N/A	N/A	N/A	1.0	1/Quarter	(¹¹)
¹ Daily Maximum									
² CBOD ₅ – Carbonaceous Biochemical Oxygen Demand, 5-day									
³ A 24-hour composite is a sample collected using an automated sampler set to collect equal volume aliquots of at least 100 ml each every 15 minutes over a 24 hour period. The sample must be maintained at between 0° C and 6° C at all times.									
⁴ Percent Removal is calculated using the following equation: $\text{Percent Removal} = \left[\frac{(\text{Monthly Average Influent} - \text{Monthly Average Effluent})}{\text{Monthly Average Influent}} \right] \times 100$									
⁵ TSS – Total Suspended Solids									
⁶ E. Coli – Escherichia Coli Bacteria									
⁷ Thirty (30) day Geometric Mean									
⁸ Seven (7) day Geometric Mean									
⁹ Total Nitrogen is the summation of the analytical results for Total Nitrates, Total Nitrites, and Total Kjeldahl Nitrogen									
¹⁰ WET – Whole Effluent Toxicity									
¹¹ Three (3) 24-hour composite samples with one each collected every other day for a period of five (5) days, i.e. days 1, 3, & 5									

1.3. Standard Effluent Requirements

The discharges to waters of the Commonwealth shall not produce floating solids, visible foam or a visible sheen on the surface of the receiving waters.

ATTACHMENT D

MCWD WWTP

2019 DOMESTIC SAMPLE RESULTS



ANALYTICAL REPORT

February 11, 2019

Hall Environmental Consultants, LLC

Sample Delivery Group: L1065132
Samples Received: 01/30/2019
Project Number: McCreary
Description: residential

Report To: Cyndy Leasor
1376 Danville Road Loop 1
Nicholasville, KY 40356

Entire Report Reviewed By:

Stacy Kennedy
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

SAMPLE SUMMARY

ONE LAB. NATIONWIDE. 

COMPOSITE L1065132-01 WW					
			Collected by	Collected date/time	Received date/time
			Eric Lee	01/29/19 10:40	01/30/19 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 300.0	WG1230304	1	01/30/19 21:25	01/30/19 21:25	ST
Wet Chemistry by Method 365.4	WG1233517	1	02/02/19 11:02	02/06/19 19:10	JER
Metals (ICP) by Method 200.7	WG1230428	1	01/30/19 21:49	01/31/19 09:53	TRB
Metals (ICPMS) by Method 200.8	WG1231153	1	02/03/19 14:07	02/04/19 02:02	LAT
Metals (ICPMS) by Method 200.8	WG1231153	1	02/03/19 14:07	02/04/19 14:50	LAT

GRAB L1065132-02 WW					
			Collected by	Collected date/time	Received date/time
			Eric Lee	01/29/19 10:40	01/30/19 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 420.4	WG1232411	1	02/05/19 08:00	02/08/19 14:22	JER
Wet Chemistry by Method 4500CN E-2011	WG1234147	1	02/08/19 08:47	02/08/19 13:50	JER
Wet Chemistry by Method Calc.	WG1234147	1	02/08/19 13:50	02/08/19 13:50	JER



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Stacy Kennedy
Project Manager

Project Narrative

L1065132 -03 contains subout data that is included after the chain of custody.

COMPOSITE

Collected date/time: 01/29/19 10:40

SAMPLE RESULTS - 01

L1065132

ONE LAB. NATIONWIDE.



Wet Chemistry by Method 300.0

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	34.4		1.00	1	01/30/2019 21:25	WG1230304

Wet Chemistry by Method 365.4

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Phosphorus,Total	4.83		0.100	1	02/06/2019 19:10	WG1233517

Metals (ICP) by Method 200.7

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Iron	0.621		0.100	1	01/31/2019 09:53	WG1230428

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Arsenic	ND		0.00100	1	02/04/2019 02:02	WG1231153
Cadmium	ND		0.00100	1	02/04/2019 02:02	WG1231153
Chromium	0.00144		0.00100	1	02/04/2019 02:02	WG1231153
Copper	0.0179		0.00100	1	02/04/2019 14:50	WG1231153
Lead	0.00130		0.00100	1	02/04/2019 02:02	WG1231153
Molybdenum	ND		0.00500	1	02/04/2019 02:02	WG1231153
Nickel	0.00195		0.00100	1	02/04/2019 14:50	WG1231153
Selenium	ND		0.00200	1	02/04/2019 02:02	WG1231153
Silver	ND		0.00100	1	02/04/2019 02:02	WG1231153
Zinc	0.143		0.0100	1	02/04/2019 14:50	WG1231153

GRAB

Collected date/time: 01/29/19 10:40

SAMPLE RESULTS - 02

L1065132

Additional Information

Analyte	Result	Units
pH (On Site)	6.96	su

Wet Chemistry by Method 420.4

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Total Phenol by 4AAP	0.0865		0.0400	1	02/08/2019 14:22	WG1232411

Wet Chemistry by Method 4500CN E-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Cyanide	ND		0.00500	1	02/08/2019 13:50	WG1234147

Wet Chemistry by Method Calc.

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Cyanide,amenable	ND		0.00500	1	02/08/2019 13:50	WG1234147





Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
SDG	Sample Delivery Group.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.
Qualifier	Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

Hall Environmental Consultants, LLC 1376 Danville Road Loop 1 Nicholasville, KY 40356		Billing Information: Ms. Cynthia M. Leasor 1376 Danville Road Loop 1 Nicholasville, KY 40356		Pres Chk		Analysis / Container / Preservative 712 22 22 22						Chain of Custody Page ___ of ___ 			
Report to:		Email To: @hallenvironmental.net										12865 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859 			
Project Description: residential		City/State Collected:										L# <u>L1065132</u> F229			
Phone: 859-885-3331 Fax: 859-885-4613		Client Project # McCreary		Lab Project # HALLKY-MCCREARY RES								Accnum: HALLKY Template: T145193 Prelogin: P690406 TSR: 650 - Linda Cashman PB: <u>1-17-19 MVB</u>			
Collected by (print): <u>Eric Lee</u>		Site/Facility ID #		P.O. #								Shipped Via: FedEX Ground			
Collected by (signature): <u>EL</u>		Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day		Quote #		Date Results Needed						No. of Cntrs			
Immediately Packed on Ice N ___ Y <input checked="" type="checkbox"/>															
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	CHLORIDE 125mlHDPE-NoPres	CN/CNAM 250mlHDPEAmb-NaOH	CR6ICFFP 50mlTube/plungerPres	HG1631 250mlClr-HCl	Metals 250mlHDPE-HNO3	PHT 250mlAmb-H2SO4	PT 250mlHDPE-H2SO4	Remarks	Sample # (lab only)
COMPOSITE	Grab	WW		1/29/19	1040	4	X		X		X		X		-01
GRAB	Grab	WW		1/29/19	1040	2		X				X			-02
GRAB	Grab	WW		1/29/19	1040	1				X					-03
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - Waste Water DW - Drinking Water OT - Other		Remarks: Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier		Tracking # <u>4757 5082 7468</u>		pH <u>6.96</u> Temp _____ Flow _____ Other _____		Sample Receipt Checklist COC Seal Present/Intact: <input checked="" type="checkbox"/> NP <input type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N If Applicable VOA Zero Headspace: <input type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N RAD SCREEN: <0.5 mD/hr							
Relinquished by: (Signature) <u>EL</u>		Date: <u>1/29/19</u> Time: <u>1600</u>		Received by: (Signature)		Trip Blank Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> HCL / MeOH TBR		Temp: _____ °C Bottles Received: _____		If preservation required by Login: Date/Time					
Relinquished by: (Signature)		Date: _____ Time: _____		Received by: (Signature)		Date: <u>1/30/19</u> Time: <u>845</u>		Hold:		Condition: NCF / <input checked="" type="checkbox"/> OK					



ANALYTICAL RESULTS

Project: McCreary/WG1230242
Pace Project No.: 50215987

Sample: GRAB		Lab ID: 50215987001	Collected: 01/29/19 10:40	Received: 02/01/19 10:55	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level		Analytical Method: EPA 1631E Preparation Method: EPA 1631E Initial Volume/Weight: 50 mL Final Volume/Weight: 51 mL						
Mercury	117	ng/L	5.1	10	02/02/19 12:37	02/04/19 23:03	7439-97-6	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Andy Vann



Login #: L1065132	Client: HALLKY	Date: 1/30/19	Evaluated by: Troy Dunlap
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Non-Conformance (check applicable items)

Sample Integrity		Chain of Custody Clarification	
Parameter(s) past holding time	X	Login Clarification Needed	If Broken Container:
Temperature not in range		Chain of custody is incomplete	Insufficient packing material around container
Improper container type		Please specify Metals requested.	Insufficient packing material inside cooler
pH not in range.		Please specify TCLP requested.	Improper handling by carrier (FedEx / UPS / Couri
Insufficient sample volume.		Received additional samples not listed on coc.	Sample was frozen
Sample is biphasic.		Sample ids on containers do not match ids on coc	Container lid not intact
Vials received with headspace.		Trip Blank not received.	If no Chain of Custody:
Broken container		Client did not "X" analysis.	Received by:
Broken container:		Chain of Custody is missing	Date/Time:
Sufficient sample remains			Temp./Cont. Rec./pH:
			Carrier:
			Tracking#

Login Comments: Did not receive the CR6ICFFP container.

Client Informed by:	<input checked="" type="checkbox"/> Call	<input type="checkbox"/> Email	<input type="checkbox"/> Voice Mail	Date: 1-31-19	Time: 11:30
TSR Initials: LC	Client Contact: Eric Lee				

Login Instructions:

Eric is notifying Cyndy Leasor about this and they will decide if they need to resample.

ATTACHMENT E

MCWD WWTP

SUMMARY OF TOXIC SCANS 2020

MCWD WWTP

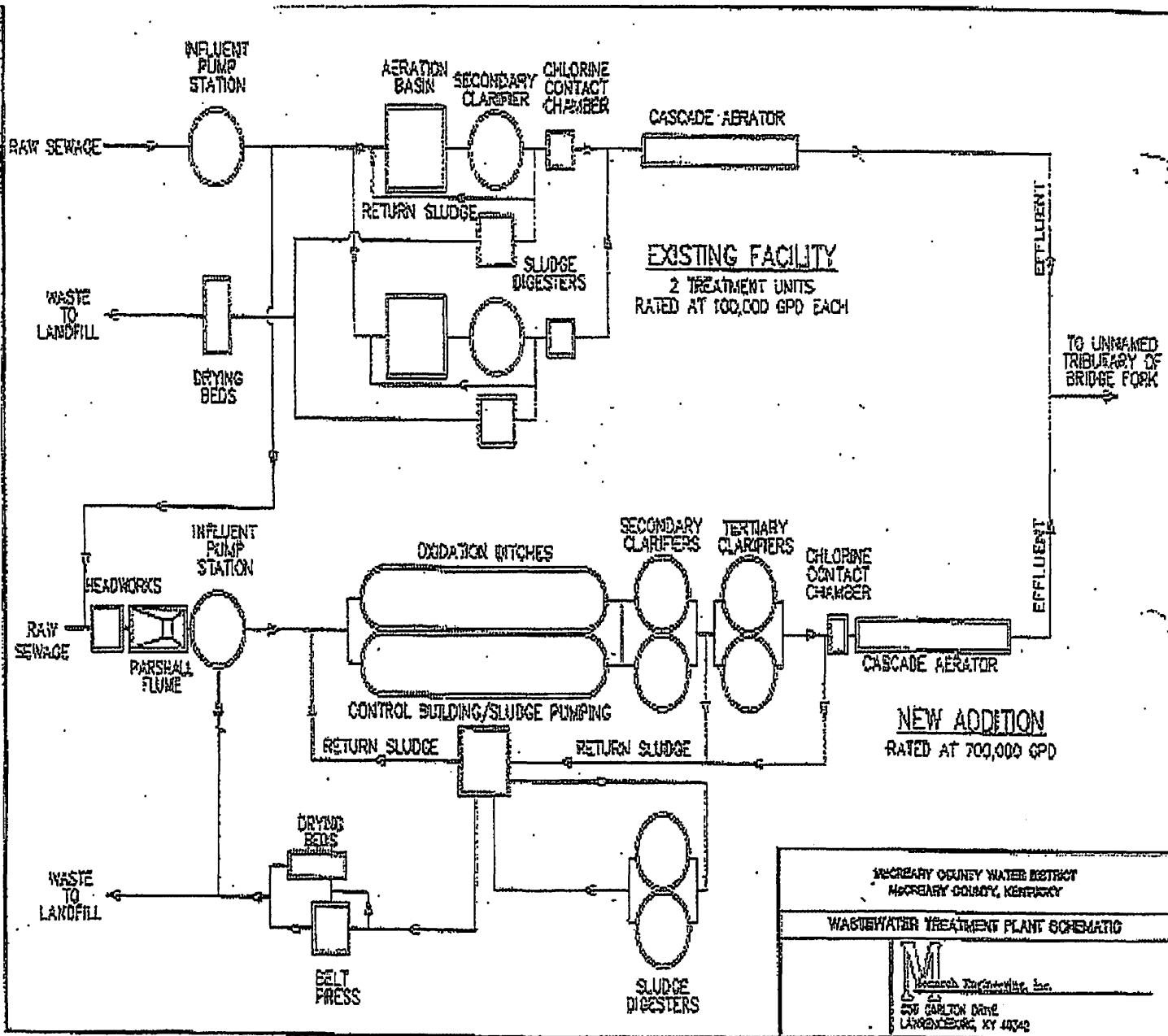
Data from Toxic Scans

Parameter	Water Quality Std / Local Limit	ANTIMONY Concentration (mg/L)							
		05/12/20	06/05/20	06/11/20	06/19/20	07/02/20	07/09/20	08/14/20	Avg
Influent		1.86	0.34	1.85	2.27	0.95	0.78	2.62	1.46
Effluent	0.64 mg/l	0.15	0.26	0.245	0.22	0.53	0.36	0.24	0.28
% Removal		92	23	87	90	44	54	91	69

ATTACHMENT F

MCWD WWTP

MCWD WWTP PROCESS SCHEMATIC



3.5. Plant Flow Diagram



ANDY BESHEAR
GOVERNOR

REBECCA W. GOODMAN
SECRETARY

ANTHONY R. HATTON
COMMISSIONER

**ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION**

300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601
TELEPHONE: 502-564-2150
TELEFAX: 502-564-4245

January 6, 2021

Mr. Stephan Whitaker
McCreary County Water District
P. O. Box 488
Whitley City, KY 42653

Re: 2021 Antimony Local Limit Revision
Final Approval
McCreary County Water District
McCreary County WWTP
KPDES No.: KY0097837

Dear Mr. Whitaker:

The Division of Water received a local limits re-evaluation dated November 2020 from the McCreary County Water District (MCWD) to revise the local limit for antimony. A technical review of the re-evaluation was completed, and the proposed limit of 9.61 mg/l was conditionally approved on November 24, 2020. Since the proposed limit was less stringent than the previous limit, its adoption is considered a major modification under the general pretreatment regulations of 40 CFR 403.18. Public notice of the program modification was published in *The McCreary County Voice* on Thursday, December 3, 2020. No comments were received during the 30-day public comment period. The antimony limit of 9.61 mg/l is approved and must be adopted following MCWD's normal adoption procedure.

If you have any questions regarding this matter, please contact me at (502) 782-7055 or by email at Diana.Robertson@ky.gov.

Sincerely,

A handwritten signature in black ink that reads "Diana Robertson".

Diana Robertson
Pretreatment Coordinator
Kentucky Division of Water

Copy: Ms. Cynthia Leasor, Hall Environmental Consultants

AREA McCreary County, Kentucky

PSC KY NO. 2

2nd Revised SHEET NO. 24

McCreary County Water District

CANCELLING PSC KY NO. 2

1st Revised SHEET NO. 24

RULES AND REGULATIONS

13. The following discharge limitations are established for characteristics of any wastewaters to be discharged into the District's sewer system subject to any compliance schedule established by the District. Significant Industrial Users (SIUs) must comply with these limitations if they are more stringent than applicable State or Federal regulations. In accordance with 40 CFR Part 403, these limitations are considered pretreatment standards equivalent to the Federal limitations established in 40 CFR Subchapter N.

<u>Parameter</u>	<u>Maximum Daily Concentration (mg/l)</u>
Arsenic	0.15
Antimony	9.61
Cadmium	0.03
Chromium, Total	1.83
Chromium, Hexavalent	0.75
Copper	0.53
Cyanide, Amenable	0.12
Lead	0.10
Mercury	0.001
Molybdenum	6.94
Nickel	0.88
Selenium	0.08
Silver	0.13
Zinc	0.67

(T)

DATE OF ISSUE June 24, 2021
MONTH / DATE / YEAR

DATE EFFECTIVE July 14, 2021
MONTH / DATE / YEAR

ISSUED BY /s/Randy Kidd
SIGNATURE OF OFFICER

TITLE Chairman

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE
COMMISSION IN CASE NO. _____ DATED _____

NOTICE

On or about June 24, 2021, McCreary County Water District (“McCreary District”) will file with the Kentucky Public Service Commission a proposed revision to its rules and regulations for the provision of sewer service. This revision will increase the limit for maximum permissible daily concentration of antimony in a significant industrial user’s wastewater discharge from 0.09 mg/l to 9.61 mg/l. The Kentucky Division of Water has previously reviewed and approved the proposed revision.

McCreary District proposes to place the proposed revisions into effect on July 14, 2021.

Any person may examine the proposed tariff sheet at McCreary District’s office at 456 North Hwy 27, Whitley City, Kentucky 42653, Monday through Friday, 8:00 a.m. to 4:00 p.m., or at the Public Service Commission’s offices located at 211 Sower Boulevard, Frankfort, Kentucky, Monday through Friday, 8:00 a.m. to 4:30 p.m., or through the Public Service Commission’s Web site at <https://psc.ky.gov/trf4/TRFListFilings.aspx?Mode=1>.

Comments regarding the proposed revisions may be submitted to the Public Service Commission by mail to the Public Service Commission, P.O. Box 615, Frankfort, Kentucky 40602 or by e-mail to psc.tariffs@ky.gov.

The proposed revision is a condition of service proposed by McCreary District. However, the Public Service Commission may order conditions of service to be observed that differ from that proposed. Such action may result in conditions of service for consumers other than those set forth in this notice.

KRS 278.180 requires McCreary District to provide the Public Service Commission with notice of the proposed revisions at least thirty (30) days prior to their effective date but permits the Public Service Commission to shorten this notice period to twenty (20) days. In its filing, McCreary District has requested that the Public Service Commission shorten this notice period to 20 days.

A person may submit a timely written request for intervention to the Public Service Commission, P.O. Box 615, Frankfort, Kentucky 40602, establishing the grounds for the request including the person’s status and interest. If the Public Service Commission does not receive a written request for intervention within twenty (20) days of the initial publication of notice, it may take final action on the proposed tariff revisions.

McCreary County Water District

First Publication Date: June 17, 2021

RESOLUTION NO. 2021-06-24

**A RESOLUTION OF THE BOARD OF COMMISSIONERS OF
MCCREARY COUNTY WATER DISTRICT AUTHORIZING A
REVISION TO THE WATER DISTRICT'S RULES AND
REGULATIONS PERTAINING TO THE MAXIMUM DAILY
CONCENTRATION OF ANTIMONY IN THE WASTEWATER
DISCHARGE OF A SIGNIFICANT INDUSTRIAL USER**

WHEREAS, McCreary County Water District is a water district organized pursuant to the provisions of KRS Chapter 74;

WHEREAS, pursuant to KRS 278.015, the Kentucky General Assembly has declared that all water districts are "public utilities" and are subject to the regulation of the Kentucky Public Service Commission and the provisions of KRS Chapter 278;

WHEREAS McCreary County Water District owns and operates sewage collection and treatment system that serves the residents of McCreary County, Kentucky;

WHEREAS, McCreary County Water District's sewer operations are subject to the jurisdiction and regulation of the Kentucky Public Service Commission;

WHEREAS, McCreary County Water District is required to comply with the Clean Water Act (33 USC 1251 *et seq.*), the General Pretreatment Regulations (40 CFR Part 403), and 401 KAR 5:055;

WHEREAS, consistent with its legal obligations under the Clean Water Act, the General Pretreatment Regulations and 401 KAR 5:055, McCreary County Water District adopted rules and regulations that set forth uniform requirements for the uses of its sewer collection and treatment system, including the maximum daily concentration of antimony in the wastewater discharge of significant industrial users;

WHEREAS, on October 3, 2019, the Kentucky Public Service Commission permitted these rules and regulations to take effect;

WHEREAS, General Pretreatment Regulations require that McCreary County Water District to periodically review the effluent discharge limitations for their technical basis and revise the Sewer Use Rules and Regulations if necessary in order to continue in compliance with federal and state regulations;

WHEREAS, in November 2020, McCreary County Water District undertook a local limits re-evaluation which determined that the existing limit on the maximum daily concentration of antimony in the wastewater discharge of a significant industrial user should be raised to 9.61 milligrams per liter;

WHEREAS, McCreary County Water District submitted a request to the Kentucky Division of Water for approval to revise the existing limit on antimony and on November 24, 2020, that request was conditionally approved;

WHEREAS, the Kentucky Division of Water on January 6, 2021, after public notice of the proposed revision had been published and the public had an opportunity to comment on the proposed revision, issued final approval of the proposed revision;

WHEREAS, KRS 278.030(2) requires a utility to “furnish adequate, efficient and reasonable service” and permits it to “establish reasonable rules governing the conduct of its business and the conditions;”

WHEREAS, KRS 278.160(1) requires a utility to file with the Kentucky Public Service Commission schedules showing all rates and conditions for service established by it and collected or enforced;”

WHEREAS, KRS 278.160(2) prohibits a utility from enforcing any condition of service unless such condition is set forth in its filed rate schedules; and

WHEREAS, raising the existing limit on the maximum daily concentration of antimony in the wastewater discharge of a significant industrial user to 9.61 milligrams per liter will not have an adverse effect on water quality while reducing the burden on McCreary County Water District’s significant industrial users;

NOW, THEREFORE, IT IS HEREBY RESOLVED BY THE BOARD OF COMMISSIONERS OF MCCREARY COUNTY WATER DISTRICT AS FOLLOWS:


Section 1. The facts, recitals, and statements contained in the foregoing preamble of this Resolution are true and correct and are hereby affirmed and incorporated as a part of this Resolution.

Section 2. Effective 20 days after the filing of the attached tariff sheet with the Kentucky Public Service Commission, McCreary County Water District’s rules and regulations are revised to increase the existing limit on the maximum daily concentration of antimony in the wastewater discharge of a significant industrial user to 9.61 milligrams per liter.

Section 3. The Chairman and his designated representatives are hereby further authorized and directed to make all filings with the Kentucky Public Service Commission necessary to place into effect the proposed revision approved herein.

Section 4. This Resolution shall take effect upon its adoption.

ADOPTED BY THE BOARD OF COMMISSIONERS OF MCCREARY COUNTY
WATER DISTRICT at a meeting held on June 17, 2021 signed by the Chairman and
attested by the Secretary. ²⁴



Randy Kidd, Chairman

ATTEST:

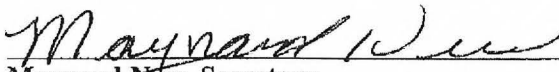


Maynard New, Secretary

CERTIFICATION

I, the undersigned, hereby certify that I am the duly qualified and acting Secretary of the McCreary County Water District; that the foregoing is a full, true and correct copy of a Resolution adopted by the Board of Commissioners of the McCreary County Water District at a meeting duly held on June 17, 2021; that said official action appears as a matter of public record in McCreary County Water District's official records or journal; that said meeting was held in accordance with all applicable requirements of Kentucky law, including KRS 61.810, 61.815, 61.820 and 61.823; that a quorum was present at said meeting; that said official action has not been modified, amended, revoked or repealed and is now in full force and effect.

WITNESS my hand this ²⁴17th day of June 2021.


Maynard New, Secretary

**REVISED TARIFF SHEET INCREASING THE EXISTING LIMIT ON THE
MAXIMUM DAILY CONCENTRATION OF ANTIMONY IN THE WASTEWATER
DISCHARGE OF A SIGNIFICANT INDUSTRIAL USER**

AREA McCreary County, Kentucky

PSC KY NO. 2

2nd Revised SHEET NO. 24

McCreary County Water District

CANCELLING PSC KY NO. 2

1st Revised SHEET NO. 24

RULES AND REGULATIONS

13. The following discharge limitations are established for characteristics of any wastewaters to be discharged into the District's sewer system subject to any compliance schedule established by the District. Significant Industrial Users (SIUs) must comply with these limitations if they are more stringent than applicable State or Federal regulations. In accordance with 40 CFR Part 403, these limitations are considered pretreatment standards equivalent to the Federal limitations established in 40 CFR Subchapter N.

<u>Parameter</u>	<u>Maximum Daily Concentration (mg/l)</u>
Arsenic	0.15
Antimony	9.61
Cadmium	0.03
Chromium, Total	1.83
Chromium, Hexavalent	0.75
Copper	0.53
Cyanide, Amenable	0.12
Lead	0.10
Mercury	0.001
Molybdenum	6.94
Nickel	0.88
Selenium	0.08
Silver	0.13
Zinc	0.67

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DATE OF ISSUE June 24, 2021
MONTH / DATE / YEAR

DATE EFFECTIVE July 14, 2021
MONTH / DATE / YEAR

ISSUED BY /s/Randy Kidd
SIGNATURE OF OFFICER

TITLE Chairman

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE
COMMISSION IN CASE NO. _____ DATED _____