



700 West Liberty Street | Louisville, KY 40203-1911
Phone: 502.540.6000 | LouisvilleMSD.org

December 12th, 2024

Crystal Dennis
300 Sower Blvd., 3rd Floor
Frankfort, Kentucky 40601

**RE: Kentucky State Reformatory STP, KPDES No: KY00400126
Discharge Monitoring Report for November 2024.**

Dear Ms. Dennis:

Attached are the Discharge Monitoring Report (DMR) for the Kentucky State Reformatory STP, for the month November 2024.

See attached overflow documentation.

There were no bypasses. We had one violation for daily max ammonia. Permit limit of 7.5 mg/L with a result of 8.7 mg/L. We had the plant running at reduced aeration due to high flow from excessive rainfall. We did retest a couple days later with a result of 0.2 mg/L.

If you have any questions concerning the attached DMR's, please contact me at (502) 264-2804.

Sincerely,

Alex Smither
Process Supervisor

CAS 11/24

Cc: V. Teague, B. Tinnel

Code	Parameter	Monitoring Location	Field	Type	Description	Acknowledge
01119	Copper, total recoverable	1 - Effluent Gross	0	--	Value NODI Sample = 0.0223 = 0.024 19 - mg/L Permit Req. = 0.0223 = 0.024 19 - mg/L Value NODI = 0.0223 = 0.024 19 - mg/L	01/07 - Weekly CP - COMPOS 01/07 - Weekly 24 - COMP24
34306	Chlorodibromomethane	1 - Effluent Gross	0	--	Value NODI Sample = 5.0 = 28 - ug/L Permit Req. <= 13.0 MO AVG <= 28 - ug/L Value NODI = 5.0 = 28 - ug/L	01/07 - Weekly CP - COMPOS 01/07 - Weekly 24 - COMP24
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	--	Value NODI Sample = 0.6697 = 1.763 03 - MGD Permit Req. = 0.6697 = 1.763 03 - MGD Value NODI = 0.6697 = 1.763 03 - MGD	99/99 - Continuous RC - Recorder (auto) 99/99 - Continuous RC - Recorder (auto)
50050	Flow, in conduit or thru treatment plant	G - Raw Sewage Influent	0	--	Value NODI Sample = 0.7427 = 1.983 03 - MGD Permit Req. = 0.7427 = 1.983 03 - MGD Value NODI = 0.7427 = 1.983 03 - MGD	01/07 - Weekly CA - CALCTD 01/07 - Weekly CA - CALCTD
50060	Chlorine, total residual	1 - Effluent Gross	0	--	Value NODI Sample = 0.01 = 0.01 19 - mg/L Permit Req. <= 0.011 MO AVG <= 0.019 DAILY MX 19 - mg/L Value NODI = 0.01 = 0.01 19 - mg/L	01/07 - Weekly GR - GRAB 01/07 - Weekly GR - GRAB
51040	E. coli	1 - Effluent Gross	0	--	Value NODI Sample = 1.0 = 1.0 13 - #/100mL Permit Req. <= 130.0 30DA GEO <= 240.0 7 DA GEO 13 - #/100mL Value NODI = 1.0 = 1.0 13 - #/100mL	01/07 - Weekly GR - GRAB 01/07 - Weekly GR - GRAB
80082	BOD, carbonaceous [5 day, 20 C]	1 - Effluent Gross	0	--	Value NODI Sample = 46.0 = 93.0 26 - lb/d Permit Req. <= 83.5 MO AVG <= 125.0 MX WK AV 26 - lb/d Value NODI = 46.0 = 93.0 26 - lb/d	01/07 - Weekly CP - COMPOS 01/07 - Weekly 24 - COMP24
80082	BOD, carbonaceous [5 day, 20 C]	G - Raw Sewage Influent	0	--	Value NODI Sample = 172.0 = 371.0 19 - mg/L Permit Req. = 172.0 = 371.0 19 - mg/L Value NODI = 172.0 = 371.0 19 - mg/L	01/07 - Weekly CP - COMPOS 01/07 - Weekly 24 - COMP24
80091	BOD, carb-5 day, 20 deg C, percent removal	K - Percent Removal	0	--	Value NODI Sample = 95.4 = 23 - % Permit Req. >= 85.0 MO AV MN 23 - % Value NODI = 95.4 = 23 - %	01/30 - Monthly CA - CALCTD 01/30 - Monthly CA - CALCTD
81011	Solids, suspended percent removal	K - Percent Removal	0	--	Value NODI Sample = 90.7 = 23 - % Permit Req. >= 85.0 MO AV MN 23 - % Value NODI = 90.7 = 23 - %	01/30 - Monthly CA - CALCTD 01/30 - Monthly CA - CALCTD

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

Code	Parameter Name	Monitoring Location	Field	Type	Description	Acknowledge
00610	Nitrogen, ammonia total [as N]	1 - Effluent Gross	Quality or Concentration Sample Value 3	Soft	The provided sample value is outside the permit limit. Please verify that the value you have provided is correct.	Yes

Comments

Attachments

Name	Type	Size
KSR_COVER_11_24.pdf	pdf	40805.0
KSR_resample_11_18.pdf	pdf	853739.0
KSR_BYPASS_11_24.pdf	pdf	207796.0

Report Last Saved By

Louisville and Jefferson County MSD

User: ALEX.SMITHER@LOUISVILLEMSD.ORG
Name: Charles Smither
E-Mail: alex.smither@louisvillemmsd.org
Date/Time: 2024-12-19 10:06 (Time Zone: -05:00)

Report Last Signed By

User: ALEX.SMITHER@LOUISVILLEMSD.ORG
Name: Charles Smither
E-Mail: alex.smither@louisvillemmsd.org
Date/Time: 2024-12-19 10:06 (Time Zone: -05:00)



**IMSAST0004
Overflow Report**

11/1/2024 12:00:00 AM to 11/30/2024 12:00:00 AM

KPDES #	Facility ID	Water Quality Treatment Center	Receiving Stream of Discharge	Region
KY0040126	MSD0411	KSR	CEDAR CREEK	NA

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Station	Receiving Stream	Discharge To
Sewer Lift Station	MSD1243-PS	1815 N STHY 393	KSR	CURRYS FORK	GROUND

Activity Code / Description	WO #	Ref #	Initiated on	Initiated By	Assigned To	Dish Status	Event Date	Problem Desc	Result	Completed	Condition
DISREV:RAIN EVENT DISCHARGE	3875818		11/19/2024 6:42:00 AM	PARKER	GENERAL MAINTENANCE	QUEUED FOR INVESTIGATION / REPAIR	4/15/2024 12:00:00 AM	LACK OF SYSTEM CAPACITY	UNAUTHORIZED DISCHARGE- WATERS	11/19/24 11:03 AM	

Discharge Reporting:

Discharge Amount:	50 GAL
Cause:	LACK OF SYSTEM CAPACITY.
Clean Up:	CLEANUP NOT POSSIBLE DUE TO MAGNITUDE OF STORM.
Control Zone:	PLACED TEMPORARY SIGNS AROUND THE IMPACTED AREA.
Impact:	SEWAGE FOUND AROUND WET WELL.
Repair:	SITE FOUND DURING RAIN EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR.
Public Notification:	PLACED TEMPORARY SIGNS AROUND THE IMPACTED AREA

Notifications:

11/19/24 1:00 PM	DISNOT	EMAIL NOTIFICATION OF UNAUTHORIZED DISCHARGE SENT TO:DISCHARGENOTICES@LOUISVILLEMSD.ORG, SAYRE.DENNIS@EPAMAIL.EPA.GOV
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**IMSAST0004
Overflow Report**

11/1/2024 12:00:00 AM to 11/30/2024 12:00:00 AM

KPDES #	Facility ID	Water Quality Treatment Center	Receiving Stream of Discharge	Region
KY0040126	MSD0411	KSR	CEDAR CREEK	NA

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Station	Receiving Stream	Discharge To
Sewer Lift Station	MSD1243-PS	1815 N STHY 393	KSR	CURRYS FORK	GROUND

Activity Code / Description	WO #	Ref #	Initiated on	Initiated By	Assigned To	Dish Status	Event Date	Problem Desc	Result	Completed	Condition
DISREV:RAIN EVENT DISCHARGE	3869494		11/14/2024 10:01:00 AM	SOSA RODRIGUEZ	GENERAL MAINTENANCE	QUEUED FOR INVESTIGATION / REPAIR	4/15/2024 12:00:00 AM	LACK OF SYSTEM CAPACITY	UNAUTHORIZED DISCHARGE- WATERS	11/14/24 10:09 AM	

Discharge Reporting:

Discharge Amount:	750 GAL
Cause:	LACK OF SYSTEM CAPACITY.
Clean Up:	CLEANUP NOT POSSIBLE DUE TO MAGNITUDE OF STORM.
Control Zone:	PLACED TEMPORARY SIGNS AROUND THE IMPACTED AREA.
Impact:	SEWAGE FOUND AROUND WET WELL.
Repair:	SITE FOUND DURING RAIN EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR.
Public Notification:	PLACED TEMPORARY SIGNS AROUND THE IMPACTED AREA.

Notifications:

11/14/24 1:00 PM	DISNOT	EMAIL NOTIFICATION OF UNAUTHORIZED DISCHARGE SENT TO:DISCHARGENOTICES@LOUISVILLEMSD.ORG, SAYRE.DENNIS@EPAMAIL.EPA.GOV
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**IMSAST0004
Overflow Report**

11/1/2024 12:00:00 AM to 11/30/2024 12:00:00 AM

KPDES #	Facility ID	Water Quality Treatment Center	Receiving Stream of Discharge	Region
KY0040126	MSD0411	KSR	CEDAR CREEK	NA

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Station	Receiving Stream	Discharge To
Sewer Lift Station	MSD1243-PS	1815 N STHY 393	KSR	CURRYS FORK	GROUND

Activity Code / Description	WO #	Ref #	Initiated on	Initiated By	Assigned To	Dish Status	Event Date	Problem Desc	Result	Completed	Condition
DISREV:RAIN EVENT DISCHARGE	3868827		11/10/2024 6:09:00 PM	BROADEN	BROADEN	QUEUED FOR INVESTIGATION / REPAIR	4/15/2024 12:00:00 AM	LACK OF SYSTEM CAPACITY	UNAUTHORIZED DISCHARGE-WATERS	11/11/24 08:29 AM	

Discharge Reporting:

Discharge Amount:	550 GAL
Cause:	LACK OF SYSTEM CAPACITY.
Clean Up:	CLEANUP NOT POSSIBLE DUE TO MAGNITUDE OF STORM.
Control Zone:	PLACED TEMPORARY SIGNS AROUND THE IMPACTED AREA.
Impact:	SEWAGE FOUND AROUND WET WELL.
Repair:	SITE FOUND DURING RAIN EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR.
Public Notification:	PLACED TEMPORARY SIGNS AROUND THE IMPACTED AREA.

Notifications:

11/11/24 1:00 AM	DISNOT	EMAIL NOTIFICATION OF UNAUTHORIZED DISCHARGE SENT TO:DISCHARGENOTICES@LOUISVILLEMSD.ORG, SAYRE.DENNIS@EPAMAIL.EPA.GOV
11/11/24 1:00 AM	DISSNO	WAITING TO COMPLETE THE DISCHARGE INFORMATION



**IMSAST0004
Overflow Report**

11/1/2024 12:00:00 AM to 11/30/2024 12:00:00 AM

KPDES #	Facility ID	Water Quality Treatment Center	Receiving Stream of Discharge	Region
KY0040126	MSD0411	KSR	CEDAR CREEK	NA

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Station	Receiving Stream	Discharge To
Sewer Main	122738A-V	2040 COX LN	KSR	CEDAR CREEK	GROUND

Activity Code / Description	WO #	Ref #	Initiated on	Initiated By	Assigned To	Dish Status	Event Date	Problem Desc	Result	Completed	Condition
DISREV:RAIN EVENT DISCHARGE	3866106		11/6/2024 3:00:00 PM	BROADEN	BROADEN	REPAIRED - ISSUE RESOLVED	11/6/2024 12:00:00 AM	STRUCTURAL FAILURE	UNAUTHORIZED DISCHARGE-WATERS	11/06/24 03:30 PM	

Discharge Reporting:

Discharge Amount:	500 GAL
Cause:	STRUCTURAL FAILURE (FORCE MAIN BREAK).
Clean Up:	MSD CONTRACTOR CLEANED AND SANITIZED THE IMPACTED AREA.
Control Zone:	PLACED TEMPORARY SIGNS AROUND THE IMPACTED AREA.
Impact:	SEWAGE/DEBRIS/SOLIDS/PERSONAL HYGIENE PRODUCTS FOUND ON THE GROUND.
Repair:	REPAIRED THE MAIN SEWER; WORK ORDER #3866126.
Public Notification:	PLACED TEMPORARY SIGNS AROUND THE IMPACTED AREA.

Notifications:

11/7/24 1:00 AM	DISNOT	EMAIL NOTIFICATION OF UNAUTHORIZED DISCHARGE SENT TO:DISCHARGENOTICES@LOUISVILLEMSD.ORG, SAYRE.DENNIS@EPAMAIL.EPA.GOV
11/7/24 1:00 AM	DISSNO	WAITING TO COMPLETE THE DISCHARGE INFORMATION


Metropolitan Sewer District - OC
P.O. Box 740011
Louisville, KY, 40201

Page 1 of 1

Beckmar Certificate Of Analysis 241118011

241118011.02		Collection Date: 11/18/2024 10:00 AM					Sampled By: Daniel Kidd		
Project: KSR WQTC - Winter		Sample Description: T411EFF-RESAMPLE					Matrix: Wastewater		
Test Name	Parameter	Result	Unit	MDL	MRL	Type	Method	Analyzed Date/Time	Analyst
Ammonia as N	Ammonia	<0.2	mg/L	0.2	0.2	C24	SM 4500-NH3 D (2011)	11/20/2024 04:30 PM	NSK

Thank You,



Paul Barker
Lab Manager



CHAIN OF CUSTODY AND ANALYTICAL REQUEST

*Job ID: 241118011



Metropolitan Sewer District - OC

Month: Nov Year: 2024

Special Instructions: Use this Chain of Custody for samples taken during the months of November through April Calibration ID: _____

Facility Location & Contact Information		Send Results To: (same as client info <input type="checkbox"/> yes <input type="checkbox"/> no)		Billing Information (same as client info <input type="checkbox"/> yes <input type="checkbox"/> no)		Permit ID (if applicable) <u>KY0040126</u>	
Client Name <u>KSR WQTC</u>		Client Name <u>Metropolitan Sewer District</u>		Client Name <u>Metropolitan Sewer District</u>		Compliance (Y/N) <u>Y</u> State: <u>KY</u>	
Address <u>1612 Dawkins Rd.</u>		Address <u>P.O. Box 740011</u>		Address <u>P.O. Box 740011</u>		Samples chlorinated (Y/N) <u>Y</u>	
City, St, ZIP <u>La Grange, KY 40031</u>		City, State, ZIP <u>Louisville, KY 40201</u>		City, State, ZIP <u>Louisville, KY 40201</u>			
Phone _____		Phone / Fax <u>502-540-6735</u>		Contact Name _____			
Contact _____		E-mail <u>david.radke@louisvillemsd.org</u>		A.P. Email <u>accountspayable@louisvillemsd.org</u>			

Collected by (please print): Daniel Kidd (signature): [Signature] P.O. Number: _____ Sample Frequency Weekly

Bottle ID (Lab Use Only)	Collection		Project ID: <u>KSR WQTC - Winter</u>	Analysis Requested	Field Data				Collection Type (See Bottom Right)	Number of Containers	Type of Container (See Bottom Center)	Matrix Code (See Bottom Right)	Preservative Code (See Bottom Right)	Initial Laboratory Location	Preservative Added in-house (Y/N)	
	Day	Time			pH (S.U.)	DO (Mg/L)	Cl ₂ (mg/L) Free Total	Temp. (°C)								
			<u>T411EFF - KSR WQTC EFF</u>	COD, TSS, NO₂, NO₃, Total Nitrogen						C24	1	P10	WW	R	R12	N
<u>02</u>	<u>17</u>	<u>1800</u>	<u>T411EFF - KSR WQTC EFF</u>	<u>TKN, NH₃, TP Resample</u>						C24	1	P10	WW	SA	R12	N
			<u>T411INF - KSR WQTC INF</u>	COD, TSS, NO₂, NO₃, Total Nitrogen						C24	1	P10	WW	R	R12	N
			<u>T411INF - KSR WQTC INF</u>	TKN, TP						C24	1	P10	WW	SA	R12	
			<u>T41TEFF - KSR WQTC EFF</u>	<u>Field Data</u>	√	√	√	√		G		WW				

Relinquished by: <u>[Signature]</u>	Received by: <u>[Signature]</u>	Date: <u>11-18-24</u>	Time: <u>1317</u>	Type of Container G10 = 1000ml Glass G5 = 500ml Glass P10 = 1000ml Plastic H40c = 40ml Headspace Clear H40a = 40ml Headspace Amber SG = 16 Oz Glass - Soil W1 = 120ml Plastic Sterile D1 = 120ml Plastic Sterile P25 = 250ml Plastic P1 = 100ml Plastic 4LC = 4 Liter Cube 1LC = 1 Liter Cube VA = 1000ml Virgin Amber Glass A8 = 8oz Glass Amber	Sample rejection: Reason: _____ Temp. At Receipt <u>3</u> °C Check Applicable Field Wet Ice <input checked="" type="checkbox"/> Blue Ice _____	Matrix Codes DW = Drinking Water S = Soil O = Other WW = Wastewater SL = Sludge P = Paint GW = Groundwater PW = Process Water SW = Surface Water V = Vegetation
Relinquished by:	Received by:	Date:	Time:	Sample Integrity	Collection Types	
Relinquished by:	Received by:	Date:	Time:	Yes No N/A	Preservative Codes	
Relinquished by:	Received by:	Date:	Time:	Broken Containers _____	Ni = Nitric Acid (HNO ₃)	
Relinquished by:	Received by:	Date:	Time:	Custody Seals Intact <u>X</u> _____	SA = Sulfuric Acid (H ₂ SO ₄)	
Relinquished by:	Received by:	Date:	Time:	COC / Sample Label Agreement <u>X</u> _____	C8 - 8Hr Composite HA = Hydrochloric Acid (HCl ₃)	
Relinquished by:	Received by:	Date:	Time:	Proper Containers <u>X</u> _____	SH = Sodium Hydroxide (NaOH)	
Relinquished by:	Received by:	Date:	Time:	Samples Within Holding Times <u>X</u> _____	C12 - 12Hr Composite ST = Sodium Thiosulfate	
Relinquished by:	Received by:	Date:	Time:	All Samples on COC Received <u>X</u> _____	R = Refrigerated	
Relinquished by:	Received by:	Date:	Time:	W1 & D1 Filled to 100ml mark _____	C24 - 24Hr Composite SS = Sodium Sulfite	
Relinquished by:	Received by:	Date:	Time:	Headspace acceptable _____	AA = Ascorbic Acid	
Comments: Client Collects E-coli Separately Field Data Collected with Comps				Preservative Added (Date/Time) _____	C - Composite ZN = Zinc Acetate AC = Ammonium Chloride	
IRTS n/s: <u>201907014970</u> correction factor: <u>0.0</u> °C					Initial <u>JMC</u>	