

**BEFORE THE
DEPARTMENT OF NATURAL RESOURCES
STATE OF MISSOURI**

IN THE MATTER OF:)	
)	
City of Columbia)	
Wastewater Collection and Treatment System)	
P.O. Box 6015)	
Columbia, MO 65205)	
)	Order No. 2016-WPCB-1110
)	
SERVE:)	
)	
The City of Columbia)	
Mike Matthes)	
City Manager)	

ABATEMENT ORDER ON CONSENT

NOTICE TO RECIPIENTS OF ABATEMENT ORDERS

The issuing of this Abatement Order on Consent (AOC) No. 2016-WPCB-1110, by the Department of Natural Resources, is a formal administrative action by the state of Missouri and is being issued because the city of Columbia violated the Missouri Clean Water Law (MCWL). This AOC is issued under the authorities of Sections 640.130, 640.131, 644.056 and 644.079, RSMo. Failure to comply with this AOC is, by itself, a violation of the MCWL Section 644.076.1, RSMo. Litigation may occur without further administrative notice if there is not compliance with the requirements of this AOC. This AOC does not constitute a waiver or a modification of any requirements for the MCWL, or its implementing regulations, all of which remain in full force and effect. Compliance with the terms of this AOC shall not relieve the city of liability for, or preclude the department from, initiating an administrative or judicial enforcement action to recover

civil penalties for any future violations of the MCWL, or to seek injunctive relief, pursuant to Chapter 644, RSMo.

FINDINGS OF FACT

1. The city owns and operates a wastewater treatment facility (WWTF) located in the SE 1/4, SW 1/4, Section 07, Township 47 North, Range 13 West, of Boone County, Missouri. The WWTF, which receives wastewater from approximately 48,250 connections, consists of treatment by activated sludge, an anaerobic sludge digester, a sludge storage basin, and wetland treatment with a portion of dry solids being land applied or hauled to Missouri Biosolids. The WWTF has a design population equivalent of 178,875, a designed average flow 20.6 million gallons per day (MGD), an actual flow of 15.8 MGD, a design sludge production of 3,948 dry tons per year, and an actual sludge production of 3,337 dry tons per year. Effluent discharges to a tributary to the Missouri River pursuant the conditions and requirements of Missouri State Operating Permit (MSOP) No. MO-0097837.

2. The city's wastewater collection system is comprised of publicly owned and maintained infrastructure, which includes 704 miles of publicly owned sewer lines, 18,336 manholes, and end of line clean outs, and 22 pump stations.

3. Perche Creek, Hinkson Creek, Hominy Branch, North Fork Grindstone Creek, Grindstone Creek, Gans Creek, Bear Creek, Rocky Fork Creek, Cow Branch, Harmony Creek, Scotts Branch, Meredith Branch, Goodin Branch, Mill Creek, Flat Branch, County House Branch, South Fork Grindstone Creek, Clear creek, and their tributaries are within the boundary of the city and are waters of the state as the term is defined by Section 644.016(27) RSMo.

4. Domestic wastewater is a water contaminant as the term is defined in Section 644.016(24), RSMo.

5. Appendix's A and B includes a list of events self-reported, reported by others or found by investigation from the city's fiscal year 2008 (October 1, 2007) through part of the city's fiscal year of 2016 (August 19, 2016) that may have resulted in a release of water contaminants from the sewage system of the city and are the subject of this enforcement action. All releases that have occurred from the system up to and including the date of signature of this agreement and listed on Appendices A and B are addressed by this AOC.

6. The department dispatched employees to investigate the January 17, 2014, and March 16, July 30, and August 24, 2015, and March 2, and 3, 2016, overflows, included on Appendix A. In doing so, the department incurred costs and expenses, including but not limited to, water sampling and analysis, photographs, and travel expenses. These costs incurred by the department total \$5,477.89.

7. Section 644.096, RSMo, authorizes the state, or any political subdivision or agency, to recover actual damages, including all costs and expenses necessary to establish or collect any sums under Section 644.006 to 644.141, RSMo, and the costs and expenses of restoring any waters of the state to their condition as they existed before the violation, sustained by the state because of the violation

8. Section 644.076.1, RSMo, makes it unlawful to violate the MCWL and regulations promulgated pursuant thereto and established civil penalties up to \$10,000.00 per violation per day.

9. The city is in the process of developing an Integrated Management Plan (IMP) for its stormwater, and wastewater collection and treatment system improvements. The IMP will include but not be limited to capital improvement projects to reduce Inflow and Infiltration and other improvement in the collection system with the goal of eliminating wet weather and dry

weather Sanitary Sewer Overflows (SSOs). The city is preparing the plan in accordance with the guidelines as written in the Environmental Protection Agency's Integrated Municipal Stormwater and Wastewater Planning Approach Framework and intends to submit a copy of the plan to the department. A Memorandum of Understanding between the Department and the City details expectations between the parties including intentions regarding implementation of the IMP.

STATEMENT OF VIOLATIONS

The city has violated the MCWL and its implementing regulations as follows:

10. Operated, used, or maintained a water contaminant, wastewater, which was discharged to waters of the state without an MSOP, in violation of Sections 644.051.2 and 644.076.1, RSMo, and 10 CSR 20-6.010(1)(A) and (5)(A); and

11. Placed, or caused or permitted to be placed, a water contaminant in a location where it is reasonably certain to cause pollution of waters of the state in violation of Sections 644.051.1(1) and 644.076.1, RSMo.

12. The WWTF system discharged water contaminants into waters of the state, which reduced the quality of such waters below the Water Quality Standards established by the Missouri Clean Water Commission in violation of Sections 644.051.1(2) and 644.076.1, RSMo, and 10 CSR 20-7.031 or applicable subsections of 10 CSR 20-7.031.

AGREEMENT

13. The department and the city desire to amicably resolve all claims that may be brought against the city for violations alleged above in Statement of Violations without the city admitting to the validity or accuracy of such claims.

14. The provisions of this AOC shall apply to and be binding upon the parties executing this AOC, their successors, assigns, agents, subsidiaries, affiliates, and lessees,

including the officers, agents, servants, corporations, and any persons acting under, through, or for the parties. Any changes in ownership or corporate status, including but not limited to any transfer of assets or real or personal property, shall not affect the responsibilities of the city under this AOC. If the city sells or otherwise transfers the WWTF, then the city shall cause as a condition of such sale or transfer that the buyer will assume the obligations of the city under this AOC in writing. In such event, the city shall provide 30 days prior written notice of such assumption to the department.

15. The city, in compromise and satisfaction of the department's claims relating to the above-referenced violations, agrees, without admitting liability or fault, to pay a civil penalty in the amount of \$15,000.00. The payment shall be in the form of a certified check or cashier's check made payable to "Boone County Treasurer, as custodian of the Boone County School Fund." The check in the amount of \$15,000.00 is due and payable upon execution of this AOC by the city. The check and signed copies of the AOC shall be delivered to:

Accounting Program
Department of Natural Resources
P.O. Box 477
Jefferson City, MO 65102-0477

The city agrees to pay the state's investigative costs in the amount of \$5,477.89 in the form of a separate check made payable to the "State of Missouri". The check in the amount of \$5,477.89 is due and payable upon execution of this AOC by the city. The check shall be delivered as provided in Paragraph 39 of this AOC.

16. In the event that a SSO or a bypass of wastewater from the WWTF and/or its collection system should occur, the city agrees and is ordered to orally report the SSO or bypass to the department within 24 hours from the time the city became aware of such as SSO or bypass, by contacting the Northeast Regional Office at (660) 385-8000 between 8:00 a.m. to

5:00 p.m. Monday through Friday, and after hours (Friday 5:00 p.m. to Monday 8:00 a.m.) contact the department's 24-Hour Emergency Spill Line at (573) 634-2436 to report the SSO or bypass to the department. The city further agrees and is ordered to provide written notice to the department within five days from the time the city becomes aware of the SSO or bypass and agrees to take immediate action to correct each SSO or bypass. The city may utilize the department's SSO Reporting System at <http://www.dnr.mo.gov/modnrcag/> to report the SSOs and bypasses to the department.

OTHER PROVISIONS

17. Immediately upon becoming aware that a deadline or milestone as set forth in this AOC will not be completed by the required deadline, the city shall notify the department by telephone or electronic mail i) identifying the deadline that will not be completed; ii) identifying the reason for failing to meet the deadline; and iii) proposing an extension to the deadline. Within five days of notifying the department, the city shall submit to the department for review and approval a written request containing the same information. The department may grant an extension if it deems appropriate. Failure to submit a written notice to the department may constitute a waiver of the city's right to request an extension and may be grounds for the department to deny the city an extension.

18. Compliance with this AOC resolves only the specific violations described herein, and this AOC shall not be construed as a waiver or modification or any other requirements of the MCWL and regulations, or any other source of law. Nor does this order resolve any future violations of this order or any law or regulation. Consistent with 10 CSR 20-3.010(5), this order shall not be construed as satisfying any claim by the state or federal government for natural resource damages.

19. Nothing in this AOC forgives the city from future non-compliance with the laws of the state of Missouri, nor requires the department or state of Missouri to forego pursuing by any legal means for any non-compliance with the laws of the state of Missouri. The terms stated herein constitute the entire and exclusive agreement of the parties. There are no other obligations of the parties, be they express or implied, oral or written, except those expressly set forth herein. The terms of this AOC supersede all previous memoranda or understanding, notes, conversations, and agreements, express or implied. This AOC may not be modified orally.

20. By signing this AOC, all signatories assert that they have read and understood the terms of this AOC, and that they have the authority to sign this AOC on behalf of their respective party.

21. The effective date of the AOC shall be the date the department signs the AOC. The department shall send a fully executed copy of this AOC to the city for its records.

22. The city shall comply with the MCWL, Chapter 644, RSMo and its implementing regulations at all times in the future.

COST ANALYSIS FOR COMPLIANCE

23. Pursuant to Section 644.145, the Cost Analysis for Compliance (CAFCom), which addresses the obligations included within this Order through date of signature, is attached hereto as Appendix C. This CAFCom does not address future improvements that may be necessary to comply with the MCWL or its implementing regulations.

NOTICE OF APPEAL RIGHTS

24. By signing this AOC, the city consents to its terms and waives any right to appeal, seek judicial review, or otherwise challenge the terms and conditions of this AOC pursuant to Sections 621.250, 640.010, 640.013, 644.056.3, 644.079.2, Chapter 536 RSMo, 644.145, RSMo,

10 CSR 20-1.020, 10 CSR 20-3.010, 10 CSR 20-6.020(5), the Missouri Constitution, or any other source of law for any matters prior to the signature of this agreement.

25. The city reserves the right to appeal any decisions of the department regarding interpretations of this agreement, permits subsequent to this agreement, future violations and/or decisions of the department consistent with and allowed under law going forward from the date of signature to this agreement.

SIGNATORY AUTHORITY

Agreed to and Ordered this ____ day of _____, 2016

John Madras, Director
Water Protection Program
Missouri Department of Natural Resources

Agreed to and Ordered this ____ day of _____, 2016

Mike Matthes, City Manager
City of Columbia

ATTEST:

Sheela Amin, City Clerk

Date: _____, 2016

APPROVED AS TO FORM:

Nancy Thompson, City Counselor

Date: _____, 2016

I hereby certify that this Contract is within the purpose of the appropriation to which it is to be charged, that is, account _____ and that there is an unencumbered balance to the credit of such account sufficient to pay therefore.

Michele Nix, Director of Finance

Date: _____, 2016

Copies of the foregoing served by certified mail to:

Mr. David Shorr
Lathrop & Gage
314 East High Street
Jefferson City, MO 65101

CERTIFIED MAIL # 7013 3020 0001 2161 6133

c: Ms. Diane Huffman, Environmental Protection Agency
Mr. Chris Wieberg, Chief, Operating Permits Section
Ms. Irene Crawford, Director, Northeast Regional Office
Missouri Clean Water Commission
Accounting Program

APPENDIX A

Appendix A

FY 2016 Sanitary Sewer Overflow and Bypass Summary - Columbia Regional Wastewater Treatment Plant - Permit No. MO-0097837																		
Date	Time	Reported by	Location		SSO		Bypass		Precipitation		Discharge Estimate		Watershed	Cause	Corrective Action Completed or Needed	MDNR Notification		
			Address	MH Number(s)	Dry	Wet	Dry	Wet	Inches	Duration	Duration	Volume				Date	Time	
11/18/15	9:00 AM	Staff	1930 Jackson	1A32		x				4.45	43 hrs	unknown	unknown	Bear Creek	surcharged	Reduce I-I	11/18/2015	1:45 PM
11/18/15	9:45 AM	Staff	1614 Secretariat	2K42		x				4.45	43 hrs.	unknown	unknown	Bear Creek	surcharged	Reduce I-I	11/18/2015	1:45 PM
11/18/15	10:00 AM	Staff	2103 Lovejoy	2K154		x				4.45	43 hrs.	unknown	unknown	Bear Creek	surcharged	Reduce I-I	11/18/2015	1:45 PM
11/18/15	8:30 AM	Staff	2601 Greenbriar	5B1		x				4.45	43 hrs.	unknown	unknown	Hinkson Creek	surcharged	Reduce I-I	11/18/2015	1:45 PM
11/18/15	8:10 AM	Staff	2601 Greenbriar	5B1		x				4.45	43 hrs.	unknown	unknown	Hinkson Creek	surcharged	Reduce I-I	11/18/2015	1:45 PM
11/18/15	7:35 AM	Staff	1700 Forum	5G10		x				4.45	43 hrs.	unknown	unknown	Flat Branch	surcharged	Reduce I-I	11/18/2015	1:45 PM
11/18/15	7:35 AM	Staff	1700 Forum	5G37		x				4.45	43 hrs.	unknown	unknown	Flat Branch	surcharged	Reduce I-I	11/18/2015	1:45 PM
11/18/15	8:00 AM	Staff	1700 Forum	5G81A		x				4.45	43 hrs.	unknown	unknown	Flat Branch	surcharged	Reduce I-I	11/18/2015	1:45 PM
12/14/15	8:25 AM	Staff	1930 Jackson	1A32		x				2.28	31 hrs.	unknown	unknown	Bear Creek	surcharged	Reduce I-I	12/14/2015	1:40 PM
12/14/15	9:00 AM	Staff	1614 Secretariat	2K42		x				2.28	31 hrs.	unknown	unknown	Bear Creek	surcharged	Reduce I-I	12/14/2015	1:40 PM
12/14/15	8:00 AM	Staff	107 Pendleton	3C50		x				2.28	31 hrs.	unknown	unknown	Flat Branch	surcharged	Reduce I-I	12/14/2015	1:40 PM
12/14/15	8:10 AM	Staff	501 Spring Valley	3F61		x				2.28	31 hrs.	unknown	unknown	County House Branch	surcharged	Reduce I-I	12/14/2015	1:40 PM
12/14/15	8:50 AM	Staff	2601 Greenbriar	5B1		x				2.28	31 hrs.	unknown	unknown	Hinkson Creek	surcharged	Reduce I-I	12/14/2015	1:40 PM
12/14/15	8:50 AM	Staff	2601 Greenbriar	5B2		x				2.28	31 hrs.	unknown	unknown	Hinkson Creek	surcharged	Reduce I-I	12/14/2015	1:40 PM
12/14/15	7:50 AM	Staff	1700 Forum	5G9		x				2.28	31 hrs.	unknown	unknown	Flat Branch	surcharged	Reduce I-I	12/14/2015	1:40 PM
12/14/15	7:50 AM	Staff	1700 Forum	5G10		x				2.28	31 hrs.	unknown	unknown	Flat Branch	surcharged	Reduce I-I	12/14/2015	1:40 PM
12/14/15	7:50 AM	Staff	1700 Forum	5G11		x				2.28	31 hrs.	unknown	unknown	Flat Branch	surcharged	Reduce I-I	12/14/2015	1:40 PM
12/14/15	7:50 AM	Staff	1700 Forum	5G40		x				2.28	31 hrs.	unknown	unknown	Flat Branch	surcharged	Reduce I-I	12/14/2015	1:40 PM
12/14/15	8:00 AM	Staff	1700 Forum	5G81A		x				2.28	31 hrs.	unknown	unknown	Flat Branch	surcharged	Reduce I-I	12/14/2015	1:40 PM
12/23/15	8:00 AM	Staff	3514 Deer Run	2K68		x				n/a	n/a	unknown	<50 gal	Bear Creek	roots at connection	CIPP	12/23/2015	8:25 AM
12/27/15	8:00 AM	Staff	WWTP	clarifier				x		3.52	52 hrs	unknown	unknown	None-Lagoon	surcharged	training for operators	12/29/2015	2:23 PM
12/28/15	9:40 AM	Staff	1930 Jackson	1A32		x				3.26	31 hrs.	unknown	unknown	Bear Creek	surcharged	Reduce I-I	12/28/2015	3:00 PM
12/28/15	9:40 AM	Staff	1930 Jackson	1A30		x				3.26	31 hrs.	unknown	unknown	Bear Creek	surcharged	Reduce I-I	12/28/2015	3:00 PM
12/28/15	9:40 AM	Staff	1930 Jackson	1A31		x				3.26	31 hrs.	unknown	unknown	Bear Creek	surcharged	Reduce I-I	12/28/2015	3:00 PM
12/28/15	9:40 AM	Staff	1614 Secretariat	2K42		x				3.26	31 hrs.	unknown	unknown	Bear Creek	surcharged	Reduce I-I	12/28/2015	3:00 PM
12/28/15	9:45 AM	Staff	107 Pendleton	3C50		x				3.26	31 hrs.	unknown	unknown	Flat Branch	surcharged	Reduce I-I	12/28/2015	3:00 PM
12/28/15	10:00 AM	Staff	501 Spring Valley	3F61		x				3.26	31 hrs.	unknown	unknown	County House Branch	surcharged	Reduce I-I	12/28/2015	3:00 PM
12/28/15	10:20 AM	Staff	E Business Loop	4P59		x				3.26	31 hrs.	unknown	unknown	Bear Creek	surcharged	Reduce I-I	12/28/2015	3:00 PM
12/28/15	9:35 AM	Staff	2601 Greenbriar	5B1		x				3.26	31 hrs.	unknown	unknown	Hinkson Creek	surcharged	Reduce I-I	12/28/2015	3:00 PM
12/28/15	9:20 AM	Staff	1700 Forum	5G10		x				3.26	31 hrs.	unknown	unknown	Flat Branch	surcharged	Reduce I-I	12/28/2015	3:00 PM
12/28/15	9:20 AM	Staff	1700 Forum	5G11		x				3.26	31 hrs.	unknown	unknown	Flat Branch	surcharged	Reduce I-I	12/28/2015	3:00 PM
12/29/15	1:00 AM	Staff	WWTP	clarifier				x		3.52	52 hrs.	unknown	unknown	None-Lagoon	surcharged	training for operators	12/29/2015	2:23 PM
01/31/16	3:45 PM	Citizen	1422 Torrey Pines	5E141		x				n/a	n/a	unknown	unknown	Mill Creek	grease obstruction	add to 6 month list	2/1/2016	1:05 PM
02/01/16	9:00 AM	Staff	1834 Scarbrough	7L53		x				n/a	n/a	unknown	unknown	Clear Creek	grease+rags obstruction	add to 6 month list	2/1/2016	1:05 PM
02/22/16	9:30 PM	Staff	WWTP	digester				x		n/a	n/a	unknown	unknown	None-Lagoon	power outage	none	2/22/2016	3:45 PM
03/03/16	10:45 AM	Citizen	4011 Discovery	DC1		x				n/a	n/a	unknown	unknown	Gans Creek	defective fitting	replace fitting	3/3/2016	3:30 PM
03/15/16	12:30 PM	Citizen	3201 Woodbine Ct	5J4		x				n/a	n/a	unknown	unknown	Hinkson Creek	Grease + Grit	add to 6 month list, CIPP	3/15/2016	3:15 PM
04/23/16	1:15 PM	Staff	WWTP	centrate line		x				n/a	n/a	unknown	unknown	n/a	obstructed line	monitor line	4/24/2016	12:15 PM
05/01/16	4:30 AM	Jim Gallup	923 Yale	3156		x				n/a	n/a	unknown	unknown	n/a	obstructed line	CIPP	5/2/2016	11:00 AM
06/18/16	1:00 PM	Staff	Route KK	8N6		x				n/a	n/a	unknown	unknown	Mill Creek	bored sewer main	repaired main	6/18/2016	6:40 PM
07/03/16	3:50 AM	Staff	Clear Pump Station	7K23		x				5.87	24 hrs.	80 min.	60,000 gal	Clear Creek	power outage	Reduce I-I	7/3/2016	11:53 AM
07/04/16	8:30 AM	Citizen	2210 Ridgfield	5L54		x				5.98	32 hrs.	unknown	unknown	County House Branch	surcharged	Reduce I-I	7/4/2016	12:20 PM
07/04/16	8:30 AM	Citizen	2216 Ridgfield	5L55		x				5.98	32 hrs.	unknown	unknown	County House Branch	surcharged	Reduce I-I	7/4/2016	12:20 PM
07/05/16	9:10 AM	Staff	1614 Secretariat	2K42		x				5.98	32 hrs.	unknown	unknown	Bear Creek	surcharged	Reduce I-I	7/5/2016	2:40 PM
07/05/16	8:00 AM	Staff	Rollins/Redbud	3A86		x				5.98	32 hrs.	unknown	unknown	Flat Branch	surcharged	Reduce I-I	7/5/2016	2:40 PM
07/05/16	10:20 AM	Staff	409 W Walnut	3B204		x				5.98	32 hrs.	unknown	unknown	Flat Branch	surcharged	Reduce I-I	7/5/2016	2:40 PM
07/05/16	8:15 AM	Staff	310 N Garth	3B252		x				5.98	32 hrs.	unknown	unknown	Flat Branch	surcharged	Reduce I-I	7/5/2016	2:40 PM
07/05/16	8:25 AM	Staff	107 Pendleton	3C50		x				5.98	32 hrs.	unknown	unknown	Flat Branch	surcharged	Reduce I-I	7/5/2016	2:40 PM
07/05/16	8:45 AM	Staff	501 Spring Valley	3F61		x				5.98	32 hrs.	unknown	unknown	County House Branch	surcharged	Reduce I-I	7/5/2016	2:40 PM
07/05/16	8:35 AM	Staff	111 Spring Valley	3F95		x				5.98	32 hrs.	unknown	unknown	County House Branch	surcharged	Reduce I-I	7/5/2016	2:40 PM
07/05/16	1:30 PM	Staff	1720 Rollins Rd	4150		x				5.98	32 hrs.	unknown	unknown	Hinkson Creek	surcharged	Reduce I-I	7/5/2016	2:40 PM
07/05/16	8:30 AM	Staff	1400 Business Loop	4P59		x				5.98	32 hrs.	unknown	unknown	Bear Creek	surcharged	Reduce I-I	7/5/2016	2:40 PM
07/05/16	9:15 AM	Staff	2601 Greenbriar Dr	5B1		x				5.98	32 hrs.	unknown	unknown	Hinkson Creek	surcharged	Reduce I-I	7/5/2016	2:40 PM
07/05/16	9:20 AM	Staff	2601 Greenbriar Dr	5B2		x				5.98	32 hrs.	unknown	unknown	Hinkson Creek	surcharged	Reduce I-I	7/5/2016	2:40 PM
07/05/16	8:00 AM	Staff	1700 Forum	5G9		x				5.98	32 hrs.	unknown	unknown	Flat Branch	surcharged	Reduce I-I	7/5/2016	2:40 PM

07/05/16	7:55 AM	Staff	1700 Forum	5G10		x			5.98	32 hrs.	unknown	unknown	Flat Branch	surcharged	Reduce I+I	7/5/2016	2:40 PM
07/05/16	7:55 AM	Staff	1700 Forum	5G11		x			5.98	32 hrs.	unknown	unknown	Flat Branch	surcharged	Reduce I+I	7/5/2016	2:40 PM
07/05/16	10:25 AM	Staff	1700 Forum	5G14		x			5.98	32 hrs.	unknown	unknown	Flat Branch	surcharged	Reduce I+I	7/5/2016	2:40 PM
07/05/16	8:25 AM	Staff	1700 Forum	5G17		x			5.98	32 hrs.	unknown	unknown	Flat Branch	surcharged	Reduce I+I	7/5/2016	2:40 PM
07/05/16	8:25 AM	Staff	1700 Forum	5G25		x			5.98	32 hrs.	unknown	unknown	Flat Branch	surcharged	Reduce I+I	7/5/2016	2:40 PM
07/05/16	8:00 AM	Staff	1700 Forum	5G37		x			5.98	32 hrs.	unknown	unknown	Flat Branch	surcharged	Reduce I+I	7/5/2016	2:40 PM
07/05/16	7:50 AM	Staff	1700 Forum	5G39		x			5.98	32 hrs.	unknown	unknown	Flat Branch	surcharged	Reduce I+I	7/5/2016	2:40 PM
07/05/16	9:00 AM	Brett Russell	2310 Colony Dr	5G65		x			n/a	n/a	unknown	unknown	Hinkson Creek	rags obstruction/sag	Remove sag	7/5/2016	2:40 PM
07/05/16	8:30 AM	Staff	2400 Chapel Hill	5K128		x			5.98	32 hrs.	unknown	unknown	County House Branch	surcharged	Reduce I+I	7/5/2016	2:40 PM
07/05/16	10:00 AM	Staff	4216 Forum Blvd.	8G13A					5.98	32 hrs.	unknown	unknown	Hinkson Creek	surcharged	Reduce I+I	7/5/2016	2:40 PM
07/05/16	2:10 PM	Staff	4740 Old Mill Creek	8O10		x			5.98	32 hrs.	unknown	unknown	Mill Creek	surcharged	Reduce I+I	7/5/2016	2:40 PM
07/05/16	9:45 AM	Staff	4900 W Gillespie Bridge Rd	10E18		x			5.98	32 hrs.	unknown	unknown	Merideth	surcharged	Reduce I+I	7/5/2016	2:40 PM
07/06/16	7:30 AM	Staff	KK/ W Applewood Creek	8O29		x			5.98	32 hrs.	unknown	unknown	Merideth	surcharged	Reduce I+I	7/5/2016	12:55 PM
07/06/16	8:05 PM	Staff	2209 Country Club Dr	4K96		x			5.98	32 hrs.	unknown	unknown	Hinkson Creek	surcharged	Reduce I+I	7/6/2016	12:55 PM
07/06/16	7:55 AM	Staff	1907 Country Club Dr	4K102		x			5.98	32 hrs.	unknown	unknown	Hinkson Creek	surcharged	Reduce I+I	7/6/2016	12:55 PM
07/06/16	8:30 AM	Staff	2900 Forum	5F225		x			5.98	32 hrs.	unknown	unknown	Hinkson Creek	surcharged	Reduce I+I	7/6/2016	12:55 PM
07/06/16	8:35 AM	Staff	2900 Forum	5F226		x			5.98	32 hrs.	unknown	unknown	Hinkson Creek	surcharged	Reduce I+I	7/6/2016	12:55 PM
07/11/16	1:20 AM	Staff	3019 Hayden Dr	2O3		x			5.98	32 hrs.	unknown	unknown	Bear Creek	surcharged	Reduce I+I	7/11/2016	12:55 PM
08/19/16	8:45 AM	Staff	1121 S Glenwood Ave	3E10D		x			n/a	n/a	unknown	unknown	Flat Branch	roots at joint	short liner	8/19/2016	2:15 PM
09/06/16	9:30 AM	Chuck Carl	1901 Hanover	2A146		x			n/a	n/a	unknown	unknown	Hinkson Creek	broken pipe	replace manhole	9/6/2016	3:05 PM
09/12/16	3:00 PM	Staff	Sixth + Elm	4N38-4N37		x			n/a	n/a	17minutes	< 500 gal	Flat Branch	broken pipe	short liner	9/12/2016	4:20 AM

Precipitation from Sanborn Field weather station

FY 2015 Sanitary Sewer Overflow and Bypass Summary - Columbia Regional Wastewater Treatment Plant - Permit No. MO-0097837

Date	Time	Reported by	Location		SSO		Bypass		Precipitation		Discharge Estimate		Watershed	Cause	Corrective Action	MDNR Notification	
			Address	MH Number(s)	Dry	Wet	Dry	Wet	Inches	Duration	Duration	Volume				Completed or Needed	Date
10/02/14	10:55 AM	Utility Staff	107 Pendleton	3C50		x			4.4		unknown	unknown	Flat Branch	Surcharged	Reduce I&I	10/3/2014	9:05 AM
10/02/14	10:00 AM	Utility Staff	2209 S Country Club Dr	4K96		x			4.4	12 hrs.	unknown	unknown	Hinkson Creek	Surcharged	Reduce I&I	10/3/2014	9:05 AM
10/03/14	10:30 AM	Utility Staff	1700 Forum	5G40		x			5.62	29 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	10/3/2014	2:55 PM
10/03/14	10:55 AM	Utility Staff	1700 Forum	5G81A		x			5.62	29 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	10/3/2014	2:40 PM
10/03/14	8:05 AM	Utility Staff	2216 Ridgefield	5L55		x			5.62	29 hrs.	unknown	unknown	County House Branch	Surcharged	Reduce I&I	10/3/2014	2:55 PM
10/03/14	8:45 AM	Utility Staff	811 Boulder Dr	6O29A		x			5.62	29 hrs.	unknown	unknown	Hinkson Creek	Surcharged	Reduce I&I	10/3/2014	2:40 PM
10/03/14	7:30 AM	Utility Staff	2400 Chapel Hill Rd	5K128		x			5.62	29 hrs.	unknown	unknown	County House Branch	Surcharged	Reduce I&I	10/3/2014	2:40 PM
10/03/14	8:20 AM	Utility Staff	1930 Jackson	1A32		x			5.62	29 hrs.	unknown	unknown	Bear Creek	Surcharged	Reduce I&I	10/3/2014	2:40 PM
10/03/14	8:25 AM	Utility Staff	Prov. & Mick Deaver	5C15		x			5.62	29 hrs.	unknown	unknown	Hinkson Creek	Surcharged	Reduce I&I	10/3/2014	2:40 PM
10/03/14	10:15 AM	Utility Staff	1700 Forum	5G9		x			5.62	29 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	10/3/2014	2:40 PM
10/03/14	10:10 AM	Utility Staff	1700 Forum	5G10		x			5.62	29 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	10/3/2014	2:40 PM
10/03/14	10:05 AM	Utility Staff	1700 Forum	5G11		x			5.62	29 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	10/3/2014	2:40 PM
10/03/14	10:15 AM	Utility Staff	1700 Forum	5G13		x			5.62	29 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	10/3/2014	2:55 PM
10/03/14	10:25 AM	Utility Staff	1700 Forum	5G14		x			5.62	29 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	10/3/2014	2:55 PM
10/03/14	10:10 AM	Utility Staff	1700 Forum	5G38		x			5.62	29 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	10/3/2014	2:40 PM
10/03/14	10:35 AM	Utility Staff	1700 Forum	5G25		x			5.62	29 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	10/3/2014	2:40 PM
10/03/14	10:20 AM	Utility Staff	1700 Forum	5G39		x			5.62	29 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	10/3/2014	2:55 PM
10/03/14	10:10 AM	Utility Staff	1700 Forum	5G38A		x			5.62	29 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	10/3/2014	2:55 PM
10/03/14	8:30 AM	Utility Staff	310 N Garth	3B252		x			5.62	29 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	10/3/2014	2:40 PM
10/03/14	7:50 AM	Utility Staff	2601 Greenbriar Dr	5B1		x			5.62	29 hrs.	unknown	unknown	Hinkson Creek	Surcharged	Reduce I&I	10/3/2014	2:40 PM
10/03/14	8:10 AM	Utility Staff	2601 Greenbriar Dr	5B2		x			5.62	29 hrs.	unknown	unknown	Hinkson Creek	Surcharged	Reduce I&I	10/3/2014	2:40 PM
10/03/14	9:10 AM	Utility Staff	4740 Old Mill Creek Rd	8O10		x			5.62	29 hrs.	unknown	unknown	Mill Creek	Surcharged	Reduce I&I	10/3/2014	2:55 PM
10/06/14	8:50 AM	Utility Staff	4338 W Bellview	10A42		x			5.62	29 hrs.	unknown	unknown	Hinkson Creek	Surcharged	Reduce I&I	10/6/2015	2:25 PM
10/06/14	8:00 AM	Utility Staff	3900 Foxcreek Way	10A82		x			5.62	29 hrs.	unknown	unknown	Hinkson Creek	Surcharged	Reduce I&I	10/6/2015	2:55 PM
10/06/14	9:15 AM	Utility Staff	3243 Brampton Ct	10B1		x			5.62	29 hrs.	unknown	unknown	Merideth	Surcharged	Reduce I&I	10/6/2015	2:25 PM
10/06/14	7:30 AM	Utility Staff	4900 W Gillespie Bridge Rd	10E7		x			5.62	29 hrs.	unknown	unknown	Hinkson Creek	Surcharged	Reduce I&I	10/6/2015	2:25 PM
10/06/14	9:45 AM	Utility Staff	4900 W Gillespie Bridge Rd	10E18		x			5.62	29 hrs.	unknown	unknown	Merideth	Surcharged	Reduce I&I	10/6/2015	2:25 PM
10/06/14	7:30 AM	Utility Staff	4900 W Gillespie Bridge Rd	10F9		x			5.62	29 hrs.	unknown	unknown	Perche	Surcharged	Reduce I&I	10/6/2015	2:25 PM
10/06/14	7:50 AM	Utility Staff	4900 W Gillespie Bridge Rd	10F13		x			5.62	29 hrs.	unknown	unknown	Perche	Surcharged	Reduce I&I	10/6/2015	2:25 PM

10/14/14	9:00 AM	Utility Staff	3243 S Brampton Ct 4900 W Gillespie Bridge Rd	10B1		x			1.31	31 hrs	unknown	unknown	Hinkson Creek	Surcharged	Reduce I&I	10/14/2014	1:45 PM
10/14/14	9:30 AM	Utility Staff	3500 Buttonwood Dr	10F9		x			1.31	31 hrs	unknown	unknown	Perche	Surcharged	Reduce I&I	10/14/2014	1:45 PM
11/22/14	2:40 PM	Citizen	935 W Old Plank Rd	6M41	x				n/a	n/a	unknown	unknown	Hinkson Creek	Grease	6 month cleaning list	11/23/2014	9:10 AM
12/09/14	7:20 AM	Citizen	2209 Country Club Dr	4K96	x				n/a	n/a	unknown	unknown	Bonne Femme Ck.	Equipment Failure	Equipment Repaired	12/9/2014	2:10 PM
02/01/15	12:55 PM	Citizen	1403 Rollins	broken main	x				n/a	n/a	unknown	< 500 gal.	County House Branch	cracked pipe	main repaired	2/2/2015	9:30 AM
02/06/15	11:30 AM	Utility Staff	4025 Applewood Creek	broken main	x				n/a	n/a	unknown	unknown	Mill Creek	broken force main	main repaired	2/13/2015	4:30 PM
03/14/15	6:20 PM	Citizen	1010 Sycamore	5F211	x				n/a	n/a	unknown	unknown	Lake Woodrail	grease & rags	invert repaired	3/15/2015	11:00 AM
05/27/15	11:30 AM	Plant Staff	Clear Creek Pump Station	broken main	x				n/a	n/a	unknown	< 50,000 gal	Clear Creek	broken main	main repaired	5/27/2015	4:40 PM
05/28/15	8:45 AM	Plant Staff	Clear Creek Force Main	air relief	x				n/a	n/a	unknown	< 20 gal	Clear Creek	bolts loose on valve	bolts replaced	5/28/2015	8:55 AM
06/10/15	1:30 PM	Plant Staff	Cow Branch Pump Station	air relief	x				n/a	n/a	15 min	<100 gal	Cow Branch	broken ball valve	valve replaced	6/12/2015	3:10 PM
06/17/15	8:30 AM	Utility Staff	1700 Forum	5G10		x			2.83	133 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	6/17/2015	2:45 PM
06/18/15	8:30 AM	Utility Staff	3243 S Brampton Ct	10B1		x			2.83	133 hrs.	unknown	unknown	Merideth	Surcharged	Reduce I&I	6/18/2015	1:40 PM
07/07/15	8:45 AM	Utility Staff	1930 Jackson St	1A32		x			1.99	9 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	7/7/2015	1:15 PM
07/07/15	8:45 AM	Utility Staff	1930 Jackson St	1A30		x			1.99	9 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	7/7/2015	1:15 PM
07/07/15	7:45 AM	Utility Staff	501 Spring Valley	3F61		x			1.99	9 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	7/7/2015	1:15 PM
07/07/15	7:50 AM	Utility Staff	1700 Forum	5G10		x			1.99	9 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	7/7/2015	1:15 PM
07/07/15	7:40 AM	Utility Staff	1700 Forum	5G12		x			1.99	9 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	7/7/2015	1:15 PM
07/07/15	7:35 AM	Utility Staff	1700 Forum	5G38A		x			1.99	9 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	7/7/2015	1:15 PM
07/07/15	7:30 AM	Utility Staff	1700 Forum	5G39		x			1.99	9 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	7/7/2015	1:15 PM
07/07/15	11:05 AM	Utility Staff	107 Pendleton	3C50		x			1.99	9 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	7/7/2015	1:15 PM
07/09/15	9:10 AM	Utility Staff	1700 Forum	5G81A		x			1.56	24 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	7/9/2015	1:25 PM
07/09/15	8:40 AM	Utility Staff	1700 Forum	5G12		x			1.56	24 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	7/9/2015	1:25 PM
07/09/15	8:00AM	Utility Staff	1700 Forum	5G10		x			1.56	24 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	7/9/2015	1:25 PM
07/09/15	11:20 AM	Utility Staff	1400 E Buisness Loop	4P59		x			1.56	24 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	7/9/2015	1:25 PM
07/20/15	7:50 AM	Utility Staff	1700 Forum	5G10		x			2.44	7 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	7/20/2015	1:45 PM
07/20/15	8:00 AM	Utility Staff	111 Spring Valley	3F95		x			2.44	7 hrs.	unknown	unknown	Merideth	Surcharged	Reduce I&I	7/20/2015	1:45 PM
07/20/15	8:00 AM	Utility Staff	501 Spring Valley	3F61		x			2.44	7 hrs.	unknown	unknown	Merideth	Surcharged	Reduce I&I	7/20/2015	1:45 PM
07/20/15	8:15 AM	Utility Staff	107 Pendleton	3C50		x			2.44	7 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	7/20/2015	1:45 PM
07/20/15	9:00 AM	Utility Staff	310 N Garth	3B252		x			2.44	7 hrs.	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	7/20/2015	1:45 PM
07/30/15	2:15 PM	Citizen	Clear Creek Force Main	broken main	x				n/a	n/a	unknown	unknown	Clear Creek	broken main	main repaired	7/30/2015	2:15 PM
08/01/15	12:45 PM	Citizen	3909 Grace Ellen	2L11		x			n/a	n/a	unknown	unknown	Bear Creek	broken main/roots	repair main	8/1/2015	2:50 PM
08/23/15	4:00 PM	Citizen	Clear Creek Force Main	broken main	x				n/a	n/a	unknown	unknown	Clear Creek	broken main	main repaired	7/24/2015	9:20 AM

Precipitation from Sanborn Field weather station

FY 2014 Sanitary Sewer Overflow and Bypass Summary - Columbia Regional Wastewater Treatment Plant - Permit No. MO-0097837																		
Date	Time	Reported by	Location		SSO		Bypass		Precipitation		Discharge Estimate		Watershed	Cause	Corrective Action Completed or Needed	MDNR Notification		
			Address	MH Number(s)	Dry	Wet	Dry	Wet	Inches	Duration	Duration	Volume				Date	Time	
01/16/14	2:15 PM	Utility staff	Clear Creek Pump Station	near 701		x				n/a	n/a	unknown	unknown	Clear Creek	Broken force main	Replace pipe	1/16/2014	3:52 PM
03/30/14	2:55 PM	Eric Lidholm	4525 Old Millcreek Road	n/a		x				n/a	n/a	unknown	unknown	Mill Creek	Broken valve on force main	Replace valve	3/31/2014	10:55 AM
04/03/14	10:30 AM	Utility staff	2103 Love Joy	2K154		x				4.16	4/1-4/3	unknown	unknown	Bear Creek	Surcharged	Reduce I&I	4/3/2014	2:15 PM
04/03/14	11:20 AM	Utility staff	4900 W Gillespie Rd.	10F13		x				4.16	4/1-4/3	unknown	unknown	Perche Creek	Surcharged	Reduce I&I	4/3/2014	2:15 PM
04/03/14	1:15 PM	Utility staff	1507 Tupelo	2M24		x				4.16	4/1-4/3	unknown	unknown	Bear Creek	Surcharged	Reduce I&I	4/3/2014	2:15 PM
04/04/14	8:40 AM	Utility staff	1501 Bluebridge	2K1		x				4.16	4/1-4/3	unknown	unknown	Bear Creek	Surcharged	Reduce I&I	4/4/2014	2:25 PM
04/04/14	8:30 AM	Utility staff	1614 Secretariat	2K42		x				4.16	4/1-4/3	unknown	unknown	Bear Creek	Surcharged	Reduce I&I	4/4/2014	2:25 PM
04/04/14	8:00 AM	Utility staff	Jackson St.	1A32		x				4.16	4/1-4/3	unknown	unknown	Bear Creek	Surcharged	Reduce I&I	4/4/2014	2:25 PM
04/04/14	8:40 AM	Leigh Lockard	409 W Walnut	3B204		x				4.16	4/1-4/3	unknown	unknown	Bear Creek	Surcharged	Reduce I&I	4/4/2014	2:25 PM
04/04/14	9:15 AM	Utility staff	310 N Garth	3B252		x				4.16	4/1-4/3	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	4/4/2014	2:25 PM
04/04/14	9:10 AM	Utility staff	501 Spring Valley	3F61		x				4.16	4/1-4/3	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	4/4/2014	2:25 PM
04/04/14	9:25 AM	Utility staff	2601 Greenbriar Dr	5B1		x				4.16	4/1-4/3	unknown	unknown	Hinkson Creek	Surcharged	Reduce I&I	4/4/2014	2:25 PM
04/04/14	7:55 AM	Utility staff	2601 Greenbriar Dr	5B2		x				4.16	4/1-4/3	unknown	unknown	Hinkson Creek	Surcharged	Reduce I&I	4/4/2014	2:25 PM
04/04/14	8:30 AM	Utility staff	Providence Point	5C15		x				4.16	4/1-4/3	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	4/4/2014	2:25 PM
04/04/14	9:25 AM	Utility staff	Univ. Bottoms	5G18		x				4.16	4/1-4/3	unknown	unknown	Flat Branch	Surcharged	Reduce I&I	4/4/2014	2:25 PM

04/04/14	9:25 AM	Utility staff	Univ. Bottoms	5G26		x			4.16	4/1-4/3	unknown	unknown	Flat Branch	Surcharged	Reduce 1&l	4/4/2014	2:25 PM
04/04/14	9:20 AM	Utility staff	Univ. Bottoms	5G25		x			4.16	4/1-4/3	unknown	unknown	Flat Branch	Surcharged	Reduce 1&l	4/4/2014	3:30 PM
04/04/14	9:40 AM	Utility staff	Univ. Bottoms	5G81A		x			4.16	4/1-4/3	unknown	unknown	Flat Branch	Surcharged	Reduce 1&l	4/4/2014	3:30 PM
04/04/14	8:50 AM	Utility staff	Univ. Bottoms	5G9		x			4.16	4/1-4/3	unknown	unknown	Flat Branch	Surcharged	Reduce 1&l	4/4/2014	3:30 PM
04/04/14	9:10 AM	Utility staff	Univ. Bottoms	5G37		x			4.16	4/1-4/3	unknown	unknown	Flat Branch	Surcharged	Reduce 1&l	4/4/2014	3:30 PM
04/04/14	9:05 AM	Utility staff	Univ. Bottoms	5G10		x			4.16	4/1-4/3	unknown	unknown	Flat Branch	Surcharged	Reduce 1&l	4/4/2014	3:30 PM
04/04/14	8:50 AM	Utility staff	Univ. Bottoms	5G39		x			4.16	4/1-4/3	unknown	unknown	Flat Branch	Surcharged	Reduce 1&l	4/4/2014	3:15 PM
04/04/14	9:00 AM	Utility staff	Univ. Bottoms	5G11		x			4.16	4/1-4/3	unknown	unknown	Flat Branch	Surcharged	Reduce 1&l	4/4/2014	3:30 PM
04/04/14	8:45 AM	Utility staff	Univ. Bottoms	5G40		x			4.16	4/1-4/3	unknown	unknown	Flat Branch	Surcharged	Reduce 1&l	4/4/2014	3:15 PM
04/04/14	7:20 AM	Utility staff	2400 Chaple Hill Rd	5K128		x			4.16	4/1-4/3	unknown	unknown	Hinkson Creek	Surcharged	Reduce 1&l	4/4/2014	3:15 PM
04/04/14	7:30 AM	Utility staff	2210 Ridgefield Rd.	5L54		x			4.16	4/1-4/3	unknown	unknown	Hinkson Creek	Surcharged	Reduce 1&l	4/4/2014	3:15 PM
04/04/14	7:30 AM	Utility staff	2216 Ridgefield Rd.	5L55		x			4.16	4/1-4/3	unknown	unknown	Hinkson Creek	Surcharged	Reduce 1&l	4/4/2014	3:15 PM
04/04/14	8:30 AM	Utility staff	3243 S Brampton	10B1		x			4.16	4/1-4/3	unknown	unknown	Merrideth	Surcharged	Reduce 1&l	4/4/2014	3:30 PM
04/04/14	8:10 AM	Utility staff	5338 W Bellview Dr	10A40		x			4.16	4/1-4/3	unknown	unknown	Merrideth	Surcharged	Reduce 1&l	4/4/2014	3:30 PM
04/04/14	8:10 AM	Utility staff	5338 W Bellview Dr	10A42		x			4.16	4/1-4/3	unknown	unknown	Merrideth	Surcharged	Reduce 1&l	4/4/2014	3:30 PM
04/04/14	8:00 AM	Utility staff	3900 Foxcreek Way	10A82		x			4.16	4/1-4/3	unknown	unknown	Merrideth	Surcharged	Reduce 1&l	4/4/2014	3:30 PM
04/04/14	7:30 AM	Utility staff	4900 W Gillespie Rd.	10F9		x			4.16	4/1-4/3	unknown	unknown	Perche Creek	Surcharged	Reduce 1&l	4/4/2014	3:30 PM
06/08/14	8:30 AM	David Gibbons	4001 Dublin Ave.	10D20		x		n/a	n/a	unknown	unknown	Scouts Branch	Vandalism	Replace manhole lid	6/8/2014	4:55 PM	
06/14/14	2:30 PM	Tipper Bernhard	2005 Oak Cliff	10D2		x		n/a	n/a	unknown	unknown	Merideth	Roots	CIPP sewer main	6/14/2014	6:35 PM	
08/01/14	11:55 PM	WWTP Staff	4900 W Gillespie Rd.	grit facility			x	n/a	n/a	unknown	unknown	Merideth	Power Outage	Operator Training	6/2/2014	3:45 PM	
08/06/14	8:00 AM	Jean Hiu	2915 Bluegrass Ct	6N35		x		n/a	n/a	unknown	unknown	Hinkson Creek	Roots	CIPP sewer main	8/6/2014	10:30 AM	
08/15/14	8:15 AM	PCE Construction	2801 Woodard	2B34A		x		n/a	n/a	unknown	unknown	Hinkson Creek	Broken Mh Frame	Replace frame	8/15/2014	1:35 PM	
09/02/14	12:55 PM	Utility staff	1930 Jackson	1A30		x		5.16	9/1-9/2	unknown	unknown	Bear Creek	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	12:55 PM	Utility staff	1930 Jackson	1A31		x		5.16	9/1-9/2	unknown	unknown	Bear Creek	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	12:55 PM	Utility staff	1930 Jackson	1A32		x		5.16	9/1-9/2	unknown	unknown	Bear Creek	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	11:25 AM	Utility staff	1614 Secretariat	2K42		x		5.16	9/1-9/2	unknown	unknown	Bear Creek	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	11:10 AM	Utility staff	2103 Love Joy	2K154		x		5.16	9/1-9/2	unknown	unknown	Bear Creek	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	10:55 AM	Utility staff	Rollins + Redbud	3A86		x		5.16	9/1-9/2	unknown	unknown	Flat Branch	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	10:35 AM	Utility staff	1119 Lakeshore	3A125		x		5.16	9/1-9/2	unknown	unknown	Bear Creek	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	11:05 AM	Utility staff	409 W Walnut	3B204		x		5.16	9/1-9/2	unknown	unknown	Flat Branch	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	8:50 AM	Utility staff	501 Spring Valley	3F61		x		5.16	9/1-9/2	unknown	unknown	County House	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	8:45 AM	Utility staff	111 Spring Valley	3F95		x		5.16	9/1-9/2	unknown	unknown	County House	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	8:00 AM	Utility staff	2601 Greenbriar Dr	5B1		x		5.16	9/1-9/2	unknown	unknown	Hinkson Creek	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	8:00 AM	Utility staff	2601 Greenbriar Dr	5B2		x		5.16	9/1-9/2	unknown	unknown	Hinkson Creek	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	9:15 AM	Utility staff	1700 Forum	5C1		x		5.16	9/1-9/2	unknown	unknown	Flat Branch	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	7:40 AM	Utility staff	Providence Point	5C15		x		5.16	9/1-9/2	unknown	unknown	Hinkson Creek	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	9:40 AM	Utility staff	1700 Forum	5G9		x		5.16	9/1-9/2	unknown	unknown	Flat Branch	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	9:30 AM	Utility staff	1700 Forum	5G10		x		5.16	9/1-9/2	unknown	unknown	Flat Branch	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	9:30 AM	Utility staff	1700 Forum	5G11		x		5.16	9/1-9/2	unknown	unknown	Flat Branch	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	9:20 AM	Utility staff	1700 Forum	5G12		x		5.16	9/1-9/2	unknown	unknown	Flat Branch	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	9:45 AM	Utility staff	1700 Forum	5G14		x		5.16	9/1-9/2	unknown	unknown	Flat Branch	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	9:45 AM	Utility staff	1700 Forum	5G17		x		5.16	9/1-9/2	unknown	unknown	Flat Branch	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	9:45 AM	Utility staff	1700 Forum	5G25		x		5.16	9/1-9/2	unknown	unknown	Flat Branch	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	9:40 AM	Utility staff	1700 Forum	5G37		x		5.16	9/1-9/2	unknown	unknown	Flat Branch	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	9:35 AM	Utility staff	1700 Forum	5G38		x		5.16	9/1-9/2	unknown	unknown	Flat Branch	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	9:25 AM	Utility staff	1700 Forum	5G38A		x		5.16	9/1-9/2	unknown	unknown	Flat Branch	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	9:20 AM	Utility staff	1700 Forum	5G39		x		5.16	9/1-9/2	unknown	unknown	Flat Branch	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	9:15 AM	Utility staff	1700 Forum	5G40		x		5.16	9/1-9/2	unknown	unknown	Flat Branch	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	10:45 AM	Utility staff	1700 Forum	5G81A		x		5.16	9/1-9/2	unknown	unknown	Flat Branch	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	9:20 AM	Utility staff	2400 Chapel Hill Rd	5K128		x		5.16	9/1-9/2	unknown	unknown	County House	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	9:30 AM	Utility staff	2210 Ridgefield Rd.	5L54		x		5.16	9/1-9/2	unknown	unknown	County House	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	9:30 AM	Utility staff	2216 Ridgefield Rd.	5L55		x		5.16	9/1-9/2	unknown	unknown	County House	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	8:30 AM	Utility staff	Boulder Dr	606		x		5.16	9/1-9/2	unknown	unknown	Hinkson Creek	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	8:30 AM	Utility staff	811 Boulder Dr	6026		x		5.16	9/1-9/2	unknown	unknown	Hinkson Creek	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	8:30 AM	Utility staff	811 Boulder Dr	6029A		x		5.16	9/1-9/2	unknown	unknown	Hinkson Creek	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	11:00 AM	Utility staff	4216 Forum	8G13A		x		5.16	9/1-9/2	unknown	unknown	Mill Creek	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/02/14	11:45 AM	Utility staff	4740 Old Mill Creek	8O10		x		5.16	9/1-9/2	unknown	unknown	Mill Creek	Surcharged	Reduce 1&l	9/2/2014	2:45PM	
09/03/14	11:45 AM	Utility staff	3361 Brampton Ct	10A30		x		5.16	9/1-9/2	unknown	unknown	Merideth	Surcharged	Reduce 1&l	9/4/2014	8:15 AM	
09/02/14	12:45 PM	Utility staff	4338 Bellview	10A40		x		5.16	9/1-9/2	unknown	unknown	Hinkson Creek	Surcharged	Reduce 1&l	9/2/2014	2:45 PM	
09/02/14	12:45 PM	Utility staff	4338 Bellview	10A42		x		5.16	9/1-9/2	unknown	unknown	Hinkson Creek	Surcharged	Reduce 1&l	9/2/2014	2:45 PM	
09/03/14	11:15 AM	Utility staff	3900 Foxcreek Way	10A82		x		5.16	9/1-9/2	unknown	unknown	Hinkson Creek	Surcharged	Reduce 1&l	9/4/2014	8:15 AM	
09/03/14	11:40 AM	Utility staff	3243 Brampton Ct	10B1		x		5.16	9/1-9/2	unknown	unknown	Merideth	Surcharged	Reduce 1&l	9/4/2014	8:15 AM	

09/03/14	12:30 PM	Utility staff	4900 W Gillespie Rd.	10E18		x			5.16	9/1-9/2	unknown	unknown	Merideth	Surcharged	Reduce I&I	9/4/2014	8:15 AM
09/03/14	9:20 AM	Utility staff	4900 W Gillespie Rd.	10F13		x			5.16	9/1-9/2	unknown	unknown	Hinkson Creek	Surcharged	Reduce I&I	9/4/2014	8:15 AM
Precipitation from Sanborn Field weather station																	

FY 2013 Sanitary Sewer Overflow and Bypass Summary - Columbia Regional Wastewater Treatment Plant - Permit No. MO-0097837

Date	Time	Reported by	Location		SSO		Bypass		Precipitation Inches	Discharge Estimate		Watershed	Cause	Corrective Action Completed or Needed	MDNR Notification	
			Address	MH Number(s)	Dry	Wet	Dry	Wet		Volume	Duration				Date	Time
10/9/12	1:02 PM	Dennis Harper	5509 Highland Parkway	8F62		X			none	unknown	unknown	Mill Creek	Defective air relief valve	Replaced air relief valve	10/10/12	11:25 AM
1/29/13	6:45PM	Utility Staff	WWTP	10F13					2.1 in.	unknown	unknown	Hinkson Creek	Excessive I&I	Reduce I&I	1/30/13	4:00PM
1/30/13	7:45 AM	Utility Staff	WWTP	10B1		X			2.1 in.	unknown	unknown	Merideth Bra	Excessive I&I	Reduce I&I	1/30/13	4:00PM
1/30/13	8:10AM	Utility Staff	4338 W. Bellview	10A42		X			2.1 in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I	1/30/13	4:00PM
3/9/13	7:30PM	Cheryl Stall	1403 McKeec	17M74		X			.87in.	19hrs.	unknown	Hominy Bran	Sewer main damaged	Repaired sewer main	3/10/13	4:10PM
3/11/13	9:25AM	Utility Staff	1614 Secretariat	2K42		X			3.87in.	unknown	unknown	Bear Creek	Excessive I&I	Reduce I&I	3/11/13	2:25PM
3/11/13	8:15AM	Utility Staff	1700 Forum Blvd.	5G10		X			3.87in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I	3/11/13	2:25PM
3/11/13	8:15AM	Utility Staff	1700 Forum Blvd	5G81A		X			3.87in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I	3/11/13	2:25PM
3/12/13	8:30AM	Utility Staff	WWTP	10B1		X			3.87in.	unknown	unknown	Merideth Bra	Excessive I&I	Reduce I&I	3/12/13	2:15PM
3/12/13	8:45AM	Utility Staff	4532 Bellview Dr	10A40		X			3.87in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I	3/12/13	2:15PM
3/12/13	9:30 AM	Utility Staff	WWTP	10F9		X			3.87in.	unknown	unknown	Perche Creek	Excessive I&I	Reduce I&I	3/12/13	2:15PM
3/18/13	9:00AM	City Electric Dept	5804 Morning Star Ct.	Force Main		X			none	1 hr.	5gal	Perche Creek	Force main damaged	Repaired force main	3/19/13	8:15AM
3/31/13	8:30 PM	Sieve Hollis	2406 Lynnwood	5G42		X			.31 in.	unknown	unknown	Hinkson Cree	Roots at faulty service	NOV to 2408 Lynnwood	4/1/13	11:00AM
4/10/13	7:45 AM	Utility Staff	2111 Lovejoy	2K154		X			2.1 in.	unknown	unknown	Bear Creek	Excessive I&I	Reduce I&I	4/11/13	1:50 PM
4/10/13	9:15 AM	Utility Staff	111 Spring Valley	3F95		X			2.1 in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I	4/11/13	1:50 PM
4/10/13	8:10AM	Utility Staff	107 Pendleton	3C50		X			2.1 in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I	4/11/13	1:50PM
4/10/13	9:10AM	Utility Staff	511 Spring Valley	3F61		X			2.1 in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I	4/11/13	1:50PM
4/10/13	7:50AM	Utility Staff	1700 Forum Blvd.	5G40		X			2.1 in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I	4/11/13	1:50PM
4/10/13	7:55AM	Utility Staff	1700 Forum Blvd.	5G25		X			2.1 in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I	4/11/13	1:50PM
4/10/13	7:50AM	Utility Staff	1700 Forum Blvd.	5G11		X			2.1 in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I	4/11/13	1:50PM
4/10/13	7:55AM	Utility Staff	1700 Forum Blvd.	5G17		X			2.1 in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I	4/11/13	1:50PM
4/10/13	7:55AM	Utility Staff	1700 Forum Blvd.	5G37		X			2.1 in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I	4/11/13	1:50PM
4/10/13	7:55AM	Utility Staff	1700 Forum Blvd.	5G9		X			2.1 in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I	4/11/13	1:50PM
4/10/13	10:35AM	Utility Staff	1700 Forum Blvd.	5G10		X			2.1 in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I	4/11/13	1:50PM
4/10/13	8:15AM	Utility Staff	2400 Chapel Hill Rd	5K128		X			2.1 in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I	4/11/13	1:50PM
4/10/13	8:30 AM	Utility Staff	2214 Ridgefield Rd	5L55		X			2.1 in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I	4/11/13	1:50PM
4/10/13	8:30 AM	Utility Staff	2210 Ridgefield Rd	5L54		X			2.1 in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I	4/11/13	1:50PM
4/10/13	7:50 AM	Utility Staff	1700 Forum Blvd.	5G81A		X			2.1 in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I	4/11/13	1:50PM
4/10/13	10:00 AM	Utility Staff	2601 Greenbriar Dr	5B1		X			2.1 in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I	4/11/13	1:50PM
4/10/13	9:05AM	Utility Staff	310 S Garth	3B252		X			2.1 in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I	4/11/13	1:50PM
4/10/13	9:40 AM	Utility Staff	1930 Jackson St.	1A32		X			2.1 in.	unknown	unknown	Bear Creek	Excessive I&I	Reduce I&I	4/11/13	1:50PM
4/10/13	7:45 AM	Utility Staff	1614 Secretariat	2K42		X			2.1 in.	unknown	unknown	Bear Creek	Excessive I&I	Reduce I&I	4/11/13	1:50PM
4/10/13	9:40 AM	Utility Staff	1930 Jackson St.	1A30		X			2.1 in.	unknown	unknown	Bear Creek	Excessive I&I	Reduce I&I	4/11/13	1:50PM
4/11/13	10:00 AM	Utility Staff	WWTP	10B1		X			2.1 in.	unknown	unknown	Merideth Bra	Excessive I&I	Reduce I&I	4/12/13	2:10 PM
4/11/13	1:50 PM	Utility Staff	1700 Forum Blvd.	5G81A		X			2.1 in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I	4/12/13	2:10PM
4/11/13	10:35 AM	Utility Staff	WWTP	10E3		X			2.1 in.	unknown	unknown	Merideth Bra	Excessive I&I	Reduce I&I	4/12/13	2:10PM
4/11/13	11:30 AM	Utility Staff	4338 W Bellview Dr	10A42		X			2.1 in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I	4/12/13	2:10PM
4/11/13	11:30 AM	Utility Staff	4338 W Bellview Dr	10A40		X			2.1 in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I	4/12/13	2:10PM
4/11/13	7:45 AM	Utility Staff	WWTP	10A30		X			2.1 in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I	4/12/13	2:10PM
4/11/13	10:15 AM	Utility Staff	3900 Foxcreek Way	10A82		X			2.1 in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I	4/12/13	2:10PM
4/11/13	7:40 AM	Utility Staff	WWTP	10F9		X			2.1 in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I	4/12/13	2:10PM
4/11/13	7:40 AM	Utility Staff	WWTP	10B1		X			2.1 in.	unknown	unknown	Merideth Bra	Excessive I&I	Reduce I&I	4/12/13	2:10PM
4/16/13	11:30 AM	Utility Staff	1614 Secretariat	2K42		X			1.72 in.	unknown	unknown	Bear Creek	Excessive I&I	Reduce I&I	4/17/13	8:30 AM
4/16/13	11:10 AM	Utility Staff	1201 Tupelo	2M24		X			1.72 in.	unknown	unknown	Bear Creek	Excessive I&I	Reduce I&I	4/17/13	8:30 AM
4/16/13	12:40 PM	Utility Staff	1930 Jackson St	1A30		X			1.72 in.	unknown	unknown	Bear Creek	Excessive I&I	Reduce I&I	4/17/13	8:30 AM
4/16/13	12:40 PM	Utility Staff	1930 Jackson St	1A31		X			1.72 in.	unknown	unknown	Bear Creek	Excessive I&I	Reduce I&I	4/17/13	8:30 AM
4/16/13	12:40 PM	Utility Staff	1930 Jackson St	1A32		X			1.72 in.	unknown	unknown	Bear Creek	Excessive I&I	Reduce I&I	4/17/13	8:30 AM
4/16/13	2:10 PM	Utility Staff	Stewart Rd	3B252		X			1.72 in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I	4/17/13	8:30 AM
4/16/13	11:45 AM	Utility Staff	2601 Greenbriar Dr	5B1		X			1.72 in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I	4/17/13	8:30 AM
4/16/13	11:30 AM	Utility Staff	1700 Forum Blvd.	5G81A		X			1.72 in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I	4/17/13	8:30 AM
4/16/13	11:25 AM	Utility Staff	1700 Forum Blvd.	5G10		X			1.72 in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I	4/17/13	8:30 AM
4/16/13	1:15 PM	Utility Staff	2400 Chapel Hill RD	5K128		X			1.72 in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I	4/17/13	8:30 AM
4/16/13	1:30PM	Utility Staff	2210 Ridgefield Rd	5L54		X			1.72 in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I	4/17/13	8:30 AM
4/16/13	1:30 PM	Utility Staff	2214 Ridgefield Rd	5L55		X			1.72 in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I	4/17/13	8:30 AM
4/16/13	1:45 PM	Utility Staff	WWTP	10A30		X			1.72 in.	unknown	unknown	Merideth Bra	Excessive I&I	Reduce I&I	4/17/13	8:30 AM
4/16/13	12:40 PM	Utility Staff	WWTP	10B1		X			1.72 in.	unknown	unknown	Merideth Bra	Excessive I&I	Reduce I&I	4/17/13	8:30 AM

4/16/13	1:50 PM	Utility Staff	WWTP	10B43		X		1.72 in.	unknown	unknown	Merideth Bra	Excessive I&I	Reduce I&I		4/17/13	8:30 AM
4/16/13	2:45PM	Utility Staff	4338 W Bellview Dr	10A40		X		1.72 in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		4/17/13	8:30 AM
4/16/13	2:45PM	Utility Staff	4338 W Bellview Dr	10A42		X		1.72in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		4/17/13	8:30 AM
4/16/13	11:20 AM	Utility Staff	WWTP	10F9		X		1.72in.	unknown	unknown	Perche Creek	Excessive I&I	Reduce I&I		4/17/13	8:30 AM
4/16/13	11:20 AM	Utility Staff	WWTP	10F13		X		1.72in.	unknown	unknown	Perche Creek	Excessive I&I	Reduce I&I		4/17/13	8:30 AM
4/16/13	2:10 PM	Utility Staff	3900 Foxcreek Way	10A82		X		1.72in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		4/17/13	8:30 AM
4/18/13	1:10PM	Utility Staff	1614 Secretariat	2K42		X		1.90 in.	unknown	unknown	Bear Creek	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	11:35AM	Utility Staff	1201 Tupelo	2M24		X		1.90in.	unknown	unknown	Bear Creek	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	11:45AM	Utility Staff	1930 Jackson St	1A32		X		1.90in.	unknown	unknown	Bear Creek	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	11:30 AM	Utility Staff	1201 Buisness Loop	4P42B		X		1.90in.	unknown	unknown	Bear Creek	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	10:30 AM	Utility Staff	310 S Garth	3B252		X		1.90in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	10:40 AM	Utility Staff	107 Pendleton	3C50		X		1.90in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	10:25 AM	Utility Staff	501 Spring Valley	3F61		X		1.90in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	10:00AM	Utility Staff	2601 Greenbriar Dr	5B1		X		1.90in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	10:15AM	Utility Staff	1601 S Providence	5C15		X		1.90in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	11:10AM	Utility Staff	1700 Forum Blvd.	5G18		X		1.90in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	11:10AM	Utility Staff	1700 Forum Blvd.	5G26		X		1.90in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	11:10AM	Utility Staff	1700 Forum Blvd.	5G17		X		1.90in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	11:10AM	Utility Staff	1700 Forum Blvd.	5G25		X		1.90in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	11:10AM	Utility Staff	1700 Forum Blvd.	5G81A		X		1.90in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	10:40AM	Utility Staff	1700 Forum Blvd.	5G9		X		1.90in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	10:40AM	Utility Staff	1700 Forum Blvd.	5G37		X		1.90in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	10:40AM	Utility Staff	1700 Forum Blvd.	5G10		X		1.90in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	10:40AM	Utility Staff	1700 Forum Blvd	5G11		X		1.90in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	10:40AM	Utility Staff	1700 Forum Blvd	5G12		X		1.90in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	10:40AM	Utility Staff	1700 Forum Blvd	5G39		X		1.90in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	10:40AM	Utility Staff	1700 Forum Blvd	5G40		X		1.90in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	10:55AM	Utility Staff	2400 Chapel Hill Rd	5K128		X		1.90in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	11:05AM	Utility Staff	2210 Ridgefield Rd	5L54		X		1.90in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	11:05AM	Utility Staff	2214 Ridgefield Rd	5L55		X		1.90in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	10:05AM	Utility Staff	WWTP	10B1		X		1.90in.	unknown	unknown	Merideth Bra	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	10:15AM	Utility Staff	4338 W Bellview Dr	10A40		X		1.90in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	10:15AM	Utility Staff	4338 W Bellview Dr	10A42		X		1.90in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	10:00AM	Utility Staff	3900 Foxcreek Way	10A82		X		1.90in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		4/19/13	9:15AM
4/18/13	7:40AM	Utility Staff	WWTP	10F9		X		1.90in.	unknown	unknown	Perche Creek	Excessive I&I	Reduce I&I		4/18/13	3:40PM
4/18/13	7:40AM	Utility Staff	WWTP	10F13		X		1.90in.	unknown	unknown	Perche Creek	Excessive I&I	Reduce I&I		4/18/13	3:40PM
4/22/13	11:15AM	Utility Staff	326 Proctor	1B13		X		none	unknown	unknown	Bear Creek	unknown	None		4/23/13	8:25AM
5/27/13	3:00PM	Utility Staff	501 Spring Valley	3F61		X		2.29in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		5/28/13	1:45PM
5/28/13	8:15AM	Utility Staff	107 Pendleton	3C50		X		2.29in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		5/28/13	1:45PM
5/28/13	8:15AM	Utility Staff	310 S Garth	3B252		X		2.29in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		5/28/13	1:45PM
5/28/13	9:55AM	Utility Staff	1614 Secretariat	2K42		X		2.29in.	unknown	unknown	Bear Creek	Excessive I&I	Reduce I&I		5/28/13	1:45PM
5/28/13	8:05AM	Utility Staff	Redbud&Rollins	3A86		X		2.29in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		5/28/13	1:45PM
5/28/2013	8:15AM	Utility Staff	2601 Greenbriar Dr	5B1		X		2.29in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		5/28/13	1:45PM
5/28/13	8:15AM	Utility Staff	2601 Greenbriar Dr	5B2		X		2.29in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		5/28/13	1:45PM
5/28/13	7:45AM	Utility Staff	1700 Forum Blvd.	5G81A		X		2.29in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		5/28/13	1:45PM
5/28/13	7:45AM	Utility Staff	1700 Forum Blvd.	5G9		X		2.29in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		5/28/2013	1:45PM
5/28/13	7:45AM	Utility Staff	1700 Forum Blvd.	5G37		X		2.29in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		5/28/13	1:45PM
5/28/13	7:45AM	Utility Staff	1700 Forum Blvd.	5G10		X		2.29in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		5/28/13	1:45PM
5/28/13	7:45AM	Utility Staff	1700 Forum Blvd.	5G11		X		2.29in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		5/28/13	1:45PM
5/28/13	7:40AM	Utility Staff	1700 Forum Blvd.	5G40		X		2.29in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		5/28/13	1:45PM
5/28/13	7:30AM	Utility Staff	2400 Chapel Hill Rd	5K128		X		2.29in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		5/28/13	1:45PM
5/28/13	7:45AM	Utility Staff	2210 Ridgefield Rd	5L54		X		2.29in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		5/28/13	1:45PM
5/28/13	7:45AM	Utility Staff	2216 Ridgefield Rd	5L55		X		2.29in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		5/28/13	1:45PM
5/29/13	7:30AM	Utility Staff	3243 S Brampton Ct	10B1		X		2.29in.	unknown	unknown	Merideth Bra	Excessive I&I	Reduce I&I		5/29/13	9:15AM
5/29/13	7:15AM	Utility Staff	4900 W. Gillespie Bridge	10F13		X		2.29in.	unknown	unknown	Perche Creek	Excessive I&I	Reduce I&I		5/29/13	9:15AM
5/29/13	8:10AM	Utility Staff	4338 W Bellview Dr	10A40		X		2.29in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		5/29/13	9:15AM
5/29/13	7:30AM	Utility Staff	4900 W. Gillespie Bridge	10F9		X		2.29in.	unknown	unknown	Perche Creek	Excessive I&I	Reduce I&I		5/29/13	9:15AM
5/29/13	7:45AM	Utility Staff	WWTP	10E18		X		2.29in.	unknown	unknown	Merideth Bra	Excessive I&I	Reduce I&I		5/29/13	9:15AM
5/29/13	8:30AM	Utility Staff	3900 Foxcreek Way	10A82		X		2.29in.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		5/29/13	9:15AM
5/31/13	11:30AM	Utility Staff	401 Melbourne	4O130		X		4.4 in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		5/31/13	2:00PM
5/31/13	3:00PM	Utility Staff	1507 Tupelo	2M24		X		4.4 in.	unknown	unknown	Bear Creek	Excessive I&I	Reduce I&I		5/31/13	2:00PM
5/31/13	1:05PM	Utility Staff	Rollins & Redbud	3A86		X		4.4 in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		5/31/13	2:00PM
5/31/13	1:05PM	Utility Staff	Rollins & Redbud	3A221		X		4.4 in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		5/31/13	2:00PM
5/31/13	1:05PM	Utility Staff	409 W. Walnut	3B204		X		4.4 in.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		5/31/13	2:00PM

5/31/13	2:30PM	Utility Staff	301 N. Providence	3C33		X			4.4 lin.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		5/31/13	2:45PM
5/31/13	2:30PM	Utility Staff	107 Pendleton	3C50		X			4.4 lin.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		5/31/13	2:00PM
5/31/13	11:15AM	Utility Staff	700 Garth	3C213		X			4.4 lin.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		5/31/13	2:00PM
5/31/13	1:00PM	Utility Staff	501 Spring Valley	3F61		X			4.4 lin.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		5/31/13	2:00PM
5/31/13	1:00PM	Utility Staff	111 Spring Valley	3F95		X			4.4 lin.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		5/31/13	2:00PM
5/31/13	12:15PM	Utility Staff	601 E. Rockcreek	3160		X			4.4 lin.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		5/31/13	2:00PM
5/31/13	1:30PM	Utility Staff	1205 E. Ash	40146A		X			4.4 lin.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		5/31/13	2:00PM
5/31/13	12:15PM	Utility Staff	712 Wilkes Blvd.	4077		X			4.4 lin.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		5/31/13	2:00PM
5/31/13	12:15PM	Utility Staff	607 N. Sixth St.	4064		X			4.4 lin.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		5/31/13	2:00PM
5/31/13	12:15PM	Utility Staff	613 N. Sixth St.	4063		X			4.4 lin.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		5/31/13	2:00PM
6/3/13	8:00AM	Utility Staff	1930 Jackson	1A32		X			4.4 lin.	unknown	unknown	Bear Creek	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	8:25AM	Utility Staff	1501 Blueridge	2K1		X			4.4 lin.	unknown	unknown	Bear Creek	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	8:15AM	Utility Staff	1614 Secretariat	2K42		X			4.4 lin.	unknown	unknown	Bear Creek	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	8:35AM	Utility Staff	2103 Lovejoy	2K154		X			4.4 lin.	unknown	unknown	Bear Creek	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	8:15AM	Utility Staff	1110 Lakeshore Dr.	3A125		X			4.4 lin.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	8:30AM	Utility Staff	215 W. Parkway	3B143		X			4.4 lin.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	8:30AM	Utility Staff	310 N. Garth	3B252		X			4.4 lin.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	10:30AM	Utility Staff	710 Morningside Dr.	4150		X			4.4 lin.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	7:30AM	Utility Staff	2601 Greenbriar Dr	5B1		X			4.4 lin.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	7:30AM	Utility Staff	2601 Greenbriar Dr	5B2		X			4.4 lin.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	8:05AM	Utility Staff	Providence Pt.	5C15		X			4.4 lin.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	9:40 AM	Utility Staff	1700 Forum Blvd.	5G9		X			4.4 lin.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	9:30AM	Utility Staff	1700 Forum Blvd.	5G10		X			4.4 lin.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	9:30AM	Utility Staff	1700 Forum Blvd.	5G11		X			4.4 lin.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	9:20AM	Utility Staff	1700 Forum Blvd.	5G14		X			4.4 lin.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	9:50AM	Utility Staff	1700 Forum Blvd.	5G17		X			4.4 lin.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	9:55AM	Utility Staff	1700 Forum Blvd.	5G18		X			4.4 lin.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	9:50AM	Utility Staff	1700 Forum Blvd.	5G25		X			4.4 lin.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	9:40AM	Utility Staff	1700 Forum Blvd.	5G37		X			4.4 lin.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	9:30AM	Utility Staff	1700 Forum Blvd.	5G38		X			4.4 lin.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	9:30AM	Utility Staff	1700 Forum Blvd.	5G38A		X			4.4 lin.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	9:30AM	Utility Staff	1700 Forum Blvd.	5G39		X			4.4 lin.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	9:20AM	Utility Staff	1700 Forum Blvd.	5G40		X			4.4 lin.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	10:10AM	Utility Staff	1700 Forum Blvd.	5G81A		X			4.4 lin.	unknown	unknown	Flat Branch	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	7:35AM	Utility Staff	2400 Chapel Hill Rd	5K128		X			4.4 lin.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	8:30AM	Utility Staff	1606 Stoney Brook	5L2		X			4.4 lin.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	7:50AM	Utility Staff	2210 Ridgefield Rd	5L54		X			4.4 lin.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	8:05AM	Utility Staff	2216 Ridgefield Rd	5L55		X			4.4 lin.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	8:20AM	Utility Staff	811 Boulder Dr.	606		X			4.4 lin.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	8:20AM	Utility Staff	811 Boulder Dr.	6029A		X			4.4 lin.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/3/13	9:40AM	Utility Staff	4740 S. Old Millcreek	8010		X			4.4 lin.	unknown	unknown	Mill Creek	Excessive I&I	Reduce I&I		6/3/13	2:30PM
6/4/13	7:25AM	Utility Staff	4900 W. Gillespie Bridge	10F10		X			4.4 lin.	unknown	unknown	Perche Creek	Excessive I&I	Reduce I&I		6/4/13	1:20PM
6/4/13	7:55AM	Utility Staff	WWTP	10A30		X			4.4 lin.	unknown	unknown	Merideth Bra	Excessive I&I	Reduce I&I		6/4/13	1:20PM
6/4/13	8:15AM	Utility Staff	4338 W Bellview Dr	10A40		X			4.4 lin.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		6/4/13	1:20PM
6/4/13	8:15AM	Utility Staff	4338 W Bellview Dr	10A42		X			4.4 lin.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		6/4/13	1:20PM
6/4/13	7:40AM	Utility Staff	3900 Foxcreek Way	10A82		X			4.4 lin.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		6/4/13	1:20PM
6/4/13	7:30AM	Utility Staff	WWTP	10B1		X			4.4 lin.	unknown	unknown	Merideth Bra	Excessive I&I	Reduce I&I		6/4/13	1:20PM
6/4/13	7:40AM	Utility Staff	WWTP	10B43		X			4.4 lin.	unknown	unknown	Merideth Bra	Excessive I&I	Reduce I&I		6/4/13	1:20PM
6/4/13	7:35AM	Utility Staff	WWTP	10E3		X			4.4 lin.	unknown	unknown	Merideth Bra	Excessive I&I	Reduce I&I		6/4/13	1:20PM
6/4/13	7:30AM	Utility Staff	4900 W. Gillespie Bridge	10F9		X			4.4 lin.	unknown	unknown	Perche Creek	Excessive I&I	Reduce I&I		6/4/13	1:20PM
6/4/13	7:15AM	Utility Staff	4900 W. Gillespie Bridge	10F13		X			4.4 lin.	unknown	unknown	Perche Creek	Excessive I&I	Reduce I&I		6/4/13	1:20PM
6/7/2013	3:00PM	Utility Staff	2116 Hunter Ln.	2L19		X			4.4 lin.	unknown	unknown	Bear Creek	Excessive I&I	Reduce I&I		6/7/13	3:20PM
6/11/13	2:00PM	Utility Staff	Research Park+ Prov.	5C14		X			4.4 lin.	unknown	unknown	Hinkson Cree	Excessive I&I	Reduce I&I		6/11/13	11:50AM
6/28/13	2:30 PM	Jerod Thornhill	711 Wolf Trail	18P40		X			none	unknown	unknown	Hominy Bran	Sag in line	Repaired sewer main		6/28/13	4:55 PM
7/3/13	7:50PM	WWTP	WWTP			X			none	5 min.	unknown	Hinkson Cree	SCADA malfunctioned	change programming		7/4/13	11:50AM
8/7/13	9:00AM	Sewer Maint.	3201 Blackberry	6J33		X			none	unknown	unknown	Grindstone	Sewer main damaged	Repaired sewer main		8/7/13	1:45PM
9/18/13	10:54PM	WWTP	WWTP			X			none	3 min.	unknown	Hinkson Cree	SCADA malfunctioned	change programming		9/19/14	8:40AM
Precipitation from Sanborn Field weather station																	

FY 2012 Sanitary Sewer Overflow and Bypass Summary - Columbia Regional Wastewater Treatment Plant - Permit No. MO-0097837

Date	Time	Reported by	Location		SSO	Bypass	Precipitation	Discharge Estimate		Watershed	Cause	Corrective Action	MDNR Notification	
			Address	MH Number(s)				Duration	Volume				Completed or Needed	Date
10/24/11	1:30 PM	Lampkin (WWTP)	Clearview Pump Station	Force main	X		none	unknown	1,000 gal	Bear Creek	pressure relief valve	replace valve	10/24/11	2:50 PM

10/28/11	1:17 PM	William Easley	705 Cook	3C193	X				none	unknown	< 100 gal	Flat Branch	MH invert	repair invert	10/28/11	2:40 PM
12/20/11	7:25 AM	Utility Staff	WWTP	10E18		X			1.59	unknown	unknown	Merideth Bra	Excessive I & I	Reduce I&I	12/20/11	11:50 AM
12/30/11	9:40 AM	Jim Elliott	2702 Bayonne	3M26-3M27	X				none	unknown	< 10 gal	County Hous	debris in sewer	cleaned sewer	10/30/11	12:48 PM
1/6/12	1:02 PM	Jim Rabadan	4870 Discovery Dr	7D force main	X				none	unknown	2,000 gal	Cedar Creek	structural failure	repaired sewer	1/6/12	3:16 PM
1/10/12	8:15 AM	Resident	1500 Bus Loop 70 E	4L3-4L2	X				none	unknown	< 100 gal	Bear Creek	structural failure	replaced sewer	1/10/12	1:10 PM
2/3/12	9:11 AM	Utility Staff	WWTP	10E18		X			1.42	8-12 hrs	unknown	Merideth Bra	Excessive I & I	Reduce I&I	2/9/12	3:00 PM
2/22/12	3:00 PM	Lampkin (WWTP)	3609 Paris Rd	Force main	X				none	unknown	< 50 gal	Bear Creek	structural failure	repaired sewer	2/23/12	9:00 AM
3/21/12	8:15 AM	Utility Staff	WWTP	10E18		X			1.95	unknown	unknown	Merideth Bra	Excessive I & I	Reduce I&I	3/21/12	10:00 AM
3/21/12	8:15 AM	Utility Staff	WWTP	10F9		X			1.95	unknown	unknown	Perche Creek	Excessive I & I	Reduce I&I	3/21/12	10:00 AM
3/21/12	8:15 AM	Utility Staff	WWTP	10F13		X			1.95	unknown	unknown	Perche Creek	Excessive I & I	Reduce I&I	3/21/12	10:00 AM
3/21/12	8:30 AM	Utility Staff	4338 W Bellview Ct.	10A42		X			1.95	unknown	unknown	Hinkson Cree	Excessive I & I	Reduce I&I	3/21/12	10:00 AM
3/21/12	10:30 AM	Utility Staff	1700 Forum	5G10		X			1.95	unknown	unknown	Flat Branch	Excessive I & I	Reduce I&I	3/21/12	10:30 AM
3/21/12	8:45 AM	Utility Staff	WWTP	10B1		X			1.95	unknown	unknown	Merideth Bra	Excessive I & I	Reduce I&I	3/22/12	8:45 AM
3/21/12	12:50 PM	Utility Staff	Chapel Hill Rd.	5K128		X			1.95	unknown	unknown	County Hous	Excessive I & I	Reduce I&I	3/22/12	8:45 AM
3/21/12	12:40 PM	Utility Staff	Ridgefield Road	5L54		X			1.95	unknown	unknown	County Hous	Excessive I & I	Reduce I&I	3/22/12	8:45 AM
3/21/12	12:42 PM	Utility Staff	Ridgefield Road	5L55		X			1.95	unknown	unknown	County Hous	Excessive I & I	Reduce I&I	3/22/12	8:45M
4/13/12	8:45 AM	Utility Staff	WWTP	10E18		X			0.88	unknown	unknown	Merideth Bra	Excessive I & I	Reduce I&I	4/16/12	9:20 AM
4/30/12	7:30 AM	Utility Staff	WWTP	10E18		X			2.46	unknown	unknown	Merideth Bra	Excessive I & I	Reduce I&I	4/30/12	12:40 PM
4/30/12	7:45 AM	Utility Staff	1700 Forum	5G10		X			2.46	unknown	unknown	Flat Branch	Excessive I & I	Reduce I&I	4/30/12	12:40 PM
4/30/12	7:45 AM	Utility Staff	1700 Forum	5G7A		X			2.46	unknown	unknown	Flat Branch	Excessive I & I	Reduce I&I	4/30/12	12:40 PM
4/30/12	8:45 AM	Utility Staff	Chapel Hill Rd.	5K128		X			2.46	unknown	unknown	County Hous	Excessive I & I	Reduce I&I	4/30/12	12:40 PM
4/30/12	8:50 AM	Utility Staff	Ridgefield Road	5L54		X			2.46	unknown	unknown	County Hous	Excessive I & I	Reduce I&I	4/30/12	12:40 PM
4/30/12	8:50 AM	Utility Staff	Ridgefield Road	5L55		X			2.46	unknown	unknown	County Hous	Excessive I & I	Reduce I&I	4/30/12	12:40 PM
4/30/12	9:45 AM	Utility Staff	WWTP	10B1		X			2.46	unknown	unknown	Merideth Bra	Excessive I & I	Reduce I&I	4/30/12	12:40 PM
4/30/12	9:25 AM	Utility Staff	4338 W Bellview Ct.	10A42		X			2.46	unknown	unknown	Hinkson Cree	Excessive I & I	Reduce I&I	4/30/12	12:40 PM
4/30/12	10:00 AM	Utility Staff	WWTP	10F13		X			2.46	unknown	unknown	Perche Creek	Excessive I & I	Reduce I&I	4/30/12	12:40 PM
4/30/12	10:30 AM	Utility Staff	WWTP	10F9		X			2.46	unknown	unknown	Perche Creek	Excessive I & I	Reduce I&I	4/30/12	2:40 PM
5/15/12	8:00 AM	Dale Cline	Clearcreek Pump Station	Pump Station	X				none	2 days	94,000 gal	Clearcreek	power failure	repaired power	5/15/12	2:00 PM
6/1/12	4:30 PM	David Bugg	Hominy Branch Outfall	4B6/4B7	X				none	unknown	44,800 gal	Hominy Bran	contractor negligence	repaired sewer	6/1/12	3:00 PM
7/23/12	9:15 AM	Sewer Maintenance	1100 Vandiver	2M62	X				none	unknown	unknown	Bear Creek	vandalism	cleaned manhole	7/23/12	4:11 PM
9/11/12	7:30 AM	Sorrell (WWTP)	WWTP	Crit Facility			X		none	< 5 min.	< 160 gal	Hinkson Cree	equipment failure	repaired equipment	9/11/12	9:01 AM
9/28/12	8:30 AM	Jacob Smith	Greenbrier Trail	5B1-5B2	X				none	30 minutes	< 1,000 gal	Hinkson Cree	contractor negligence	repaired sewer	9/28/12	9:15 AM
Precipitation from Sanborn Field weather station																

APPENDIX B

Appendix B

FY 2011 Sanitary Sewer Overflow and Bypass Summary - Columbia Regional Wastewater Treatment Plant - Permit No. MO-0097837

Date	Time	Reported by	Location		SSO		Bypass		Precipitation	Discharge Estimate		Watershed	Cause	Corrective Action Completed or Needed	MDNR Notification	
			Address	MH Numbers(s)	Dry	Wet	Dry	Wet	Inches	Duration	Volume				Date	Time
10/25/10	6:12 PM	Carrie Rose	1401 Forum	5H56-5L99	X				none	15 hrs	<50 gal	Flat Branch	Damage by others	Repaired sewer	10/26/10	11:27 AM
11/9/10	8:30 AM	Garney Construction	200' west of 713 Stillwater	6N1-6O27	X				none	unknown	unknown	Hinkson Creek	Structural Failure	Repaired sewer	11/9/10	3:40 PM
12/8/10	9:00 AM	Sewer Crew	2103 August Briggs Dr.	19K53-19K54	X				none	unknown	unknown	Hinkson Creek	Vandalism	Cleaned sewer main	12/8/10	4:03 PM
5/25/11	9:45 AM	Sewer Maintenance	4338 W Bellview Dr.	10A42		X			1.16	unknown	unknown	Hinkson Creek	Surcharge	Identify I & I	5/25/11	2:20 PM
5/25/11	10:45 AM	Sewer Maintenance	WWTP	10F9		X			1.16	unknown	unknown	Perche Creek	Surcharge	Identify I & I	5/25/11	2:20 PM
5/25/11	10:45 AM	Sewer Maintenance	WWTP	10F13		X			1.16	unknown	unknown	Perche Creek	Surcharge	Identify I & I	5/25/11	2:20 PM
5/25/11	10:30 AM	Sewer Maintenance	WWTP	10B1		X			1.16	unknown	unknown	Merideth Branch	Surcharge	Identify I & I	5/25/11	2:20 PM
5/25/11	10:30 AM	Sewer Maintenance	WWTP	10B43		X			1.16	unknown	unknown	Merideth Branch	Surcharge	Identify I & I	5/25/11	2:20 PM
5/25/11	4:00 PM	Sewer Maintenance	1700 Forum Blvd	5G10		X			1.7	unknown	unknown	Flat Branch	Surcharge	Identify I & I	5/25/11	4:45 PM
5/25/11	4:55 PM	Mike Larue	110 E. Stewart	3B92B		X			1.7	unknown	unknown	Flat Branch	Surcharge	Identify I & I	5/26/11	9:08 AM
6/13/11	8:30 AM	Sewer Crew	2510/2600 Quail	2E54-2E72	X				n/a	unknown	unknown	Hinkson Creek	Roots at tap	Owner repaired tap	6/13/11	10:10 AM
6/27/11	9:00 AM	Sewer Maintenance	1700 Forum Blvd	5G10		X			2.04	unknown	unknown	Flat Branch	Surcharge	Identify I & I	6/27/11	2:49 PM
6/27/11	9:00 AM	Sewer Maintenance	4338 W Bellview Dr.	10A42		X			2.04	unknown	unknown	Hinkson Creek	Surcharge	Identify I & I	6/27/11	2:49 PM
6/27/11	9:35 AM	Sewer Maintenance	WWTP	10B1		X			2.04	unknown	unknown	Merideth Branch	Surcharge	Identify I & I	6/27/11	2:49 PM
6/27/11	9:45 AM	Sewer Maintenance	WWTP	10E7		X			2.04	unknown	unknown	Hinkson Creek	Surcharge	Identify I & I	6/27/11	2:49 PM
6/27/11	9:30 AM	Sewer Maintenance	WWTP	10F9		X			2.04	unknown	unknown	Perche Creek	Surcharge	Identify I & I	6/27/11	2:49 PM
6/27/11	12:49 PM	WWTP	WWTP	10F13		X			2.04	10 min	400 gal	Perche Creek	Contractor Error	Reprimand Contractor	6/27/11	12:49 PM
9/9/11	8:35 AM	Steve Wells	2800 Shingo Ct	2H70-2H69	X				n/a	unknown	unknown	Bear Creek	Negligence by contractor	Cleaned sewer main	9/9/11	9:40 AM
9/23/11	11:00 AM	Mitch Moore	500 Maplewood	3F113-3F114	X				n/a	unknown	20 gal	County House	Structural Failure	Replaced repair coupling	9/23/11	8:18 AM
9/30/11	7:15 AM	Gary Blackmore	800 Valley Court	3E68C-3E68D	X				n/a	unknown	100-150 gal	County House	Structural Failure	Replaced 6' of 6"	9/30/11	11:18 AM
Precipitation from Sanborn Field weather station																

FY 2010 Sanitary Sewer Overflow and Bypass Summary - Columbia Regional Wastewater Treatment Plant - Permit No. MO-0097837

Date	Time	Reported by	Location		SSO		Bypass		Precipitation	Discharge Estimate		Watershed	Cause	Corrective Action Completed or Needed	MDNR Notification	
			Address	MH Numbers(s)	Dry	Wet	Dry	Wet	Inches	Duration	Volume				Date	Time
10/8/09	10:20 AM	Utility Staff	Chapel Hill Rd	5K128		X			5.32	Unknown	Unknown	County House	Surcharge	Identify I & I	10/8/09	1:45 PM
10/8/09	10:00 AM	Utility Staff	Ridgefield Rd	5L54		X			5.32	Unknown	Unknown	County House	Surcharge	Identify I & I	10/8/09	1:45 PM
10/8/09	10:00 AM	Utility Staff	Ridgefield Rd	5L55		X			5.32	Unknown	Unknown	County House	Surcharge	Identify I & I	10/8/09	1:45 PM
10/8/09	11:35 AM	Utility Staff	S. Old Mill Creek Rd	8O10		X			5.32	Unknown	Unknown	Mill Creek	Surcharge	Identify I & I	10/8/09	1:45 PM
10/8/09	10:45 AM	Utility Staff	4338 W Bellview Ct.	10A42		X			5.32	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	10/8/09	1:45 PM
10/8/09	10:40 AM	Utility Staff	1025 LaGrange Ct	3A95		X			5.32	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	10/8/09	1:45 PM
10/8/09	10:40 AM	Utility Staff	1025 LaGrange Ct	3A96		X			5.32	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	10/8/09	1:45 PM
10/8/09	10:40 AM	Utility Staff	1025 LaGrange Ct	3A125		X			5.32	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	10/8/09	1:45 PM
10/8/09	10:20 AM	Utility Staff	1700 Forum	5G8		X			5.32	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	10/8/09	1:45 PM
10/8/09	10:20 AM	Utility Staff	1700 Forum	5G9		X			5.32	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	10/8/09	1:45 PM
10/8/09	10:20 AM	Utility Staff	1700 Forum	5G10		X			5.32	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	10/8/09	1:45 PM
10/8/09	10:20 AM	Utility Staff	1700 Forum	5G11		X			5.32	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	10/8/09	1:45 PM
10/8/09	10:20 AM	Utility Staff	1700 Forum	5G13		X			5.32	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	10/8/09	1:45 PM
10/8/09	10:20 AM	Utility Staff	1700 Forum	5G14		X			5.32	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	10/8/09	1:45 PM
10/8/09	10:20 AM	Utility Staff	1700 Forum	5G25		X			5.32	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	10/8/09	1:45 PM
10/8/09	10:20 AM	Utility Staff	1700 Forum	5G40		X			5.32	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	10/8/09	1:45 PM
10/8/09		Utility Staff	1614 Secretariat	2K42		X			5.32	Unknown	Unknown	Bear Creek	Surcharge	Identify I & I	10/13/09	3:40 PM
10/8/09		Utility Staff	Lovejoy/Deer Run	2K154		X			5.32	Unknown	Unknown	Bear Creek	Surcharge	Identify I & I	10/13/09	3:40 PM
10/8/09		Utility Staff	Providence & M Dever	5C15		X			5.32	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	10/9/09	3:25 PM

10/8/09		Utility Staff	1700 Forum	5G11A		X			5.32	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	10/9/09	3:25 PM
10/8/09		Utility Staff	1700 Forum	5G17		X			5.32	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	10/9/09	3:25 PM
10/8/09		Utility Staff	1700 Forum	5G18		X			5.32	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	10/9/09	3:25 PM
10/8/09	9:30 AM	Utility Staff	1700 Forum	5G24		X			5.32	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	10/8/09	1:45 PM
10/8/09		Utility Staff	1700 Forum	5G26		X			5.32	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	10/9/09	3:25 PM
10/8/09		Utility Staff	4338 W Bellview Ct.	10A40		X			5.32	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	10/12/09	2:20 PM
10/8/09	9:00 AM	Utility Staff	WWTP	10B1		X			5.32	Unknown	Unknown	Merideth Branch	Surcharge	Identify I & I	10/12/09	2:20 PM
10/8/09		Utility Staff	WWTP	10B43		X			5.32	Unknown	Unknown	Merideth Branch	Surcharge	Identify I & I	10/12/09	2:20 PM
10/8/09		Utility Staff	WWTP	10E7		X			5.32	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	10/13/09	3:40 PM
10/8/09		Utility Staff	WWTP	10F9		X			5.32	Unknown	Unknown	Perche Creek	Surcharge	Identify I & I	10/13/09	3:40 PM
10/8/09		Utility Staff	Aimes Dr	6O26		X			5.32	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	10/21/09	8:15 AM
10/8/09		Utility Staff	Aimes Dr	6O6		X			5.32	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	10/21/09	9:45 AM
10/8/09		Utility Staff	Holly Hills Ct	5N1		X			5.32	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	10/22/09	11:20 AM
10/8/09		Utility Staff	Greenbrair Dr.	5B2		X			5.32	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	10/29/09	10:12 AM
10/8/09		Utility Staff	Greenbrair Dr.	5B1		X			5.32	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	10/30/09	8:15 AM
10/8/09		Utility Staff	1930 Jackson	1A30		X			5.32	Unknown	Unknown	Bear Creek	Surcharge	Identify I & I	10/30/09	4:15 PM
10/8/09		Utility Staff	1930 Jackson	1A31		X			5.32	Unknown	Unknown	Bear Creek	Surcharge	Identify I & I	10/30/09	4:15 PM
10/8/09		Utility Staff	1930 Jackson	1A32		X			5.32	Unknown	Unknown	Bear Creek	Surcharge	Identify I & I	10/30/09	4:15 PM
10/8/09		Utility Staff	Aimes Dr	6O29A		X			5.32	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	10/21/09	8:15 AM
10/8/09		Utility Staff	Clear Creek Pump Sta	7O2		X			5.32	Unknown	Unknown	Clear Creek	Surcharge	Identify I & I	12/10/09	W/DMR
10/22/09	3:50 PM	Utility Staff	1201 Stone Ct	2M24		X			1.3	Unknown	Unknown	Bear Creek	Roots/Srg	Replaced 9' of 8" Ident I &	10/22/09	4:10 AM
1/28/10	6:11 PM	Mike Burgess	3820 Juniper Place	7L4-7L34		X			none	3 hours	<3,000 gal	Clear Creek	Roots at tap	NOV - City Repaired tap	1/29/10	8:45 AM
2/21/10	5:00 PM	Utility Staff	1700 Forum	5G10		X			1.72	2 hours	Unknown	Flat Branch	Surcharge	Identify I & I	2/23/10	1:35 PM
3/19/10	11:30 AM	Mr. Torba	2800 Bluff Dale	6F126		X			none	3 hours	13,500 gal	Grindstone	Debris in MH	Cleaned manhole	3/19/10	1:45 PM
4/24/10		Utility Staff	1700 Forum	5G40		X			3.05	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	4/24/10	9:24 PM
4/24/10		Utility Staff	1700 Forum	5G14		X			3.05	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	4/24/10	9:25 PM
4/24/10		Utility Staff	1700 Forum	5G39		X			3.05	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	4/24/10	9:26 PM
4/24/10		Utility Staff	Melbourne	4O130		X			3.05	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	4/24/10	9:27 PM
4/24/10		Utility Staff	1201 Stone Ct	2M24		X			3.05	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	4/24/10	9:28 PM
4/24/10		Utility Staff	Ridgefield Rd	5L54		X			3.05	Unknown	Unknown	County House	Surcharge	Identify I & I	4/24/10	9:29 PM
4/24/10		Utility Staff	Ridgefield Rd	5L55		X			3.05	Unknown	Unknown	County House	Surcharge	Identify I & I	4/24/10	9:30 PM
4/25/10		Utility Staff	1025 LaGrange Ct	3A125		X			3.05	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	4/25/10	10:27 AM
4/25/10		Utility Staff	1700 Forum	5G7A		X			3.05	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	4/25/10	10:28 AM
4/25/10		Utility Staff	1700 Forum	5G9		X			3.05	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	4/25/10	10:29 AM
4/25/10		Utility Staff	1700 Forum	5G10		X			3.05	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	4/25/10	10:30 AM
4/25/10		Utility Staff	1700 Forum	5G17		X			3.05	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	4/25/10	10:31 AM
4/25/10		Utility Staff	1700 Forum	5G24		X			3.05	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	4/25/10	10:32 AM
4/25/10		Utility Staff	1700 Forum	5G25		X			3.05	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	4/25/10	10:37 AM
4/25/10		Utility Staff	1700 Forum	5G37		X			3.05	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	4/25/10	10:33 AM
4/25/10		Utility Staff	1700 Forum	5G38A		X			3.05	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	4/25/10	10:34 AM
4/25/10		Utility Staff	Chapel Hill Rd	5K128		X			3.05	Unknown	Unknown	County House	Surcharge	Identify I & I	4/25/10	10:35 AM
4/25/10		Utility Staff	S. Old Mill Creek Rd	8O10		X			3.05	Unknown	Unknown	Mill Creek	Surcharge	Identify I & I	4/25/10	10:36 AM
4/26/10		Utility Staff	1614 Secretariat	2K42		X			3.05	Unknown	Unknown	Bear Creek	Surcharge	Identify I & I	4/26/10	2:15 PM
4/26/10		Utility Staff	E. Rollins Rd	4I50		X			3.05	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	4/26/10	2:15 PM
4/26/10		Utility Staff	Greenbrair Dr.	5B1		X			3.05	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	4/26/10	2:15 PM
4/26/10		Utility Staff	Greenbrair Dr.	5B2		X			3.05	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	4/26/10	2:15 PM
4/26/10		Utility Staff	Aimes Dr	6O29A		X			3.05	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	4/26/10	2:15 PM
4/26/10		Utility Staff	4338 W Bellview Ct.	10A40		X			3.05	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	4/26/10	2:40 PM

4/26/10	Utility Staff	409 W. Walnut	3B204	X			3.05	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	4/26/10	2:40 PM
4/26/10	Utility Staff	1700 Forum	5G13	X			3.05	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	4/26/10	4:26 PM
4/27/10	Utility Staff	Clear Creek Pump Sta	702	X			3.05	Unknown	Unknown	Clear Creek	Surcharge	Identify I & I	4/27/10	3:38 PM
4/27/10	Utility Staff	4338 W Bellview Ct.	10A42	X			3.05	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	4/27/10	3:38 PM
4/27/10	Utility Staff	WWTP	10B1	X			3.05	Unknown	Unknown	Merideth Branch	Surcharge	Identify I & I	4/27/10	3:38 PM
5/13/10	Utility Staff	1700 Forum	5G7A	X			1.39	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	5/13/10	4:00 PM
5/13/10	Utility Staff	1700 Forum	5G10	X			1.39	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	5/13/10	4:00 PM
5/13/10	Utility Staff	1700 Forum	5G11	X			1.39	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	5/13/10	4:00 PM
5/13/10	Utility Staff	1700 Forum	5G12	X			1.39	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	5/13/10	4:00 PM
5/13/10	Utility Staff	1700 Forum	5G25	X			1.39	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	5/13/10	4:00 PM
5/13/10	Utility Staff	4338 W Bellview Ct.	10A40	X			1.39	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	5/13/10	4:00 PM
5/13/10	Utility Staff	2604 Barrys Bluff	10F9	X			1.39	Unknown	Unknown	Perche Creek	Surcharge	Identify I & I	5/13/10	4:00 PM
7/7/10	Utility Staff	1930 Jackson	1A30	X			2.75	Unknown	Unknown	Bear Creek	Surcharge	Identify I & I	7/8/10	3:07 PM
7/7/10	Utility Staff	1930 Jackson	1A31	X			2.75	Unknown	Unknown	Bear Creek	Surcharge	Identify I & I	7/8/10	3:07 PM
7/7/10	Utility Staff	1614 Secretariat	2K42	X			2.75	Unknown	Unknown	Bear Creek	Surcharge	Identify I & I	7/8/10	3:07 PM
7/7/10	Utility Staff	Lovejoy/Deer Run	2K154	X			2.75	Unknown	Unknown	Bear Creek	Surcharge	Identify I & I	7/8/10	3:07 PM
7/7/10	Utility Staff	1201 Stone Ct	2M24	X			2.75	Unknown	Unknown	Bear Creek	Surcharge	Identify I & I	7/8/10	3:07 PM
7/7/10	Utility Staff	1025 LaGrange Ct	3A96	X			2.75	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	7/8/10	3:07 PM
7/7/10	Utility Staff	409 W. Walnut	3B204	X			2.75	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	7/8/10	10:10 AM
7/7/10	Utility Staff	6 E. Stewart	3B252	X			2.75	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	7/9/10	11:50 AM
7/7/10	Utility Staff	107 Pendelton	3C50	X			2.75	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	7/8/10	10:10 AM
7/7/10	Utility Staff	307 Melbourne	4O130	X			2.75	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	7/8/10	2:45 PM
7/7/10	Utility Staff	Greenbrair Dr.	5B2	X			2.75	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	7/9/10	11:50 AM
7/7/10	Utility Staff	Greenbrair Dr.	5B1	X			2.75	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	7/9/10	11:50 AM
7/7/10	Utility Staff	1700 Forum	5G9	X			2.75	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	7/8/10	3:22 PM
7/7/10	Utility Staff	1700 Forum	5G10	X			2.75	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	7/8/10	10:10 AM
7/7/10	Utility Staff	1700 Forum	5G17	X			2.75	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	7/8/10	10:10 AM
7/7/10	Utility Staff	1700 Forum	5G18	X			2.75	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	7/8/10	10:10 AM
7/7/10	Utility Staff	1700 Forum	5G25	X			2.75	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	7/8/10	10:10 AM
7/7/10	Utility Staff	1700 Forum	5G26	X			2.75	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	7/8/10	10:10 AM
7/7/10	Utility Staff	1700 Forum	5G38	X			2.75	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	7/8/10	10:10 AM
7/7/10	Utility Staff	1700 Forum	5G38A	X			2.75	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	7/8/10	10:10 AM
7/7/10	Utility Staff	1700 Forum	5G39	X			2.75	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	7/8/10	10:10 AM
7/7/10	Utility Staff	1700 Forum	5G40	X			2.75	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	7/8/10	10:10 AM
7/7/10	Utility Staff	Chapel Hill Rd	5K128	X			2.75	Unknown	Unknown	County House	Surcharge	Identify I & I	7/9/10	10:10 AM
7/7/10	Utility Staff	Ridgefield Rd	5L54	X			2.75	Unknown	Unknown	County House	Surcharge	Identify I & I	7/8/10	10:10 AM
7/7/10	Utility Staff	Ridgefield Rd	5L55	X			2.75	Unknown	Unknown	County House	Surcharge	Identify I & I	7/8/10	10:10 AM
7/7/10	Utility Staff	S. Old Mill Creek Rd	8O10	X			2.75	Unknown	Unknown	Mill Creek	Surcharge	Identify I & I	7/9/10	2:45 PM
7/7/10	Utility Staff	Majestic Ct.	9B10	X			2.75	Unknown	Unknown	Mill Creek	Surcharge	Identify I & I	7/8/10	3:07 PM
7/7/10	Utility Staff	WWTP	10B1	X			2.75	Unknown	Unknown	Merideth Branch	Surcharge	Identify I & I	7/9/10	11:50 AM
7/7/10	Utility Staff	WWTP	10A42	X			2.75	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	7/8/10	2:45 PM
7/7/10	Utility Staff	WWTP	10E7	X			2.75	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	7/9/10	11:50 AM
7/7/10	Utility Staff	WWTP	10F9	X			2.75	Unknown	Unknown	Perche Creek	Surcharge	Identify I & I	7/9/10	11:50 AM
7/7/10	Utility Staff	Blue Ridge Rd	2K1	X			2.75	Unknown	Unknown	Bear Creek	Surcharge	Identify I & I	8/3/10	1:44 PM
7/7/10	Utility Staff	4216 Forum Blvd	8G13A	X			2.75	Unknown	Unknown	Mill Creek	Surcharge	Identify I & I	8/3/10	1:44 PM
7/26/10	Garney Const Co	Clear Creek Pump Sta	702	X			0.95	Unknown	<1,000 gal	Clear Creek	Surcharge	Identify I & I & Replace F	7/26/10	9:35 AM
7/26/10	Utility Staff	Clear Creek Pump Sta	7K1	X			0.95	Unknown	Unknown	Clear Creek	Surcharge	Identify I & I & Replace F	7/26/10	1:56 PM
7/27/10	Utility Staff	Clear Creek Pump Sta	702	X			0.49	Unknown	Unknown	Clear Creek	Surcharge	Identify I & I & Replace F	7/27/10	10:45 AM

8/11/10	7:50 AM	Christine Rubble	2105 Woodlea	4134-4135	X					none	<8 hours	300 gal	Hinkson Creek	open bell	Installed short liner	8/11/10	9:23 AM
8/20/10	2:00 PM	Utility Staff	4338 W Bellview Ct.	10A42		X				3.11	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	8/23/10	3:00 PM
8/20/10	2:00 PM	Utility Staff	Clear Creek Pump Sta	702		X				3.11	Unknown	Unknown	Clear Creek	Surcharge	Identify I & I	8/23/10	3:00 PM
8/20/10	2:00 PM	Utility Staff	1700 Forum	5G10		X				3.11	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	8/23/10	3:00 PM
9/22/10		Utility Staff	1700 Forum	5G10		X				2.17	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	10/1/10	3:05 PM
Precipitation from Sanborn Field weather station																	
FY 2009 Sanitary Sewer Overflow and Bypass Summary - Columbia Regional Wastewater Treatment Plant - Permit No. MO-0097837																	
Date	Time	Reported by	Location		SSO		Bypass		Precipitation	Discharge Estimate		Watershed	Cause	Corrective Action Completed or Needed	MDNR Notification		
			Address	MH Number(s)	Dry	Wet	Dry	Wet	Inches	Duration	Volume				Date	Time	
10/28/08	12:45 PM	unknown	801 Bourn	3180-3181	X				n/a	<30 min	<100 gal	County House Bra	Roots at Joints	Installed CIPP Liner	10/29/2008	8:10 AM	
1/24/09	1:38 PM	unknown	Old63/Broadway	4J95-4J102	X				n/a	<3 hrs	<200 gal	Hinkson Creek	Roots at Tap	NOV - City Repaired	1/24/2009	8:18 PM	
2/12/09	12:30 PM	Steve Seabaugh	5809 Morning Star	9E-Force Main	X				n/a	Unknown	< 500 gal	Perche Creek	Broken Force Main	Repaired Force Main	2/13/2009	8:16 AM	
2/17/09	9:15 AM	Cleaning Crew	Meadow Lark	6H11-4E50	X				n/a	Unknown	< 100 gal	Hinkson Creek	Roots at Joints	Installed CIPP Liner	2/17/2009	11:45 AM	
4/8/09	12:17 PM	Robert Young (UMC)	Discovery Ridge	7P-Force Main	X				n/a	Unknown	< 300 gal	Gans Creek	Valve not shut	Closed partially open valv	4/8/2009	3:32 PM	
4/20/09	8:28 AM	Tina Mills	1514 Mills Dr.	5L-Force Main	X				n/a	5 days	< 300 gal	Hinkson Creek	Hole in 2" pipe	Patched hole in 2" force m	4/20/2009	11:03 AM	
4/30/09	1:01 AM	Donna Head	1930 Jackson	1E7-1E6	X				3.03	< 3 hour	<200 gal	Bear Creek	Roots at Tap	NOV - Owner Repaired	4/30/2009	3:43 PM	
4/30/09		Sewer Maintenance	MKT @ Stadium	3A95		X			3.03	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	4/30/2009	3:43 PM	
4/30/09		Sewer Maintenance	MKT @ Stadium	3A96		X			3.03	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	4/30/2009	3:43 PM	
4/30/09		Sewer Maintenance	Sexton/Garth	3C55		X			3.03	< 4 hours	< 1000 gal	Flat Branch	Surcharge	Identify I & I	4/30/2009	3:43 PM	
4/30/09		Sewer Maintenance	Garth	3C213		X			3.03	< 4 hours	< 1000 gal	Flat Branch	Surcharge	Identify I & I	4/30/2009	3:43 PM	
4/30/09		Sewer Maintenance	1400 Bus Loop	4P59		X			3.03	Unknown	Unknown	Bear Creek	Surcharge	Identify I & I	4/30/2009	3:43 PM	
4/30/09		Sewer Maintenance	MKT @ Plant 2	5G8		X			3.03	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	4/30/2009	3:43 PM	
4/30/09		Sewer Maintenance	MKT @ Plant 2	5G9		X			3.03	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	5/1/2009	8:30 AM	
4/30/09		Sewer Maintenance	MKT @ Plant 2	5G10		X			3.03	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	5/1/2009	8:30 AM	
4/30/09		Sewer Maintenance	1700 Forum Blvd	5G25		X			3.03	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	4/30/2009	3:43 PM	
4/30/09		Sewer Maintenance	1700 Forum Blvd	5G40		X			3.03	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	4/30/2009	3:43 PM	
4/30/09		Sewer Maintenance	Chapel Hill	5K128		X			3.03	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	5/1/2009	8:30 AM	
4/30/09		Sewer Maintenance	2210 Ridgefield	5L54		X			3.03	Unknown	Unknown	County House	Surcharge	Identify I & I	4/30/2009	3:43 PM	
4/30/09		Sewer Maintenance	2216 Ridgefield	5L55		X			3.03	Unknown	Unknown	County House	Surcharge	Identify I & I	4/30/2009	3:43 PM	
4/30/09		Sewer Maintenance	S Old Mill Creek	8O10		X			3.03	Unknown	Unknown	Mill Creek	Surcharge	Identify I & I	5/1/2009	8:30 AM	
4/30/09		Sewer Maintenance	3662 S. Scott Blvd	10A37		X			3.03	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	5/1/2009	8:30 AM	
4/30/09		Sewer Maintenance	4338 W. Bellview Dr.	10A40		X			3.03	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	5/1/2009	8:30 AM	
6/2/09		Sewer Maintenance	Nifong/Bethel	8D11		X			1.57	Unknown	Unknown	Mill Creek	Surcharge	Identify I & I	6/3/2009	3:45 PM	
6/15/09	8:00 AM	Amber Gaddy	409 Melbourne	4O130		X			2.13	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	6/15/2009	3:10 PM	
6/15/09		Sewer Maintenance	4338 W. Bellview Dr.	10A42		X			2.13	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	6/15/2009	3:10 PM	
6/15/09		Sewer Maintenance	WWTP	10B1		X			2.13	Unknown	Unknown	Merideth Branch	Surcharge	Identify I & I	6/15/2009	3:10 PM	
6/15/09		Sewer Maintenance	Tupelo	2M23B		X			2.13	Unknown	Unknown	Bear Creek	Surcharge	Identify I & I	6/16/2009	12:58 PM	
6/15/09		Sewer Maintenance	Bus Loop 70	4P59		X			2.13	Unknown	Unknown	Bear Creek	Surcharge	Identify I & I	6/16/2009	12:58 PM	
6/15/09		Sewer Maintenance	1700 Forum Blvd	5G8		X			2.13	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	6/16/2009	12:58 PM	
6/15/09		Sewer Maintenance	1700 Forum Blvd	5G10		X			2.13	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	6/16/2009	12:58 PM	
6/15/09		Sewer Maintenance	1700 Forum Blvd	5G25		X			2.13	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	6/16/2009	12:58 PM	
7/4/09		Sewer Maintenance	1700 Forum Blvd	5G8		X			3.04	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	7/4/2009	1:38 PM	
7/4/09		Sewer Maintenance	1700 Forum Blvd	5G10		X			3.04	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	7/4/2009	1:38 PM	
7/4/09		Sewer Maintenance	1700 Forum Blvd	5G25		X			3.04	Unknown	Unknown	Flat Branch	Surcharge	Identify I & I	7/4/2009	1:38 PM	
7/4/09		Sewer Maintenance	4338 W. Bellview Dr.	10A42		X			3.04	Unknown	Unknown	Hinkson Creek	Surcharge	Identify I & I	7/4/2009	1:38 PM	
7/4/09		Sewer Maintenance	WWTP	10B1		X			3.04	Unknown	Unknown	Merideth Branch	Surcharge	Identify I & I	7/4/2009	1:38 PM	
Precipitation from Sanborn Field weather station																	

FY 2008 Sanitary Sewer Overflow and Bypass Summary - Columbia Regional Wastewater Treatment Plant - Permit No. MO-0097837

Date	Time	Reported by	Location		SSO		Bypass		Precipitation	Discharge Estimate		Watershed	Cause	Corrective Action	MDNR Notification	
			Address	MH Number(s)	Dry	Wet	Dry	Wet	Inches	Duration	Volume				Completed or Needed	Date
10/21/07	3:08 AM	Power Plant	Bernadette/Beverly	3L7A-3L7	X				n/a	< 1 Day	< 1,000 gal	Harmony	Vandalism	Cleaned sewer	10/22/07	8:40 AM
10/30/07	9:45 AM	Mr. Raju	Bear Crk/Rangeline	2M14-2M13A	X				n/a	>30 Days	>150,000 gal	Bear Creek	Vandalism	Cleaned out MH	10/30/07	2:24 PM
3/2/08	12:19 PM	Linda Karns	2308 N. Garth	1B62-1B55	X				n/a	< 1 Day	< 1,000 gal	Bear Creek	Roots at Tap	NOV - City Repaired	3/3/08	8:57 AM
3/12/08	9:45 PM	Rena Buckler	3101 Wingate Ct	4G90-4H61	X				n/a	< 1 Day	< 10,000 gal	Hinkson Creek	Debris at Alock	Cleaned MH	3/13/08	8:05 AM
3/29/08	5:30 PM	Floriila McCarty	2108 Amonnette	4L84-4L85	X				n/a	< 1 Day	< 1,000 gal	Hinkson Creek	Roots at Joints	Put on CIPP list	3/31/08	9:00 AM
4/3/08	10:30 AM	Jim Branson	3300 Mexico Gravel	2B7-2B8	X				n/a	< 1 Day	< 1,000 gal	Hinkson Creek	Roots in MH	Removed Roots	4/3/08	1:30 AM
4/10/08	11:45 AM	Sewer Maintenance	Chapel Hill Rd.	5K128		X			1.72	3 hr 45 min	unknown	County House	Surcharge	Removed Roots inlet of M	4/10/08	3:17 PM
4/10/08	11:45 AM	Sewer Maintenance	Ridgefield Rd.	5L54		X			1.72	3 hr 45 min	unknown	County House	Surcharge	Reduce I&I	4/10/08	3:17 PM
4/10/08	2:00 PM	Sewer Maintenance	1700 Forum Blvd	5G8		X			1.72	1 hr 30 min	unknown	Flat Branch	Surcharge	Raised MH's / Identify I &	4/15/08	8:22 AM
4/10/08	2:00 PM	Sewer Maintenance	1700 Forum Blvd	5G10		X			1.72	1 hr 30 min	unknown	Flat Branch	Surcharge	Raised MH's / Identify I &	4/15/08	8:22 AM
4/10/08	2:00 PM	Sewer Maintenance	1700 Forum Blvd	5G25		X			1.72	1 hr 30 min	unknown	Flat Branch	Surcharge	Raised MH's / Identify I &	4/15/08	8:22 AM
4/28/08	6:50 PM	Paula Kayhill	4907 Mountain Top	14B15-14B22	X				n/a	< 1 Day	< 1,000 gal	None	Vandalism	Contractor Repaired Pipe	4/29/08	10:34 AM
5/20/08	5:05 PM	Greg Willingham	1400 Elleta	2J9-2J10	X				n/a	unknown	unknown	Bear Creek	Roots at Joints	Put on CIPP list	5/21/08	10:06 AM
7/22/08		Sewer Maintenance	Cowan Dr.	3E58		X			4.42	unknown	unknown	County House	Surcharge	Constructed Relief Sewer	7/23/08	9:15 AM
7/22/08		Sewer Maintenance	Cowan Dr.	3E59		X			4.42	unknown	unknown	County House	Surcharge	Constructed Relief Sewer	7/23/08	9:15 AM
7/22/08		Sewer Maintenance	1700 Forum Blvd	5G8		X			4.42	unknown	unknown	Flat Branch	Surcharge	Raised MH's / Identify I &	7/23/08	9:15 AM
7/22/08		Sewer Maintenance	1700 Forum Blvd	5G10		X			4.42	unknown	unknown	Flat Branch	Surcharge	Raised MH's / Identify I &	7/23/08	9:15 AM
7/22/08		Sewer Maintenance	1700 Forum Blvd	5G25		X			4.42	unknown	unknown	Flat Branch	Surcharge	Raised MH's / Identify I &	7/23/08	9:15 AM
7/30/08		Sewer Maintenance	1700 Forum Blvd	3A95		X			2.38	unknown	unknown	Flat Branch	Surcharge	Raised MH	7/31/08	10:57 AM
7/30/08		Sewer Maintenance	1700 Forum Blvd	5G8		X			2.38	unknown	unknown	Flat Branch	Surcharge	Raised MH's / Identify I &	7/31/08	10:57 AM
7/30/08		Sewer Maintenance	1700 Forum Blvd	5G10		X			2.38	unknown	unknown	Flat Branch	Surcharge	Raised MH's / Identify I &	7/31/08	10:57 AM
7/30/08		Sewer Maintenance	1700 Forum Blvd	5G25		X			2.38	unknown	unknown	Flat Branch	Surcharge	Raised MH's / Identify I &	7/31/08	10:57 AM
7/30/08		Sewer Maintenance	5338 W Bellview Dr	10A42		X			2.38	unknown	unknown	Hinkson Creek	Surcharge	Remove Siphon / Bigger F	8/4/08	9:41 AM
7/30/08		Sewer Maintenance	Cowan Dr.	3E58		X			2.38	unknown	unknown	County House	Surcharge	Constructed Relief Sewer	7/31/08	10:57 AM
7/30/08		Sewer Maintenance	Cowan Dr.	3E59		X			2.38	unknown	unknown	County House	Surcharge	Constructed Relief Sewer	7/31/08	10:57 AM
8/25/08	8:00 PM	Kate Anderson	MKT Trail	3A20-3A115	X				n/a	2 hrs+-	< 100 gal	Flat Branch	Sag in pipe	Replaced 16' of 8"	8/26/08	10:50 AM
9/4/08		Sewer Maintenance	Cowan Dr.	3E58		X			3.36	unknown	unknown	County House	Surcharge	Constructed Relief Sewer	9/4/08	2:45 PM
9/4/08		Sewer Maintenance	Cowan Dr.	3E59		X			3.36	unknown	unknown	County House	Surcharge	Constructed Relief Sewer	9/4/08	2:45 PM
9/4/08		Sewer Maintenance	1700 Forum Blvd	5G8		X			3.36	unknown	unknown	Flat Branch	Surcharge	Raised MH's / Identify I &	9/4/08	2:45 PM
9/4/08		Sewer Maintenance	1700 Forum Blvd	5G10		X			3.36	unknown	unknown	Flat Branch	Surcharge	Raised MH's / Identify I &	9/4/08	2:45 PM
9/4/08		Sewer Maintenance	1700 Forum Blvd	5G25		X			3.36	unknown	unknown	Flat Branch	Surcharge	Raised MH's / Identify I &	9/4/08	2:45 PM
9/4/08		Sewer Maintenance	Ridgefield Rd.	5L54		X			3.36	unknown	unknown	County House	Surcharge	Reduce I&I	9/4/08	2:45 PM
9/4/08		Sewer Maintenance	Ridgefield Rd.	5L55		X			3.36	unknown	unknown	County House	Surcharge	Reduce I&I	9/4/08	2:45 PM
9/4/08		Sewer Maintenance	WWTP	10A30		X			3.36	unknown	unknown	Merideth Branch	Surcharge	Remove Siphon / Bigger F	9/4/08	2:45 PM
9/4/08		Sewer Maintenance	5338 W Bellview Dr	10A42		X			3.36	unknown	unknown	Hinkson Creek	Surcharge	Identify I & I	9/4/08	2:45 PM
9/4/08		Sewer Maintenance	WWTP	10B1		X			3.36	unknown	unknown	Merideth Branch	Surcharge	Remove Siphon / Bigger F	9/4/08	2:45 PM
9/4/08	3:37 PM	Chlaty Sar	2411 Blueridge	2G64-2G65	X				n/a	< 30 min	< 30 gal	Bear Creek	Roots at Tap	NOV - Plumber Repaired	9/5/08	11:21 AM
9/12/08		Sewer Maintenance	Cowan Dr.	3E58		X			2.01	unknown	unknown	County House	Surcharge	Constructed Relief Sewer	9/12/08	1:03 PM
9/12/08		Sewer Maintenance	Cowan Dr.	3E59		X			2.01	unknown	unknown	County House	Surcharge	Constructed Relief Sewer	9/12/08	1:03 PM
9/12/08		Sewer Maintenance	1700 Forum Blvd	5G8		X			2.01	unknown	unknown	Flat Branch	Surcharge	Raised MH's / Identify I &	9/12/08	3:00 PM
9/12/08		Sewer Maintenance	1700 Forum Blvd	5G9		X			2.01	unknown	unknown	Flat Branch	Surcharge	Raised MH's / Identify I &	9/12/08	3:00 PM
9/12/08		Sewer Maintenance	1700 Forum Blvd	5G10		X			2.01	unknown	unknown	Flat Branch	Surcharge	Raised MH's / Identify I &	9/12/08	3:00 PM
9/12/08		Sewer Maintenance	1700 Forum Blvd	5G25		X			2.01	unknown	unknown	Flat Branch	Surcharge	Raised MH's / Identify I &	9/12/08	3:00 PM
9/12/08		Sewer Maintenance	WWTP	10A30		X			2.01	unknown	unknown	Merideth Branch	Surcharge	Remove Siphon / Bigger F	9/12/08	3:00 PM
9/12/08		Sewer Maintenance	5338 W Bellview Dr	10A42		X			2.01	unknown	unknown	Hinkson Creek	Surcharge	Identify I & I	9/12/08	3:00 PM
9/12/08		Sewer Maintenance	WWTP	10B1		X			2.01	unknown	unknown	Merideth Branch	Surcharge	Remove Siphon / Bigger F	9/12/08	3:00 PM
9/12/08		Sewer Maintenance	WWTP	10B43		X			2.01	unknown	unknown	Merideth Branch	Surcharge	Remove Siphon / Bigger F	9/12/08	3:00 PM

9/12/08		Sewer Maintenance	WWTP	10E3		X		2.01	unknown	unknown	Merideth Branch	Surcharge	Remove Siphon / Bigger P	9/12/08	3:00 PM
Precipitation from Sanborn Field weather station															

APPENDIX C

APPENDIX C

**Missouri Department of Natural Resources
Water Protection Program
Cost Analysis for Compliance
(In accordance with RSMo 644.145)**

**City of Columbia
Missouri State Operating Permit #MO-0097837**

Section 644.145 RSMo requires the Department of Natural Resources to make a “finding of affordability” when “issuing permits under” or “enforcing provisions of” state or federal clean water laws “pertaining to any portion of a combined or separate sanitary sewer system for publicly-owned treatment works.”

The department is required to issue a permit with final effluent limits in accordance with 644.051.1.(1) RSMo, 644.051.1.(2) RSMo, and the Clean Water Act. The practical result of this analysis is to incorporate a compliance schedule into the permit in order to mitigate adverse impact to distressed populations resulting from new costs for the wastewater treatment facility (WWTF).

The cost analysis is based on data available to the department as provided by the permittee and data obtained from readily available sources. For the most accurate analysis, it is essential that the permittee provides the department with current information about the city’s financial and socioeconomic situation.

Facility Description:

The city of Columbia is served by WWTF consisting of an activated sludge plant digester, a sludge storage basin, and wetland treatment with a portion of dry solids being land applied or hauled to Missouri Biosolids. The WWTF has a design population equivalent of 178,875, a designed average flow of 20.6 million gallons per day (MGD), and an actual flow of 15.8 MGD. The receiving stream for treated effluent is a tributary to the Missouri River.

Residential Connections:	<u>42,908ⁱ</u>
Commercial Connections:	<u>4,321ⁱⁱ</u>
Industrial Connections:	
Total Connections for this facility:	<u>47,229^{i, ii}</u>

Requirements Now Being Enforced:

Since January 2014, the city has experienced four Sanitary Sewer Overflows (SSOs) as a result of breaks in the Clear Creek force main (placed in service in 2011), which caused impacts to Clear Creek and its tributaries, waters of the state. The city has installed multiple air relief valves throughout the force main; increased the pump ramp down time to reduce the potential for pressure waves in the system; and changed the operating levels to reduce the pump starts and stops. Additionally, the city has experienced numerous dry and wet weather overflows since fiscal year 2007. At this time, the department is not requiring the city to take any additional actions to prevent future occurrences, as the city is in the process of developing an Integrated Management Plan (IMP) for its wastewater, stormwater, and sanitary sewer system

improvements with implementation timelines. A component of the IMP is to establish schedules to work toward eliminating inflow and infiltration and reduce SSOs in the collection system.

Anticipated Costs Associated with Complying with the New Requirements:

There is no associated cost with any requirements of this Abatement Order on Consent (AOC).

(1) A community's financial capability and ability to raise or secure necessary funding;

There are no associated costs with the requirements of the AOC, with the exception of payment of penalty and investigative costs.

(2) Affordability of pollution control options for the individuals or households at or below the median household income level of the community;

There is no associated cost with requirements contained in the AOC. The current user rate of \$26.18ⁱⁱ per month is 0.702 percentⁱⁱⁱ of the city's median household income (MHI) based on the City's MHI^{iv} of \$44,749. Due to the minimal cost associated with the AOC, the department does not anticipate a rate increase will be necessary that could impact individuals or households of the community.

(3) An evaluation of the overall costs and environmental benefits of the control technologies;

Under the Missouri Clean Water law and the Federal Clean Water Act SSOs and Bypasses are prohibited because the discharge of untreated or partially treated wastewater creates a public health risk and negatively impacts the environment. Such discharges have the potential to contaminate lakes and streams causing serious water quality problems that negatively impact the beneficial uses listed in 10 CSR 20-7.031.

(4) Inclusion of ongoing costs of operating and maintaining the existing wastewater collection and treatment system, including payments on outstanding debts for wastewater collection and treatment systems when calculating projected rates:

The city's current outstanding debt (current amount of debt that is due today) is \$104, 548.00ⁱⁱ (as of 9/30/15 all outstanding sewer bonds. The amount of the current sewer rate per household, per month, that is being used toward payments on wastewater debt is \$11.78.ⁱⁱ The annual costs of operating cost for wastewater treatment and/or collection system improvements will be determined as part of the IMP.

(5) An inclusion of ways to reduce economic impacts on distressed populations in the community, including but not limited to low and fixed income populations. This requirement includes but is not limited to:

- (a) Allowing adequate time in implementation schedules to mitigate potential adverse impacts on distressed populations resulting from the costs of the improvements and taking into consideration local community economic considerations.
- (b) Allowing for reasonable accommodations for regulated entities when inflexible standards and fines would impose a disproportionate financial hardship in light of the environmental benefits to be gained.

Socioeconomic Data^{3-6:}

Potentially Distressed Populations – City of Columbia	
Total Population	116,906 ^{vi}
Unemployment	2.5% ^v
Adjusted Median Household Income (MHI)*	\$44,749 ^{iv}
Percent Change in MHI (2000-2012)	+32.9% ^{iv}
Percent Population Growth/Decline (2000-2012)	+29.6% ^{vi}
Median Age in Years	26.9 ^{vi}
Percent of Households in Poverty	24.5% ^{vii}
Percent of Households Relying on Food Stamps	10.9% ^{vii}

(6) An assessment of other community investments and operating costs relating to environmental improvements and public health protection;

The community anticipates drafting an IMP to balance multiple future environmental improvements throughout the city. See attached list.

(7) An assessment of factors set forth in the United States Environmental Protection Agency's guidance, including but not limited to the "Combined Sewer Overflow Guidance for Financial Capability Assessment and Schedule Development" that may ease the cost burdens of implementing wet weather control plans, including but not limited to small system considerations, the attainability of water quality standards, and the development of wet weather standards;

Since there are no new requirements being enforced, this agreement will not impose a financial burden on the community, nor will the monitoring require the city of Columbia to seek funding from an outside source.

(8) An assessment of any other relevant local community economic condition.

The community did not report any other relevant local economic conditions.

With a population of 116,906^{vi}, the city's socioeconomic status and population are thought to be stable.

Conclusion and Finding

The department is not proposing any additional requirements that will cost the city additional funds or increase the current user fees. The department identified the actions for which cost analysis for compliance is required under Section 644.145, RSMo.

The department considered the eight criteria presented in subsection 644.145.3 when evaluating the cost associated with the relevant actions. Taking into consideration these criteria, this analysis examined whether the above referenced permit modifications affects the ability of an individual customer or household to pay a utility bill without undue hardship or unreasonable sacrifice in the essential lifestyle or spending patterns of the individual or household. As a result of reviewing the above criteria, the department hereby finds that the action described above may result in a low burden with regard to the community's overall financial capability and a low financial impact for most individual customers/households.

References:

ⁱ Missouri Department of Natural Resources Fees Tracking System-WPP Sewer Connection List dated 10/7/15

ⁱⁱ Information provided by the city of Columbia during a meeting with the department on 04/16/16

ⁱⁱⁱ $(\text{Cost per household per month of } \$26.18 * 12 / (\text{MHI of } 44,749)) * 100 = \text{Cost per household as a percent of MHI}$

^{iv} Median Household Income data from American Community Survey – Median income in the past 12 months – http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?_afpt=table

^v Unemployment data was obtained from Missouri Department of Economic Development (July 2014) – <http://www.missourieconomy.org/pdfs/urel1407.pdf>

^{vi} Population trend data was obtained from online at: 2012 Census Bureau Population Data - http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?_afpt=table, 2000 Census Bureau Population Data - <http://www.census.gov/popest/data/cities/totals/2009/tables/SUB-EST2009-04-29.xls>, 1990 Census Bureau Population Data - <http://www.census.gov/prod/cen1990/cp1/cp-1-27.pdf>

^{vii} Poverty data – American Community Survey- <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>

List of major infrastructure or other investments in environmental projects

Name	Construct		Cost
	Design Year	ion year	
Sewer Projects			
Annual 100-Acre Point Trunks			\$140,000/year
Annual Inflow & Infiltration Program			\$2,000,000/year
Annual Private Common Collector			\$500,000/Year
Annual Sewer Main and Manhole Rehab			\$700,000/year
Annual Sewer System Improvements			\$1,000,000/year
B-8 Relief Sewer - Rangeling & Vandiver	2020	2021	\$ 1,847,800
B-9 Relief Sewer - Garth & Vandiver	2020	2021	\$ 693,420
C-5 Trunk Relief Sewer - Rock Quarry: Nifong - Zoe	2020	2021	\$ 288,925
Calvert Drive Sewer Relocation	2016	2017	\$ 240,000
Cout and Hickory Street Sewer Relocation	2015	2016	\$ 245,000
Cow Branch Outfall	2021	2023	\$ 3,484,500
FBRS - 4th Street - Elm to Rogers/Broadawy	2018	2019	\$ 3,862,251
FBRS - Elm & 6th Street	2014	2016	\$ 2,336,000
FBRS - Stadium to Elm	2014	2015	\$ 3,100,000
FBRS to Turner Relief Sewer	2014	2015	\$ 410,000
FY12 Sewer Main Rehab	2012	2012	\$ 5,072,343
FY2014 Sewer Main Rehab	2014	2014	\$ 1,308,701
FY2015 Sewer Main Rehab	2015	2015	\$ 2,700,000
Gans Creek Pump Station Upgrade	2020	2021	\$ 2,543,200
Haystack Acres Pump Station Interceptor	2012	2021	\$ 656,807
Henderson Branch Sewer: Midway Sewer Extension	2015	2017	\$ 2,669,000
Hominy Branch Outfall Ext: LOW Rd - Mexico Gravel	2021	2023	\$ 2,568,800
Hominy Branch Outfall Relief Sewer	2009	2011	\$ 4,531,996
Little Bonne Femme Regional Pump Station	2021	2023	\$ 9,479,250
Lower Southwest Outfall Relief Sewer	2020	2021	\$ 809,320
M-2 Interceptor Relief - Merideth Branch Creek	2020	2021	\$ 450,690
North Grindstone Creek Bank Stabilization	2013	2015	\$ 200,000
North Grindstone Outfall Ext. Phase III	2009	2019	\$ 1,406,020
PCCE #3 - Stewart & Medavista	2012	2016	\$ 1,515,000
PCCE #8 - Thilly Lathrop	2010	2016	\$ 2,200,000
PCCE #11 - Wilson Street/High Street	2010	2015	\$ 253,000
PCCE #14 - Cliff Drive	2013	2015	\$ 329,750
PCCE #16 - Bingham Rd & West Ridgeley Rd	2013	2017	\$ 463,900
PCCE #17 - Wilson Street/Ross Street	2010	2017	\$ 290,398
PCCE #18 - Spring Valley Road	2013	2016	\$ 149,000
PCCE #19 - Sunset Lane	2010	2012	\$ 735,000
PCCE #20 - Ridgemont	2015	2015	\$ 271,500
PCCE #21 - Stanford	2017	2018	\$ 79,343
PCCE #22 - Shannon Place	2016	2018	\$ 94,941
PCCE #23 - Lakeshore Drive & Edgewood	2017	2018	\$ 238,028
PCCE #24 - St. James & St. Joseph	2015	2016	\$ 154,100

PCCE #25 - Glenwood & Redbud	2016	2018	\$	591,110
PCCE #27 - Grace Ellen	2015	2016	\$	365,000
PCCE #28 - Hickory Hill Drive & Sunset Drive	2017	2018	\$	158,685
PCCE #29 - East Sunset Lane	2017	2018	\$	238,028
PCCE #30 - West Stewart, Edgewood, Westmount Ave	2018	2019	\$	354,186
PCCE #31 - Oakwood Court	2018	2019	\$	163,470
PCCE #33 - Lyon Street	2018	2019	\$	81,736
PCCE #34 - Forest Hill Court & Ridge Road	2019	2020	\$	533,283
PCCE #35 - Richmond Ave	2019	2020	\$	129,111
PCCE #38 - North Eighth Street	2020	2021	\$	138,684
PCCE #39 - Hubbell Drive Sewer Improvement	2014	2015	\$	125,000
PCCE #40 - Sunset Dr, Prospect St, Crestland Ave	2020	2021	\$	404,495
PCCE #41 - W Stewart Road & West Blvd	2020	2021	\$	190,691
Prathersville Area Sewer District	2020	2021	\$	375,520
Rocky Fork Outfall Sewer	2025	2027	\$	8,913,500
Sewer District #170 - S. Bethel Church Road	2011	2015	\$	370,380
Sewer District #171 - Crites Lane	2016	2021	\$	83,388
Sewer District - Hill Creek Road	2021	2022	\$	51,163
Sexton Road Relief Sewer	2020	2021	\$	2,543,200
Southwest Trunk #2 Relief Sewer	2020	2021	\$	809,650
Stephens Park Sewer Relocation	2020	2021	\$	103,815
STM WWTP Energize MO Comm	2012	2012	\$	628,725
STM WWTP Improvement	2009	2010	\$	3,000,000
Upper Bear Creek Sewer Replacement	2020	2021	\$	601,030
Upper Hinkson Creek Outfall Ext	2012	2015	\$	7,650,174
Upper Merideth Branch Stream Bank Stabiliz.	2013	2016	\$	600,000
Upper Southwest Outfall Relief	2020	2021	\$	317,900
W Broadway Sewer Improvement	2014	2015	\$	175,000
Westwood Avenue Sewer Relocation	2013	2015	\$	321,715
Woodrail Sewer Replacement Project	2014	2016	\$	330,000
Woodstock MHP WWTP Interceptor	2020	2021	\$	115,570
WWTP - Digester Complex Improvements	2017	2018	\$	4,337,390
WWTP - Fine Screen Facility	2025	2025	\$	2,400,000
WWTP - Engineering Addition	2015	2016	\$	100,000
WWTP Improvement Project Phase I	2008	2010	\$	63,914,991

Landfill Projects

Agriturf for Bioreactor Cell	2016	2016	\$	255,000
Collection and Admin Relocation - Landfill	2013	2016	\$	4,670,000
Disposal Cell #6	2016	2017	\$	4,300,000
Disposal Cell #7	2023	2024	\$	4,000,000
Household Hazardous Waste Building	2024	2024	\$	350,000
Landfill & Compost Facility Stormwater Compliance	2015	2016	\$	245,000
Landfill Expansion Permitting	2017	2019	\$	600,000
Landfill Wetlands	2014	2016	\$	225,000
Leachate Storage & Handling	2016	2017	\$	608,827

Landfill Gas to Energy, Heat recovery system	2014	2016	\$	325,000
Material Recovery Facility Expansion Phase 2	2024	2024	\$	2,400,000
Material Recovery Facility Phase 1	2015	2018	\$	1,500,000
Methane Gas Extraction Wells		2014	\$	2,125,947
Recycling Drop-Off Site - S. Providence Rd	2014	2015	\$	150,000
State Farm Parkway off Nifong Connector Drop-Off	2014	2015	\$	20,839
Stimulus Landfill Gas Plant EMC	2010	2011	\$	425,275

Stormwater Projects

2302 Business 70 East	2025	2026	\$	400,000
Alan Lane	2020	2021	\$	276,840
Aldeah & Ash Storm Pipe Rehab	2016	2016	\$	150,000
Annual CAM projects	\$50,000/year			
Annual Downtown Tree Planters	\$25,000/year			
Annual Floodplain Mapping	Starts in 2021, \$50,000			
Annual Mitigation Bank Program	Starts in 2017, \$50,000 first year then \$100,000			
Annual Projects	\$50,000/year \$100,000/year starting in FY2018			
Annual Property Acquisition	Starts in 2021, \$50,000			
Annual TV Inspections	Starts in 2021, \$50,000			
Bourn Avenue	2021	2021	\$	650,000
Braemore Drainage	2021	2022	\$	275,000
Bray/Longwell Drainage	2021	2021	\$	250,000
Calvert Drive	2021	2022	\$	700,000
CAM - Forum Nature Area	2013	2014	\$	50,000
CAM - Hubbart Flow & Sediment Study	2014	2016	\$	72,282
Capri Estates Drainage	2020	2021	\$	404,000
Downtown Tree Planter 2015	2015	2016	\$	30,000
E Nifong Culvert Rehab	2016	2016	\$	125,000
East Downtown	2022	2022	\$	1,500,000
East Point Lining	2016	2016	\$	100,000
East Point Storm Water Study	2021	2021	\$	50,000
English/Subella/Jake Drainage	2021	2022	\$	180,000
Flat Branch System Inventory Model	2022	2022	\$	400,000
Garth @ Oak Tower	2018	2019	\$	458,420
Garth-Jewell	2021	2021	\$	250,000
Gillespie Bridge Road	2021	2022	\$	600,000
Grasslands - Brandon Drainage	2022	2022	\$	1,100,000
Greenwood South	2020	2020	\$	225,200
Greenwood Stewart Phase 2	2022	2022	\$	1,600,000
Grissum Bldg Water Quality Improvements	2012	2012	\$	546,745
Hickman & 6th & 7th	2018	2018	\$	371,350
Hinkson Avenue	2021	2022	\$	300,000
Hinkson Bacteria Assessment	2015	2015	\$	15,167
Hitt and Elm	2011	2015	\$	112,000
Kelly Detention Retrofit	2022	2022	\$	306,282
Lakshire Estates Lake Modification	2022	2022	\$	150,000