



CITY OF COLUMBIA, MISSOURI

UTILITIES DEPARTMENT
SOLID WASTE DIVISION

October 3, 2017

Paul Dickerson, Chief
Water Pollution Compliance/ Enforcement
Missouri Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102

RE: Third Quarter 2017 NPDES Monitoring Report, Columbia Sanitary Landfill and Compost Facility, MDNR permit # MO-0112640, Boone County

This letter represents the Third Quarter 2017 NPDES Monitoring Report for permit number MO-0112640 for Outfalls 002, 003, 004, 005, 006 and 007. Monthly samples were collected from Outfall 004 on August 22, 2017, no discharge was observed during the months of July and September. Quarterly samples were collected from Outfalls 004, 005, 006, and 007 on August 22, 2017. No discharge was observed on Outfalls 002 and 003 during the Third Quarter of 2017. On September 18, 2017 an additional report was generated for Outfall 005 due to an error by our third party testing laboratory inadvertently using parameters in outdated permit. Sampling for Outfall 005 was performed in accordance with the proper permit, so only a corrected report was necessary. Daily site precipitation amounts for the Third Quarter of 2017 are enclosed with this letter. The precipitation summarized by month is as follows:

Month	Recorded Precipitation
July, 2017	3.10"
August, 2017	2.88"
September, 2017	0.96"

The results of the quarterly samples collected from Outfalls 004,005,006, and 007 enclosed, indicate no exceedances.

Areas of previous re-vegetative efforts have continued to establish with an overall increase in the density of the vegetative cover. Construction of the new administrative building has been completed.

Table 3
 NPDES Monitoring for Non-Municipal Wastewater Discharges
 Outfall 006
 Third Quarter 2017

Facility Name: Columbia Sanitary Landfill & Yard Waste Compost
 Permit Number: MO-0112640
 County: Boone
 Owner: City of Columbia, Missouri
 Type of Facility: Sanitary Landfill & Yard Waste Compost Facility

Required Frequency of Monitoring: Quarterly

Report Period: Third Quarter 2017

Third Quarter 2017		Outfall 006	Collected
Parameters	Units	Daily Maximum	Sample Type
Flow	MGD		Est
COD	mg/L	9	Grab
Settleable Solids	mL/L/hr		Grab
Total Suspended Solids	mg/L	100	Grab
pH (field)	SU	6.5 - 9.0	Grab
Oil & Grease	mg/L	10	Grab
TPH	mg/L		Grab
Aluminum	ug/L		Grab
Aluminum (dissolved)	ug/L		Grab
Copper	ug/L		Grab
Iron	ug/L	4000	Grab
Lead	ug/L		Grab
Zinc	ug/L		Grab

NS - Not Sampled

Table 3
 NPDES Monitoring for Non-Municipal Wastewater Discharges
 Outfall 005
 Third Quarter 2017

Facility Name: Columbia Sanitary Landfill & Yard Waste Compost Required Frequency of Monitoring: Quarterly
 Permit Number: MO-0112640 Report Period: Third Quarter 2017

County: Boone

Owner: City of Columbia, Missouri

Type of Facility: Sanitary Landfill & Yard Waste Compost Facility

Third Quarter 2017

Parameters	Units	Daily Maximum	Sample Type	Outfall 005 Collected 8/22/2017 Reported 9/11/2017 *Reported 9/18/2017
Flow	MGD		Est	0.084
COD	mg/L		Grab	18.9*
Settleable Solids	mg/L		Grab	<0.2
Total Suspended Solids	mg/L		Grab	52
pH (field)	SU	6.5 - 9.0	Grab	7.68
Oil & Grease	mg/L		Grab	<1.0
Aluminum, Total Recoverable	ug/L		Grab	3,240*
Copper, Total Recoverable	ug/L		Grab	5
Iron, Total Recoverable	ug/L		Grab	2,010
Lead, Total Recoverable	ug/L		Grab	<5
Zinc, Total Recoverable	ug/l		Grab	16

NS - Not Sampled

*Reported 9/18/2017 due to error by 3rd party testing laboratory

NPDES Monitoring for Non-Municipal Wastewater Discharges
 Outfalls 002, 003, 004, and 007
 Third Quarter 2017

Facility Name: Columbia Sanitary Landfill & Yard Waste Compost
 Permit Number: MO-0112640
 County: Boone

Required Frequency of Monitoring: Quarterly
 Report Period: Third Quarter 2017

Owner: City of Columbia, Missouri
 Type of Facility: Sanitary Landfill & Yard Waste Compost Facility

Third Quarter 2017

Parameters	Units	Daily Maximum	Sample Type	Outfall 002 Results	Outfall 003 Results	Outfall 004 Results Collected 8/22/2017 Reported 9/11/2017	Outfall 007 Results Collected 8/22/2017 Reported 9/11/2017
Flow	MGD		Est	NS	NS	0.061	0.007
Chemical Oxygen Demand	mg/L	90	Grab	NS	NS	19.5	15.5
BOD5	mg/L		Grab	NS	NS	<6	<6
Total Suspended Solids	mg/L	80	Grab	NS	NS	31	7
pH (field)	SU	6.5 - 9.0	Grab	NS	NS	8.04	7.38
Settleable solids	mL/L		Grab	NS	NS	0.1	<0.1
Ammonia as N	mg/L		Grab	NS	NS	<0.3	<0.3
Nitrogen, total	mg/L		Grab	**	**	1.1	**
Phosphorus, total	mg/L		Grab	**	**	<0.05	**
Oil & Grease	mg/L	10	Grab	NS	NS	<1.0	<1.0
Chloride + Sulfates	mg/L	1000	Grab	NS	NS	386.5	411.8
Chloride	mg/L		Grab	NS	NS	28.5	12.8
Fluoride	mg/L		Grab	NS	NS	0.45	0.59
Sulfate	mg/L		Grab	NS	NS	358	399
Benzene	ug/L		Grab	NS	NS	<5.0	<5.0
Aluminum	ug/L		Grab	NS	NS	1,060	<200
Aluminum (dissolved)	ug/L		Grab	NS	NS	<200	<200
Antimony	ug/L		Grab	NS	NS	<6	<6
Arsenic	ug/L		Grab	NS	NS	<5	5
Beryllium	ug/L		Grab	NS	NS	<4	<4
Cadmium	ug/L		Grab	NS	NS	<5	<5
Chromium	ug/L		Grab	NS	NS	<10	<10
Cobalt	ug/L		Grab	NS	NS	<50	<50
Copper	ug/L		Grab	NS	NS	<5	<5
Iron	ug/L	4000	Grab	NS	NS	750	500
Lead	ug/L		Grab	NS	NS	<5	<5
Mercury	ug/L		Grab	NS	NS	<0.2	<0.2
Nickel	ug/L		Grab	NS	NS	13	<10
Selenium	ug/L		Grab	NS	NS	<5	<5
Silver	ug/L		Grab	NS	NS	<3	<3
Thallium	ug/L		Grab	NS	NS	<2	<2
Zinc	ug/L		Grab	NS	NS	8	<5

** - Parameter not required

NA - Not analyzed

NS - Not Sampled

Highlighted cell indicated an exceedance of the daily maximum or monthly average limits

SAMPLE CHAIN OF CUSTODY RECORD



Engineering Surveys and Services

1113 Fay Street * Columbia, Missouri 65201 * (573) 449-2646
 802 El Dorado Drive * Jefferson City, Missouri 65101 * (573) 636-3303
 1775 West Main Street * Sedalia, Missouri 65301 * (660) 826-8618

City of Columbia Landfill

Columbia Landfill Stormwater

Columbia, Missouri

ESS Lab No.: L3782

Outfall: 4

Facility:

Stormwater

Sample Date: 8/22/17

Sample Time: 9:10 AM

Sample Temp: 24.5 deg C

Sampled By: VINEET KADILA

Tests to be Performed Container/Preservative

Tests to Be Performed Container/Preservative

Biochemical Oxygen Demand
 Chemical Oxygen Demand
 Grease & Oil
 pH
 Settleable Solids
 Total Suspended Solids
 Ammonia
 Chloride
 Sulfate
 Fluoride
 Aluminum
 Arsenic
 Cadmium
 Chromium
 Copper
 Iron
 Lead
 Selenium
 Silver
 Thallium

Zinc
 Antimony
 Beryllium
 Cobalt
 Mercury
 Nickel
 Digestion
 Chromium, Trivalent
 Chromium, Hexavalent
 Benzene
 Kjeldahl Nitrogen
 Nitrate Nitrogen
 Nitrite Nitrogen
 Total Nitrogen
 Phosphorous, Total

Diss Aluminum	2 - 1000 p	None
	500 p	H2SO4
	500 p	HNO3
	1000 w/m g	H2SO4(L)
	2 - 40 ml vial	HCl
	500 p	NP

Additional Information:

Relinquished by:

Received by:

Date and Time

8/22/17 9:10 AM

22 Aug 17
 9:10 AM

**MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
NPDES DISCHARGE MONITORING REPORT**

11 September 2017
L3782

Facility: Columbia Landfill Stormwater	Permit No.: MO-0112640	Sample Date: 22 August 2017
County: Boone	Frequency: Quarterly	Sample Time: 09:10 AM
Location: Columbia, Missouri	Sample Loc.: Effluent	Sample Type: Grab Sample
Outfall No.: 4	Flow, mgd:	Sample Temp: 24 °C
Description: Stormwater	Collected By: Others	Weather:
Monitoring Period: 01 July 2017 To 30 September 2017		Report Due: <u>28 October 2017</u>

PARAMETER	1027	UNITS	Detection	Method
Biochemical Oxygen Demand	<6	mg/l		
Chemical Oxygen Demand	19.5 ✓	mg/l		
Grease & Oil	< 1.0 ✓	mg/l		
pH	7.7 ✓	units		
Settleable Solids	0.1	ml/l/hr		
Total Suspended Solids	31 ✓	mg/l		
Ammonia	<0.3	mg/l		
Chloride	28.5 ✓	mg/l		
Sulfate	358 ✓	mg/l		
Fluoride	0.45	mg/l		
Aluminum	1,060	ug/l		
Aluminum	<200*	ug/l		
Arsenic	<5	ug/l		
Cadmium	<5	ug/l		
Chromium	<10	ug/l		
Copper	<5	ug/l		

Comments:

*Result is dissolved

Analysis performed in strict accordance with sample holding times & test procedures outlined in "Standard Methods for the Examination of Water and Wastewater", latest edition

INSTRUCTIONS:

1. Date & sign one copy & retain for your records.
2. Date & sign one copy & mail to: **Department of Natural Resources**
Northeast Regional Office
1709 Prospect Drive
Macon, MO 63552

**OWNER
APPROVAL:**

DATE:

cc: Adam White
email: White

Engineering Surveys & Services

BY:


Linda L. Adams

**MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
NPDES DISCHARGE MONITORING REPORT**

11 September 2017

L3782

Facility: Columbia Landfill Stormwater	Permit No.: MO-0112640	Sample Date: 22 August 2017
County: Boone	Frequency: Quarterly	Sample Time: 09:10 AM
Location: Columbia, Missouri	Sample Loc.: Effluent	Sample Type: Grab Sample
Outfall No.: 4	Flow, mgd:	Sample Temp: 24 °C
Description: Stormwater	Collected By: Others	Weather:

Monitoring Period: 01 July 2017 To 30 September 2017

Report Due: 28 October 2017

PARAMETER	1027	UNITS	Method
Iron	750 ✓	ug/l	6020A
Lead	<5	ug/l	6020A
Selenium	<5	ug/l	6020A
Silver	<3	ug/l	6020A
Thallium	<2	ug/l	6020A
Zinc	8	ug/l	6020A
Antimony	<6	ug/l	6020A
Beryllium	<4	ug/l	6020A
Cobalt	<50	ug/l	6020A
Mercury	<0.2	ug/l	6020A
Nickel	13	ug/l	6020A
Digestion	yes		
Chromium, Trivalent	<10	ug/l	3500 Cr
Chromium, Hexavalent	<5	ug/l	3500 Cr D
Benzene	<5.0**	ug/l	8260 B
Kjeldahl Nitrogen	1.1	mg/l	4500N org

Comments:

** Analysis by PDC Laboratories

Analysis performed in strict accordance with sample holding times & test procedures outlined in "Standard Methods for the Examination of Water and Wastewater", latest edition

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**OWNER
APPROVAL:**

DATE:

cc: Adam White
email: White

Engineering Surveys & Services

BY:

Linda L. Adams

**MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
NPDES DISCHARGE MONITORING REPORT**

11 September 2017

L3782

Facility: Columbia Landfill Stormwater	Permit No.: MO-0112640	Sample Date: 22 August 2017
County: Boone	Frequency: Quarterly	Sample Time: 09:10 AM
Location: Columbia, Missouri	Sample Loc.: Effluent	Sample Type: Grab Sample
Outfall No.: 4	Flow, mgd:	Sample Temp: 24 °C
Description: Stormwater	Collected By: Others	Weather:

Monitoring Period: 01 July 2017 To 30 September 2017 **Report Due:** 28 October 2017

PARAMETER	1027	UNITS	Method
Nitrate Nitrogen	<0.10	mg/l	SM16-418D
Nitrite Nitrogen	<0.005	mg/l	4500-NO2-B
Total Nitrogen	1.1	mg/l	
Phosphorous, Total	<0.05	mg/l	4500PBE

Comments:

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Macon, MO 63552

**OWNER
APPROVAL:**

DATE:

cc: Adam White
email: White

Engineering Surveys & Services

BY:


Linda L. Adams

SAMPLE CHAIN OF CUSTODY RECORD



Engineering Surveys and Services

1113 Fay Street * Columbia, Missouri 65201 * (573) 449-2646
 802 El Dorado Drive * Jefferson City, Missouri 65101 * (573) 636-3303
 1775 West Main Street * Sedalia, Missouri 65301 * (660) 826-8618

City of Columbia Landfill	Columbia Landfill Stormwater	Columbia, Missouri
ESS Lab No.: L3782	Outfall: 5	Facility: Stormwater
Sample Date: 8/22/17	Sample Time: 9:45 AM	Sample Temp: 24 deg C
Sampled By: VINCEET KAYLA		
<u>Tests to be Performed</u>	<u>Container/Preservative</u>	<u>Tests to Be Performed</u>
<u>Container/Preservative</u>	<u>Tests to Be Performed</u>	<u>Container/Preservative</u>
Biochemical Oxygen Demand		
Grease & Oil		
pH		
Settleable Solids		
Total Suspended Solids		
Ammonia		
Kjeldahl Nitrogen		
Nitrate Nitrogen		
Nitrite Nitrogen		
Total Nitrogen		
Phosphorous, Total		
		2 - 1000 p None
		500 p H2SO4
		1000 w/m g H2SO4(L)
		500 p NP
Additional Information:		

Relinquished by:

Received by:

Date and Time

8/22/17
9:45 AM

22 Aug 17
3:10 PM

**MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
NPDES DISCHARGE MONITORING REPORT**

11 September 2017

L3782

Facility: Columbia Landfill Stormwater	Permit No.: MO-0112640	Sample Date: 22 August 2017
County: Boone	Frequency: Quarterly	Sample Time: 09:45 AM
Location: Columbia, Missouri	Sample Loc.: Effluent	Sample Type: Grab Sample
Outfall No.: 5	Flow, mgd:	Sample Temp: 24 °C
Description: Stormwater	Collected By: Others	Weather:

Monitoring Period: 01 July 2017 To 30 September 2017

Report Due: 28 October 2017

PARAMETER	1028	UNITS	Detection	Method
Biochemical Oxygen Demand	<6	mg/l		
Grease & Oil	< 1.0	mg/l		
pH	7.7	units		
Settleable Solids	<0.2	ml/l/hr		
Total Suspended Solids	52	mg/l		
Ammonia	0.3	mg/l		
Kjeldahl Nitrogen	<1.0	mg/l		
Nitrate Nitrogen	0.22	mg/l		
Nitrite Nitrogen	<0.005	mg/l		
Total Nitrogen	<1.0	mg/l		
Phosphorous, Total	0.13	mg/l		

Comments:

Analysis performed in strict accordance with sample holding times & test procedures outlined in "Standard Methods for the Examination of Water and Wastewater", latest edition

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Northeast Regional Office
1709 Prospect Drive
Macon, MO 63552

**OWNER
APPROVAL:**

DATE:

cc: Adam White
email: White

Engineering Surveys & Services

BY:

Linda L. Adams

**ENGINEERING SURVEYS AND SERVICES
TESTING LABORATORIES**

1113 Fay Street * Columbia, Missouri 65201 * (573) 449-2646
802 El Dorado Drive * Jefferson City, Missouri 65101 * (573) 636-3303
1775 West Main Street * Sedalla, Missouri 65301 * (660) 826-8618

Date: 18 September 2017

Lab Number: L3782

Project: Columbia Landfill Stormwater

Location: Columbia, Missouri

Date Received: 22 August 2017

Sample No. / 1028 / Outfall #005, 8/22/17, 9:45 AM

Description :

TEST RESULTS:

Parameter:	1028	Units	Detection	Method
Aluminum	3,240	ug/l		6020A
Iron	2,010	ug/l		6020A
Copper	5	ug/l		6020A
Zinc	16	ug/l		6020A
Lead	<5	ug/l		6020A
Chemical Oxygen Demand	18.9	mg/l		5220 D

Sample secured and delivered to laboratory by others
Addition to report dated 9/11/2017

Method number from "Standard Methods for the Examination of Water & Wastewater", current edition, unless noted otherwise.

cc: Adam White

email: White

Engineering Surveys & Services

BY:



For: Linda L. Adams

SAMPLE CHAIN OF CUSTODY RECORD



Engineering Surveys and Services

1113 Fay Street * Columbia, Missouri 65201 * (573) 449-2646
 802 El Dorado Drive * Jefferson City, Missouri 65101 * (573) 636-3303
 1775 West Main Street * Sedalia, Missouri 65301 * (660) 826-8618

City of Columbia Landfill

Columbia Landfill Stormwater

Columbia, Missouri

ESS Lab No.: L3782

Outfall: 6

Facility:

Stormwater

Sample Date: 8/22/17

Sample Time: 9:35 AM

Sample Temp: 24.7 deg C

Sampled By: VINCEY KAPILA

Tests to be Performed

Container/Preservative

Tests to Be Performed

Container/Preservative

Chemical Oxygen Demand

Grease & Oil

pH

Settleable Solids

Total Suspended Solids

Aluminum

Copper

Iron

Lead

Zinc

Digestion

GRO

Diss Aluminum

1000 p None

500 p H2SO4

500 p HNO3

1000 w/m g H2SO4(L)

2 - 40 ml vial HCl

Additional Information:

Relinquished by:

Received by:

22 Aug 17
3:10 PM

Date and Time

8/22/17 9:35 AM

**MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
NPDES DISCHARGE MONITORING REPORT**

11 September 2017

L3782

Facility: Columbia Landfill Stormwater	Permit No.: MO-0112640	Sample Date: 22 August 2017
County: Boone	Frequency: Quarterly	Sample Time: 09:35 AM
Location: Columbia, Missouri	Sample Loc.: Effluent	Sample Type: Grab Sample
Outfall No.: 6	Flow, mgd:	Sample Temp: 25 °C
Description: Stormwater	Collected By: Others	Weather:

Monitoring Period: 01 July 2017 To 30 September 2017

Report Due: 28 October 2017

PARAMETER	1029	UNITS	Method
Chemical Oxygen Demand	29.4	mg/l	
Grease & Oil	< 1.0 ✓	mg/l	
pH	7.7 ✓	units	
Settleable Solids	<0.1	ml/l/hr	
Total Suspended Solids	26 ✓	mg/l	
Aluminum	1,260	ug/l	
Aluminum	<200*	ug/l	
Copper	<5	ug/l	
Iron	820 ✓	ug/l	
Lead	<5	ug/l	
Zinc	7	ug/l	
Digestion	yes		
GRO	<1,000**	ug/l	8015

Comments:

*Result is dissolved **Analysis by PDC Laboratories

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cc: Adam White
email: White

Engineering Surveys & Services

BY:

Linda L. Adams

SAMPLE CHAIN OF CUSTODY RECORD



Engineering Surveys and Services

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 1775 West Main Street * Sedalia, Missouri 65301 * (660) 826-8618

City of Columbia Landfill

Columbia Landfill Stormwater

Columbia, Missouri

ESS Lab No.: L3782

Outfall: 7

Facility:

Stormwater

Sample Date: 8/22/17

Sample Time: 9:20 AM Sample Temp: 23.8 deg C

Sampled By: VINCEY KAPILA

<u>Tests to be Performed</u>	<u>Container/Preservative</u>	<u>Tests to Be Performed</u>	<u>Container/Preservative</u>
Biochemical Oxygen Demand		Zinc	
Chemical Oxygen Demand		Antimony	
Grease & Oil		Beryllium	
pH		Cobalt	
Settleable Solids		Mercury	
Total Suspended Solids		Nickel	
Ammonia		Digestion	
Chloride		Chromium, Trivalent	
Sulfate		Chromium, Hexavalent	
Fluoride		Benzene	
Aluminum		Diss. Aluminum	
Arsenic			
Cadmium			
Chromium			
Copper			
Iron			2 - 1000 p None
Lead			500 p H2SO4
Selenium			500 p HNO3
Silver			1000 w/m g H2SO4(L)
Thallium			2 - 40 ml vial HCl

Additional Information:

Relinquished by:

[Signature]

Received by:

[Signature]
 22 Aug 17
 3:10pm

Date and Time

8/22/17 9:20 AM

**MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
NPDES DISCHARGE MONITORING REPORT**

11 September 2017

L3782

Facility: Columbia Landfill Stormwater	Permit No.: MO-0112640	Sample Date: 22 August 2017
County: Boone	Frequency: Quarterly	Sample Time: 09:20 AM
Location: Columbia, Missouri	Sample Loc.: Effluent	Sample Type: Grab Sample
Outfall No.: 7	Flow, mgd:	Sample Temp: 24 °C
Description: Stormwater	Collected By: Others	Weather:

Monitoring Period: 01 July 2017 To 30 September 2017 **Report Due:** 28 October 2017

PARAMETER	1030	UNITS	Detection	Method
Biochemical Oxygen Demand	<6	mg/l		
Chemical Oxygen Demand	15.5 ✓	mg/l		
Grease & Oil	< 1.0	mg/l		
pH	7.4	units		
Settleable Solids	<0.1	ml/l/hr		
Total Suspended Solids	7 ✓	mg/l		
Ammonia	<0.3	mg/l		
Chloride	12.8 ✓	mg/l		
Sulfate	399 ✓	mg/l		
Fluoride	0.59	mg/l		
Aluminum	<200	ug/l		
Aluminum	<200*	ug/l		
Arsenic	5	ug/l		
Cadmium	<5	ug/l		
Chromium	<10	ug/l		
Copper	<5	ug/l		

Comments:

*Result is dissolved

Analysis performed in strict accordance with sample holding times & test procedures outlined in "Standard Methods for the Examination of Water and Wastewater", latest edition

INSTRUCTIONS:

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1709 Prospect Drive
Macon, MO 63552

**OWNER
APPROVAL:**

DATE:

cc: Adam White
email: White

Engineering Surveys & Services

BY:

Linda L. Adams

**MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
NPDES DISCHARGE MONITORING REPORT**

11 September 2017

L3782

Facility: Columbia Landfill Stormwater	Permit No.: MO-0112640	Sample Date: 22 August 2017
County: Boone	Frequency: Quarterly	Sample Time: 09:20 AM
Location: Columbia, Missouri	Sample Loc.: Effluent	Sample Type: Grab Sample
Outfall No.: 7	Flow, mgd:	Sample Temp: 24 °C
Description: Stormwater	Collected By: Others	Weather:

Monitoring Period: 01 July 2017 To 30 September 2017 **Report Due:** 28 October 2017

PARAMETER	1030	UNITS	Method
Iron	500 -	ug/l	6020A
Lead	<5	ug/l	6020A
Selenium	<5	ug/l	6020A
Silver	<3	ug/l	6020A
Thallium	<2	ug/l	6020A
Zinc	<5	ug/l	6020A
Antimony	<6	ug/l	6020A
Beryllium	<4	ug/l	6020A
Cobalt	<50	ug/l	6020A
Mercury	<0.2	ug/l	6020A
Nickel	<10	ug/l	6020A
Digestion	yes		
Chromium, Trivalent	<10	ug/l	3500 Cr
Chromium, Hexavalent	<5	ug/l	3500 Cr D
Benzene	<5.0**	ug/l	8260 B

Comments:

**Analysis by PDC Laboratories

Analysis performed in strict accordance with sample holding times & test procedures outlined in "Standard Methods for the Examination of Water and Wastewater", latest edition

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