

Wastewater Performance Report

July 1, 2003 – June 30, 2004

Charlotte-Mecklenburg Utilities

5100 Brookshire Blvd. Charlotte, NC 28216 Phone: (704) 399-2221 Fax: (704) 393-2219 www.cmutilities.com

I. General Information

Name of Regulated Entity and Responsible Person:

City of Charlotte Douglas O. Bean, Director Charlotte-Mecklenburg Utilities Administration Division 5100 Brookshire Blvd. Charlotte, NC 28216 (704) 399-2221

Applicable Permits:

There are five wastewater treatment facilities owned and operated by Charlotte-Mecklenburg Utilities. Charlotte-Mecklenburg Utilities also operates one facility that is owned by Mecklenburg County. Below is a list of these facilities and their applicable NPDES (National Pollutant Discharge Elimination System) permit number. Included with the list of facilities is the name of the Operator in Responsible Charge (ORC) at the facilities and the site telephone numbers.

WWTF	Permit Number	ORC	Phone
Irwin Creek WWTP	NC0024945	James T. Hunter	704-357-1344
Mallard Creek WRF	NC0030210	Roy E. Purgason, Jr.	704-547-0680
McAlpine Creek WWMF	NC0024970	Sandy Kim Neely	704-542-0736
McDowell Creek WWTP	NC0036277	Elliot E. Goins, Jr.	704-875-6443
Sugar Creek WWTP	NC0024937	Roy E. Purgason, Jr.	704-553-2124
WW COLLECTION	Permit Number	ORC	Phone
4100 W. Tyvola Road	N/A	Earl Peigler	704-357-6064

The wastewater treatment facility that is owned by Mecklenburg County and operated by Charlotte-Mecklenburg Utilities is:

WWTF	Permit Number	ORC	Phone
McDowell Park WWTP	NC0029220	Robert P. Norris	704-537-1344

Description of collection and treatment systems:

The wastewater collection system currently operates under existing wastewater treatment plant NPDES permits. Utilities applied for its collection system permit and the NC Department of Environment and Natural Resources is reviewing that application.

Charlotte-Mecklenburg Utilities collects wastewater from an estimated 191,148 connections to households and businesses throughout the county. Wastewater is collected and directed (via gravity flow supported by sewage lift stations) to one of five wastewater treatment plants where it is treated. An average of 80.89 million gallons of wastewater is treated and discharged each day.

More than 100 employees work to maintain 3,297 miles of collection pipelines and 68 sewage lift stations throughout the county. The gravity sewer pipes in this system range in size from 8 inches in diameter to 78 inches in diameter.

Each of the wastewater treatment plants provides primary, secondary and advanced treatment to the waste stream. Large solid particles and inorganic materials are removed by screening and settling. The wastewater is treated biologically to remove dissolved pollutants. Disinfection reduces bacterial and pathogenic materials. Finally, the waste stream passes through sand filters to remove very small particles that may not have been removed through the settling process.

II. Summary of System Performance

How did we do?

After a tough year for sewer spills in 2003, the past fiscal year ended with a **35% reduction in the total number of overflows, and a 96% reduction in the volume of wastewater spilled** (the lowest number of gallons in at least five years). The drastic drop in spills can be attributed to less rain, ongoing spill reduction strategies and capital improvements to the system.

Highlights

Charlotte-Mecklenburg Utilities safely collected, treated and discharged more than 29.6 billion gallons of wastewater for the fiscal year ending June 30, 2004. Our wastewater collection system and plants safely transported and processed more than 99.997 percent of all flow. Less than 0.0025 percent escaped the collection and treatment system in the form of sewage spills and overflows. Our wastewater treatment plants met 99.85 percent of all permitted discharge limits.

Charlotte-Mecklenburg Utilities celebrated some important milestones even as it took numerous actions to prevent overflows and protect water quality through effective wastewater treatment.

- Approximately 922 miles of sewer lines were cleaned (including repeated cleanings).
- 14.8 miles of sewer pipes were restored or replaced.
- Four of the five wastewater treatment plants received Peak Performance Awards from the Association of Metropolitan Sewerage Agencies (AMSA) for the calendar year ending 2003. McAlpine Wastewater Treatment plant, with 100 percent perfect compliance with their permit requirements, received an AMSA Gold Award. Irwin, Sugar, and McDowell Creek Wastewater Treatment Plants earned AMSA Silver Awards.
- Charlotte-Mecklenburg Utilities received a 2004 National Environmental Achievement Award from the Association of Metropolitan Sewerage Agencies (AMSA) for the development of the Blue Planet Water Environmental Center.
- Plant expansions and upgrades continued at all five treatment facilities to enhance performance and increase reliability.
- In its fourth year, our Oil & Grease Prevention Program inspected grease-handling facilities at 412 restaurants to ensure compliance with city sewer use ordinance and protect the sewer system from improper grease disposal. Two Notices of Violation and Compliance Orders were issued. The following programs continue to increase: Educational training and presentations

- (14), residential handouts / mailings (4,365) follow up visits (276), sewer-overflow (45) and complaint investigations (32).
- Six pump stations were closed and three stations added to equal 68 pump stations serving low-lying areas. Old Vermillion and Davidson Lift Stations caused multiple spills last year and were demolished this year. Staff performed 168 routine / preventative maintenance tasks on pump stations.
- Phosphorus reduction project began construction in Fall 2003.

Continuing Challenges

345 sewer overflows occurred from our wastewater pipe network (compared to 532 the previous year). Most spills were due to grease buildup and the presence of tree roots in pipes. Other factors contributed to overflows, including vandalism, old and/or broken pipes and stormwater inadvertently entering the sanitary sewer system during sudden, heavy rainfall.

While spills are an ongoing challenge, it's important to note the Charlotte-Mecklenburg Utilities wastewater collection system successfully delivered 99.997 percent of this community's 29.6 *billion* gallons of wastewater last year. Our crews work 24 hours a day, 365 days per year to prevent and respond to overflows.

Wastewater Collection Challenges

The greatest continuing wastewater challenge in this community – and in others across the U.S. – is sewage spills and overflows. During the fiscal year ending June 30, 2004, Utilities reported 345 sewage spills from the collection system and three at wastewater treatment plants. The total of 345 spills equaled 665,167 gallons spilled (561,477 gallons reached surface waters). The three overflows at wastewater treatment plants equaled 71, 800 gallons spilled (62,850 gallons reached surface waters).

Grease and other blockages that lead to sewer overflows are cleared by Utilities crews, using metal rods and/or truck-mounted water jets. If damaged pipe or other infrastructure is discovered it is repaired. The spilled sewage can sometimes be captured and pumped back into the sewer system.

Inspection crews and our customers find overflows. Reports of overflows where 1,000 or more gallons reach surface waters are faxed to the media in an effort to notify the public. A legal notice is posted when overflows of 15,000 gallons or more reach surface waters. Crews also use door hangers to notify customers when appropriate.

Charlotte-Mecklenburg Utilities continues its excellent sewage spill response record. Our wastewater collection staff response time averaged 34.4-minutes to all overflows as of June 30, 2004. Staff responded to over 89 % of the spills in less than 60 minutes. This compares to a state response standard of 120 minutes or less.

The five-year moving average now stands at 317 collection system spills per year (from FY2000 to present- FY04).

Utilities continues to identify and correct grease, tree root, and rain related overflows. A consultant has been retained to assess the wastewater collection system and our ongoing programs to reduce overflows. Odor issues in the collection system are improving but challenges remain.

Wastewater Treatment Plants Challenges

Charlotte-Mecklenburg Utilities five wastewater treatment plants met 99.854 percent of all discharge limit tests set forth by our NPDES permits but our commitment is 100 percent compliance. Staff continues to improve maintenance capabilities and overall performance. Major rehabilitation and improvement projects help maintain compliance. Future upgrades and expansions are being added.

There were three overflows at wastewater treatment plants. The largest was a 45,000-gallon overflow at McAlpine Creek WWTP on December 26.

Utilities temporarily suspended accepting applications for <u>new</u> sewer pipe extensions in the McDowell Creek WWTP service area. The wastewater treatment plant is operating near its permitted treatment capacity. Utilities worked with N.C. Department of Environment And Natural Resources to obtain permits to increase capacity. The project is under construction and will expand capacity to 12 million gallons per day when complete. Utilities expects to resume accepting new sewer extension applications in fiscal year 2005 (FY05).

Our pretreatment program has identified, permitted and is regulating large industrial users to keep unsuitable discharges out of the wastewater system. While industrial compliance is extremely high in Charlotte-Mecklenburg, identifying other potentially hazardous discharge sources is an ongoing challenge. In FY05 expansion of the trunkline monitoring program continued, enabling Utilities pretreatment staff to more closely observe what industrial and commercial customers discharge into the sewer network and to identify potential problem areas to protect the collection system and plants.

Thirty-one (of ninety-four) pretreatment industries received Environmental Excellence Awards. The Crown Award for Pretreatment was awarded to Chesapeake Treatment Co. The Crown Award for Pollution Prevention was awarded to Independent Beverage Corp. The Crown Award for Water Conservation was awarded to Carolinas HealthCare Systems.

The sections following this page – Sections IIA and IIB -- detail all spills from the collection system and plants, along with plant permit limit violations and monitoring and reporting violations. Section IIA includes spills for the fiscal year ending June 30, 2004 and is separated by month. These include size of spills, their cause and descriptions of any known environmental impact.

The second section, Section IIB, represents NPDES reporting and monitoring violations and is separated by plant.

III. Notification

This report is available to the users or customers of this system by clicking on the 'publications' link of the Charlotte-Mecklenburg Utilities homepage at www.cmutilities.com. There are also printed copies available at the Charlotte-Mecklenburg Utilities Administration Building at 5100 Brookshire Blvd., Charlotte, NC 28216, and at the City/County Customer Service and Information Center at 600 East Fourth Street, Charlotte, NC 28202. The users or customers of this system will receive a summary version of this report and will be notified of the availability of this comprehensive version via a bill insert in the September 2004 water/sewer bill. A news release will be issued before September 1 about this report. In addition, the summary version will be translated into Spanish and advertised during the month of September in a regional Spanish-speaking newspaper. We will also make this Spanish version available via our website.

IV. Certification

Douglas O. Bean, Director

Charlotte – Mecklenburg Utilities

I certify under penalty of law that this report is complete and accurate to the best of my knowledged further certify that this report has been made available to the users or customers of the named system and that those users have been notified of its availability.	э.

Date

IIA. <u>Listing of Sewer Spills by Month</u>
The following is a list of spills from the public wastewater system that occurred between July 1, 2003 and June 30, 2004. Most occurred from the wastewater collection system. Spills that occurred at wastewater plants are noted in the address.

July Date	Total Estimate	Volume Reaching Surface Water	Surface Water Name	# Fish Killed	Block	Street Name	Cause of Spill / Bypass
6/30/2003	50	0	McAlpine Creek	0	1800	Pineville Matthews Rd	6-inch pipe damaged - caused blockage
7/1/2003	1252	0	None	0	4700	Topsail Ct	Grease blockage
7/3/2003	1670	334	McAlpine Creek	0	5601	All Saint's Ln	Tree roots blockage
7/9/2003	500	0	Stewart Creek	0	800	Yellowstone Dr	Grease blockage
7/9/2003	300	0	Irwin Creek	0	3301	Statesville Av	Contractor damaged manole - caused blockage
7/10/2003	2700	0	None	0	3825	Carmel Forest Dr	Grease blockage
7/10/2003	400	400	McAlpine Creek tributary	0	9200	Covedale Dr	Tree roots blockage
7/11/2003	800	800	South Prong Of Clarks Creek	0	14201	Old Vermillion Dr, Huntersville	Power failure at pump station
7/11/2003	400	0	Briar Creek	0	2758	Meadowcliff Dr	Tree roots & grease blockage
7/13/2003	5000	5000	South Prong Of Clarks Creek	0	14201	Old Vermillion Dr, Huntersville	Heavy rains caused surcharge
7/14/2003	5200	520	Sugar Creek	0	1504	Davidson St (North)	General debris blockage
7/15/2003	400	0	Reedy Creek	0	7410	William Reynold Dr	General debris blockage
7/17/2003	200	200	McMullen Creek	0	5755	Doncaster Dr	Grease & tree roots blockage
7/20/2003	100	100	Briar Creek tributary	0	3415	Monroe Rd	Grease blockage
7/20/2003	50	50	McAlpine Creek tributary	0	2008	Broadleaf Pl	Grease blockage
7/24/2003	800	800	Irwin Creek tributary	0	1210	Norris Av	Grease & tree roots blockage
7/24/2003	100	0	Briar Creek	0	3019	Palm Av	Grease & tree roots blockage
7/26/2003	800	400	Neal Branch tributary	0	13500	Plowstone Ct	Paper, rock, and ropes blockage

7/26/2003	300	300	Briar Creek tributary	0	1200	Green Oaks Ln	General debris blockage
7/27/2003	1270	635	McAlpine Creek tributary	0	2618	Cedarwild Rd	Grease blockage
7/28/2003	920	0	Briar Creek	0	3621	Randolph Rd	General debris blockage
		-				'	<u> </u>
7/29/2003	200	0	McMullen Creek	0	7916	Robin Crest Rd	Grease & tree roots blockage
month total = 22 spills	23,412	9,539					
ZZ Spilis	20,412	3,353					
	Total	Volume Reaching Surface	Surface Water	# Fish			
August Date	Estimate	Water	Name	Killed	Block	Street Name	Cause of Spill / Bypass
8/1/2003	1000	1000	Campbell Creek tributary	0	6804	Wallace View Ct	Contractor hit manhole causing debris, dirt, and rock blockage
8/4/2003	1670	0	Long Creek	0	8400	Bellhaven Bl	Grease blockage
			McMullen Creek				<u> </u>
8/5/2003	250	250	tributary	0	5701	Bellchase St	Tree roots blockage
8/5/2003	24000	24000	Reedy Creek tributary	0	7320	Plott Rd	Heavy rain
8/5/2003	700	0	Coffey Creek	0	9936	Garthwood Rd	Tree roots & grease blockage
8/6/2003	800	0	Irwin Creek	0	2800	Willow St	Grease blockage
8/7/2003	250	125	McAlpine Creek tributary	0	6814	Old Forge Rd	Tree roots blockage
0/1/2003	230	125	McAlpine Creek	0	0014	Old Forge Ita	Tiee Tools blockage
8/7/2003	600	300	tributary	0	14420	Nolen Ln	Grease blockage
8/12/2003	1905	1905	One Run Branch tributary	0	1401	Wandering Way Dr	Tree roots blockage
0/12/2003	1905	1905	Sugar Creek	0	1401	Wandening Way Di	Tiee tools blockage
8/12/2003	4000	800	tributary	0	1900	Bangor Rd	General debris blockage
8/12/2003	20	0	McDowell Creek	0	9623	Cockerham Ln	Grease blockage
8/13/2003	50	0	Briar Creek	0	1900	Chatam Av	Tree roots blockage
8/19/2003	2650	2650	Irwin Creek tributary	0	10000	Woody Ridge Rd	Tree roots & grease blockage
8/19/2003	50	0	Irwin Creek	0	300	Irwin Av (North)	Broken pipe and grease blockage
8/19/2003	100	0	McAlpine Creek	0	8317	Adrian Ct	Tree roots & grease blockage
8/19/2003	200	0	None	0	1032	Coliseum (Apt - F) Dr	Grease blockage
8/20/2003	835	835	Stewart Creek	0	3141	Columbus Cr	Tree roots & grease blockage
8/20/2003	200	0	Irwin Creek	0	2415	Old Steele Creek	Grease & tree roots blockage
8/22/2003	8020	8020	Stewart Creek	0	900	September Ln	Tree roots, grease, & wood blockage

			tributary				
8/22/2003	80	0	Catawba River	0	20505	Southshore Dr	Low pressure valve left open by non-city employee
8/23/2003	835	835	Little Sugar Creek tributary	0	2754	Catalina Av	Grease blockage
8/23/2003	835	835	Campbell Creek tributary	0	5300	Coronado Dr	Tree roots & grease blockage
8/23/2003	1900	1900	Paw Creek tributary	0	1200	Browns Ln	Tree roots blockage
8/23/2003	200	200	Briar Creek tributary	0	3308	Enfield Rd	Grease & tree roots blockage
8/25/2003	30	0	Little Sugar Creek	0	4001	Tryon St (North)	Grease & motor oil blockage
8/27/2003	1670	167	McAlpine Creek tributary	0	15100	Wyndham Oaks Dr	Grease blockage
8/27/2003	19050	19050	Irwin Creek tributary	0	6601	Horace Mann Rd	Grease blockage
8/28/2003	400	400	McAlpine tributary	0	6800	Redman Rd	Grease blockage
8/28/2003	1670	835	Irwin Creek tributary	0	3829	Atlas Dr	Grease & tree roots blockage
8/30/2003	400	400	Briar Creek	0	1700	Providence Rd	Unknown debris blockage
month total = 30 spills	74,370	64,507					
September Date	Total Estimate	Volume Reaching Surface Water	Surface Water Name	# Fish Killed	Block	Street Name	Cause of Spill / Bypass
					Block 9334	Street Name New Towne Dr	Cause of Spill / Bypass Broken pipe
Date	Estimate	Water	Name McAlpine tributary Briar Creek	Killed			
9/1/2003	Estimate 300	Water 300	Name McAlpine tributary Briar Creek Branch Of Briar Creek	Killed	9334	New Towne Dr	Broken pipe
9/1/2003 9/1/2003 9/4/2003	300 100 2000	300 100 2000	Name McAlpine tributary Briar Creek Branch Of Briar Creek Sugar Creek	0 0 0	9334 1700 4213	New Towne Dr Providence Rd Tipperary Pl	Broken pipe Debris blockage Grease blockage
9/1/2003 9/1/2003	300 100	Water 300 100	Name McAlpine tributary Briar Creek Branch Of Briar Creek	0 0	9334 1700	New Towne Dr Providence Rd	Broken pipe Debris blockage
9/1/2003 9/1/2003 9/4/2003 9/4/2003	300 100 2000 10000	Water 300 100 2000 10000	Name McAlpine tributary Briar Creek Branch Of Briar Creek Sugar Creek tributary South Prong Of	0 0 0 0	9334 1700 4213 6817	New Towne Dr Providence Rd Tipperary Pl Dunmurry Ln	Broken pipe Debris blockage Grease blockage Grease blockage
9/1/2003 9/1/2003 9/4/2003 9/4/2003 9/5/2003	300 100 2000 10000 62500	Water 300 100 2000 10000 62500	Name McAlpine tributary Briar Creek Branch Of Briar Creek Sugar Creek tributary South Prong Of Rocky River	0 0 0 0 0	9334 1700 4213 6817 701	New Towne Dr Providence Rd Tipperary Pl Dunmurry Ln South St, Davidson	Broken pipe Debris blockage Grease blockage Grease blockage Broken pipe
9/1/2003 9/1/2003 9/4/2003 9/4/2003 9/5/2003 9/8/2003	300 100 2000 10000 62500 5000	Water 300 100 2000 10000 62500 5000	Name McAlpine tributary Briar Creek Branch Of Briar Creek Sugar Creek tributary South Prong Of Rocky River Irwin Creek Little Sugar Creek	0 0 0 0 0	9334 1700 4213 6817 701 1212	New Towne Dr Providence Rd Tipperary Pl Dunmurry Ln South St, Davidson Kohler Av	Broken pipe Debris blockage Grease blockage Broken pipe Broken pipe
9/1/2003 9/1/2003 9/4/2003 9/4/2003 9/5/2003 9/8/2003 9/10/2003	2000 1000 2000 10000 62500 5000	Water 300 100 2000 10000 62500 5000	Name McAlpine tributary Briar Creek Branch Of Briar Creek Sugar Creek tributary South Prong Of Rocky River Irwin Creek Little Sugar Creek tributary	0 0 0 0 0 0 0	9334 1700 4213 6817 701 1212 2002	New Towne Dr Providence Rd Tipperary Pl Dunmurry Ln South St, Davidson Kohler Av Canterwood Dr	Broken pipe Debris blockage Grease blockage Grease blockage Broken pipe Broken pipe Grease blockage
9/1/2003 9/4/2003 9/4/2003 9/4/2003 9/5/2003 9/8/2003 9/10/2003	2000 1000 2000 10000 62500 5000 10000 5000	Water 300 100 2000 10000 62500 5000 10000 5000	Name McAlpine tributary Briar Creek Branch Of Briar Creek Sugar Creek tributary South Prong Of Rocky River Irwin Creek Little Sugar Creek tributary Irwin Creek tributary	0 0 0 0 0 0 0	9334 1700 4213 6817 701 1212 2002 2600	New Towne Dr Providence Rd Tipperary Pl Dunmurry Ln South St, Davidson Kohler Av Canterwood Dr Freedom Dr	Broken pipe Debris blockage Grease blockage Broken pipe Broken pipe Grease blockage Broken pipe Broken pipe

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9/12/2003	100	100	Little Sugar Creek tributary	0	2058	Edgewater Dr	Tree roots blockage
07.12/2000			Campbell Creek	-	2000	_ age nate: 2:	Troo roote brownings
9/13/2003	200	200	tributary	0	6811	Reddmann Rd	General debris blockage
9/16/2003	10	10	McAlpine Creek	0	701	Mountain View Dr	Grease & tree roots blockage
9/16/2003	100	100	Irwin Creek	0	1036	Druid Cr	Grease blockage
9/17/2003	1125	1125	Little Sugar Creek tributary	0	500	Davidson St (North)	Grease blockage
9/18/2003	1200	1200	Briar Creek tributary	0	1360	Carolyn Dr	Broken pipe
9/19/2003	11925	10733	Campbell Creek tributary	0	6808	Wallace View Ct	Broken pipe
9/22/2003	50	0	Stewart Creek	0	1001	Mcquay St	Grease & tree roots blockage
9/23/2003	42000	42000	South Prong Clarke Creek	0	14201	Old Vermillion Dr, Huntersville	Heavy rains caused surcharge
9/23/2003	1200	1200	Little Sugar Creek	0	400	Woodlawn Rd (East)	Grease blockage
9/23/2003	375	38	Lake Norman	0	360	Griffith St	Tree roots blockage
9/23/2003	100	0	Irwin Creek	0	2852	Willow St	Grease blockage
9/23/2003	800	400	Briar Creek tributary	0	1520	Eastway Dr	Tree roots & grease blockage
9/25/2003	100	0	Briar Creek	0	3300	Driftwood Dr	Broken pipe
9/26/2003	1670	0	None	0	1103	Cedarwood Ln	Grease & tree roots blockage
9/27/2003	980	980	Irwin Creek	0	6211	Goldwagon Ln	Grease blockage
9/29/2003	20	0	Little Sugar Creek	0	301	7th St (East)	Grease blockage
month total =							-
28 spills	157,675	153,806					
	Total	Volume Reaching Surface	Surface Water	# Fish			
October Date	Estimate	Water	Name	Killed	Block	Street Name	Cause of Spill / Bypass
10/1/2003	3810	0	Little Sugar Creek	0	4125	Howie Cr	Grease & tree roots blockage
10/1/2003	1900	380	Irwin Creek	0	5101	Fowler Farm Rd	Grease & debris blockage
10/5/2003	187	187	Briar Creek	0	2219	7th St (East)	Grease blockage
10/6/2003	200	0	Stewart Creek	0	4152	Canyon Creek Ln	Grease, tree roots & debris blockage
10/6/2003	400	400	McAlpine Creek	0	5208	Guildbrook Rd	Broken pipe
10/7/2003	1400	1400	McDowell Creek tributary	0	12624	Cumberland Crest Dr	Grease blockage
10/7/2003	5300	3975	Campbell Creek	0	5745	Cedars East Ct	Grease blockage

10/7/2003	30	0	Stewart Creek	0	528	Katonah Av	Grease & debris blockage
10/1/2003	30	0	Little Sugar Creek	0	320	Natorian Av	Orease & debris biockage
10/9/2003	100	100	tributary	0	200	College St	Grease blockage
10/10/2003	75000	75000	Rocky River South Prong	0	701	South St, Davidson	Broken pipe
10/10/2000			Sugar Creek	-		Country Duringon	2.0.0 p.p0
10/12/2003	1125	563	tributary	0	6017	Falstaff Dr	Grease blockage
10/16/2003	1670	835	Steele Creek	0	4728	Langden Gate Rd	Contractor left plug in pipe
10/17/2003	3670	3670	Stewart Creek tributary	0	2200	Double Oaks Rd	Grease & debris blockage
10/17/2003	30	0	McAlpine Creek	0	807	Wellston Dr	Grease & tree roots blockage
10/20/2003	100	0	Kings Branch	0	508	Farm Hurst Dr	Grease & tree roots blockage
			Ŭ.				Ü
10/21/2003	100	0	Lake Norman Clark's Creek	0	16101	Jetton Rd	Broken pipe
10/23/2003	1000	500	tributary	0	3822	Hedingham Ct	Grease & tree roots blockage
10/25/2003	10	0	McMullen Creek	0	3400	Tinkerbell Ln	Tree roots blockage
						Sugar Creek Rd	
10/26/2003	300	0	Little Sugar Creek	0	1408	(West)	Grease blockage
10/30/2003	6900	6900	Little Sugar Creek tributary	0	812	Friendly Pl	Grease & tree roots blockage
10/30/2003	50	0	Paw Creek tributary	0	9351	Smith Dr	Vandalism (rocks & debris)
			McMullen Creek				
10/31/2003	13800	13800	tributary	30	4009	Craig Av	Grease blockage
month total = 22 spills	117,082	107,710					
- 1	,	- ,					
November	Total	Volume Reaching Surface	Surface Water	# Fish			
Date	Estimate	Water	Name	Killed	Block	Street Name	Cause of Spill / Bypass
11/1/2003	400	400	Briar Creek	0	3815	Woodleaf Rd	Tree roots & grease blockage
11/3/2003	6300	6300	Long Creek	0	6415	Old Plank Rd	Vandalism (rocks & bricks)
11/4/2003	2	2	Little Sugar Creek	0	4718	Longwood Dr	Broken pipe
11/4/2003	1588	1588	Briar Creek tributary	0	2001	Patio Ct	Grease blockage
11/5/2003	400	0	Briar Creek	0	855	Museum Dr	Tree roots blockage
11/10/2003	100	0	McMullen Creek	0	750	Ashmore Dr	Tree roots blockage
11/11/2003	800	800	Kings Branch	0	648	Griffith Rd	Tree roots blockage
11/11/2003	300	300	Briar Creek tributary	0	3421	Bonneville Dr	Tree roots blockage

11/16/2003								
11/18/2003 800 400	11/16/2003	1000	800	Lake Norman	0	18909	Coveside Ln	Broken pipe caused by lawn mower
11/18/2003 2922 2	11/16/2003	400	0	Reedy Creek	0	6201	Randy Dr	Grease & tree roots blockage
11/18/2003 2922 2922	11/18/2003	800	400	Little Sugar Creek	0	4020	Sussex Av	Tree roots blockage
11/19/2003	44/40/0000	0000	2000		•	0.4.50		
11/19/2003 700	11/18/2003	2922	2922		0	6156	Loch Arbor Ln	Grease blockage
11/20/2003 400 360	11/19/2003	700	700	tributary	0	2836	Fordwood Dr	Grease blockage
11/20/2003 40	44/00/0000	400	000		0	5700	Distant Da	One and block and
11/22/2003								<u> </u>
11/22/2003	11/20/2003	40	0		0	5401	Nations Ford Rd	Tree roots blockage
11/26/2003 75 75	11/22/2003	150	150		0	9600	Heartwood Ln	Grease blockage
11/26/2003 3340 3340 Campbell Creek 0 8830 Albemarle Rd Grease blockage	11/25/2003	400	400	Briar Creek tributary	0	3801	Delgany Dr	Grease blockage
11/27/2003 400 400 McAlpine Creek 0 6615 Ronda Av Grease & tree roots blockage	11/26/2003	75	75	Little Sugar Creek	0	4718	Longwood Dr	Broken pipe
11/28/2003 400 400 McMullen Creek 0 3841 Chevington Rd Grease & tree roots blockage	11/26/2003	3340	3340	Campbell Creek	0	8830	Albemarle Rd	Grease blockage
11/30/2003 2500 2500 Little Sugar Creek 0 718 Stanfield Dr Broken pipe	11/27/2003	400	400	McAlpine Creek	0	6615	Ronda Av	Grease & tree roots blockage
December Date Estimate Total Estimate Estimate Estimate Water Water Name Killed Block Street Name Ballantyne Commons Pk General debris blockage Date	11/28/2003	400	400	McMullen Creek	0	3841	Chevington Rd	Grease & tree roots blockage
December Total Estimate	11/30/2003	2500	2500	Little Sugar Creek	0	718	Stanfield Dr	Broken pipe
December Date Estimate Fish Mark Estimate Estimate Water Water Name Killed Block Street Name Estimate Cause of Spill / Bypass	month total =							
Date Estimate Water Name Killed Block Street Name Cause of Spill / Bypass 12/1/2003 200 200 10700 10700 General debris blockage 12/1/2003 200 0 Irwin Creek 0 1950 John McDonald Av Rocks, bricks, & paper blockage 12/1/2003 20 0 Ticer Branch 0 3140 Sheets Cr Grease blockage 12/3/2003 400 300 McAlpine Creek tributary 0 2101 Knickerbocker Dr Grease blockage 12/6/2003 200 McAlpine Creek tributary 0 6800 Old Forge Dr Grease & tree roots blockage 12/8/2003 100 0 Briar Creek 0 2019 Finchley Dr Grease blockage 12/8/2003 2650 2650 King's Branch 0 837 Silver Ct Grease blockage 12/8/2003 1270 1270 Briar Creek 0 1344 Briar Creek Rd Grease blockage	22 spills	23,417	21,837					
Date Estimate Water Name Killed Block Street Name Cause of Spill / Bypass 12/1/2003 200 200 10700 10700 General debris blockage 12/1/2003 200 0 Irwin Creek 0 1950 John McDonald Av Rocks, bricks, & paper blockage 12/1/2003 20 0 Ticer Branch 0 3140 Sheets Cr Grease blockage 12/3/2003 400 300 McAlpine Creek tributary 0 2101 Knickerbocker Dr Grease blockage 12/6/2003 200 McAlpine Creek tributary 0 6800 Old Forge Dr Grease & tree roots blockage 12/8/2003 100 0 Briar Creek 0 2019 Finchley Dr Grease blockage 12/8/2003 2650 2650 King's Branch 0 837 Silver Ct Grease blockage 12/8/2003 1270 1270 Briar Creek 0 1344 Briar Creek Rd Grease blockage								
12/1/2003 200 200 200 10700 Commons Pk General debris blockage						Block	Street Name	Cause of Snill / Bynass
12/1/2003 200 0 Irwin Creek 0 1950 John McDonald Av Rocks, bricks, & paper blockage 12/1/2003 20 0 Ticer Branch 0 3140 Sheets Cr Grease blockage 12/3/2003 400 300 McAlpine Creek tributary 0 2101 Knickerbocker Dr Grease blockage 12/6/2003 200 200 McAlpine Creek 0 0 6800 Old Forge Dr Grease & tree roots blockage 12/8/2003 100 0 Briar Creek 0 2019 Finchley Dr Grease blockage 12/8/2003 2650 2650 King's Branch 0 837 Silver Ct Grease blockage 12/8/2003 1270 1270 tributary 0 9135 Trinity Rd Grease blockage 12/10/2003 3975 3776 Briar Creek 0 1344 Briar Creek Rd Grease blockage	Duto	Lotiniate	Water		ranca	Diook		Guase of Opin / Bypass
12/1/2003 20 0 Ticer Branch 0 3140 Sheets Cr Grease blockage 12/3/2003 400 300 McAlpine Creek tributary 0 2101 Knickerbocker Dr Grease blockage 12/6/2003 200 200 McAlpine Creek 0 6800 Old Forge Dr Grease & tree roots blockage 12/8/2003 100 0 Briar Creek 0 2019 Finchley Dr Grease blockage 12/8/2003 2650 King's Branch 0 837 Silver Ct Grease blockage 12/8/2003 1270 1270 Tributary 0 9135 Trinity Rd Grease blockage 12/10/2003 3975 3776 Briar Creek 0 1344 Briar Creek Rd Grease blockage	12/1/2003	200	200	tributary	0	10700	Commons Pk	General debris blockage
12/3/2003 400 300 McAlpine Creek tributary 0 2101 Knickerbocker Dr Grease blockage 12/6/2003 200 200 McAlpine Creek 0 6800 Old Forge Dr Grease & tree roots blockage 12/8/2003 100 0 Briar Creek 0 2019 Finchley Dr Grease blockage 12/8/2003 2650 2650 King's Branch 0 837 Silver Ct Grease blockage 12/8/2003 1270 1270 1270 Trinity Rd Grease blockage 12/10/2003 3975 3776 Briar Creek 0 1344 Briar Creek Rd Grease blockage	12/1/2003	200	0	Irwin Creek	0	1950	John McDonald Av	Rocks bricks & paper blockage
12/3/2003 400 300 tributary 0 2101 Knickerbocker Dr Grease blockage 12/6/2003 200 200 McAlpine Creek 0 6800 Old Forge Dr Grease & tree roots blockage 12/8/2003 100 0 Briar Creek 0 2019 Finchley Dr Grease blockage 12/8/2003 2650 2650 King's Branch 0 837 Silver Ct Grease blockage 12/8/2003 1270 1270 1270 Trinity Rd Grease blockage 12/10/2003 3975 3776 Briar Creek 0 1344 Briar Creek Rd Grease blockage						1000	00:	rtocks, blicks, a paper blockage
12/6/2003 200 200 McAlpine Creek 0 6800 Old Forge Dr Grease & tree roots blockage 12/8/2003 100 0 Briar Creek 0 2019 Finchley Dr Grease blockage 12/8/2003 2650 2650 King's Branch 0 837 Silver Ct Grease blockage 12/8/2003 1270 1270 Stewart Creek tributary 0 9135 Trinity Rd Grease blockage 12/10/2003 3975 3776 Briar Creek 0 1344 Briar Creek Rd Grease blockage	12/1/2003	20	0					, , , , , , , , , , , , , , , , , , , ,
12/8/2003 100 0 Briar Creek 0 2019 Finchley Dr Grease blockage 12/8/2003 2650 2650 King's Branch 0 837 Silver Ct Grease blockage 12/8/2003 1270 1270 tributary 0 9135 Trinity Rd Grease blockage 12/10/2003 3975 3776 Briar Creek 0 1344 Briar Creek Rd Grease blockage				McAlpine Creek	0	3140	Sheets Cr	Grease blockage
12/8/2003 2650 2650 King's Branch 0 837 Silver Ct Grease blockage 12/8/2003 1270 1270 1270 Trinity Rd Grease blockage 12/10/2003 3975 3776 Briar Creek 0 1344 Briar Creek Rd Grease blockage	12/3/2003	400	300	McAlpine Creek tributary	0	3140 2101	Sheets Cr Knickerbocker Dr	Grease blockage Grease blockage
12/8/2003 1270 1270 Stewart Creek tributary 0 9135 Trinity Rd Grease blockage 12/10/2003 3975 3776 Briar Creek 0 1344 Briar Creek Rd Grease blockage	12/3/2003 12/6/2003	400 200	300 200	McAlpine Creek tributary McAlpine Creek	0 0 0	3140 2101 6800	Sheets Cr Knickerbocker Dr Old Forge Dr	Grease blockage Grease & tree roots blockage
12/8/2003 1270 1270 tributary 0 9135 Trinity Rd Grease blockage 12/10/2003 3975 3776 Briar Creek 0 1344 Briar Creek Rd Grease blockage	12/3/2003 12/6/2003 12/8/2003	400 200 100	300 200 0	McAlpine Creek tributary McAlpine Creek Briar Creek	0 0 0 0	3140 2101 6800 2019	Sheets Cr Knickerbocker Dr Old Forge Dr Finchley Dr	Grease blockage Grease & tree roots blockage Grease blockage
	12/3/2003 12/6/2003 12/8/2003	400 200 100	300 200 0	McAlpine Creek tributary McAlpine Creek Briar Creek King's Branch	0 0 0 0	3140 2101 6800 2019	Sheets Cr Knickerbocker Dr Old Forge Dr Finchley Dr	Grease blockage Grease & tree roots blockage Grease blockage
12/12/2003 300 75 South Prong Of 0 222 Mock Rd Grease blockage	12/3/2003 12/6/2003 12/8/2003 12/8/2003	400 200 100 2650	300 200 0 2650	McAlpine Creek tributary McAlpine Creek Briar Creek King's Branch Stewart Creek	0 0 0 0	3140 2101 6800 2019 837	Sheets Cr Knickerbocker Dr Old Forge Dr Finchley Dr Silver Ct	Grease blockage Grease & tree roots blockage Grease blockage Grease blockage Grease blockage
	12/3/2003 12/6/2003 12/8/2003 12/8/2003	400 200 100 2650 1270	300 200 0 2650 1270	McAlpine Creek tributary McAlpine Creek Briar Creek King's Branch Stewart Creek tributary	0 0 0 0 0	3140 2101 6800 2019 837 9135	Sheets Cr Knickerbocker Dr Old Forge Dr Finchley Dr Silver Ct Trinity Rd	Grease blockage Grease & tree roots blockage Grease blockage Grease blockage Grease blockage Grease blockage

			Rocky River				
12/15/2003	200	50	Irwin Creek	0	2358	Morton St	Grease blockage
12/16/2003	800	800	McAlpine Creek tributary	0	11230	Carmel Commons Bv	Tree roots & grease blockage
12/16/2003	400	400	Clems Branch tributary	0	14420	Nolen Ln	Grease blockage
12/20/2003	562	562	Sugar Creek tributary	0	6705	Park South Dr	Grease blockage
12/20/2003	500	500	McAlpine Creek tributary	0	9009	Harris BI (East)	Grease blockage
12/21/2003	1125	562	McMullen Creek tributary	0	9524	Deer Spring Ln	Grease, sticks, & paper blockage
12/21/2003	490	0	Little Sugar Creek	0	1454	Townes Rd	Grease blockage
12/23/2003	100	10	McAlpine Creek tributary	0	3340	Silver Stream Rd	Tree roots blockage
12/23/2003	400	400	Sugar Creek	0	605	Candler Ln	Broken pipe
12/23/2003	50	0	Irwin Creek	0	4419	Tyvola Rd (West)	Grease blockage
12/24/2003	200	200	McMullen Creek	0	3640	Chevington Rd	Tree roots blockage
12/24/2003	200	200	Unnamed Water Source	0	15801	Northstone Dr	General debris blockage
12/24/2003	100	0	Little Sugar Creek tributary	0	6319	Hazelton Dr	Grease blockage
12/24/2003	100	0	Mallard Creek	0	2401	Haybrook Ln	Grease blockage
12/25/2003	500	250	McAlpine Creek tributary	0	5300	Guildbrook Rd	Grease blockage
12/26/2003	450	450	Paw Creek tributary	0	9153	Spyglass Pl	Grease blockage
12/26/2003	500	250	Stewart Creek	0	3938	Tennessee Av	Grease, rocks, & bricks blockage
12/22/22						McAlpine Creek WWTP 12701 Lancaster	A pipe was clogged and a valve stuck open. When the blockage was released, wastewater overflowed past the valve. Crews were able to locate and close the valve, but it took
12/26/2003	45,000	45,000	McAlpine Creek Little Sugar Creek	0		Highway, Pineville	several hours.
12/27/2003	200	200	tributary	0	2320	Catalina Av	Grease blockage
12/30/2003	7800	7020	Briar Creek tributary	0	2500	Eastway Dr	Grease blockage
12/30/2003	100	0	Lake Norman	0	21502	Rio Oro Dr	Broken pipe (low pressure) by commercial truck
month total = 31 spills	69,092	65,325					

January Date	Total Estimate	Volume Reaching Surface Water	Surface Water Name	# Fish Killed	Block	Street Name	Cause of Spill / Bypass
1/1/2004	980	250	McCullough Creek tributary	0	11700	General Dr	Tree roots & grease blockage
1/2/2004	750	750	Twelve Mile Creek tributary	0	9999	Woodglen (Union County) Dr	Broken pipe by contractor
1/5/2004	1200	0	Campbell Creek	0	11000	W.T. Harris bl (East)	Tree roots blockage
1/6/2004	150	30	Campbell Creek	0	6546	Louglen Cr	Grease blockage
1/6/2004	300	300	Irwin Creek	0	3100	Statesville Av	General debris blockage (i.e.rocks, bricks, & dirt) by contractor
1/7/2004	5010	5010	Briar Creek	0	1022	Hickory Nut St	Broken pipe by erosion
1/7/2004	120	60	Stewart Creek	0	724	I-85 hwy (North)	Grease blockage
1/10/2004	1905	1905	Clarke Creek tributary	0	10303	Bolton Ct	Grease blockage
1/11/2004	5010	5010	McAlpine Creek tributary	0	7031	Pleasant Dr	Grease & tree roots blockage
1/12/2004	60	60	Irwin Creek tributary	0	200	Poplar St (South)	General debris blockage
1/13/2004	2400	2400	Kings Branch	0	200	Regency Executive Pk	General debris blockage
1/13/2004	90	90	Stewart Creek tributary	0	3510	Firestone Dr	Grease & tree roots blockage
1/15/2004	840	840	Taggert Creek	0	1700	Brooksvale St	Grease blockage
1/15/2004	1500	1500	Taggert Creek	0	2828	I-85 Service Rd	Grease blockage
1/16/2004	180	180	Little Sugar Creek tributary	0	328	Keswick Av	Tree roots & grease blockage
1/17/2004	50	50	Briar Creek tributary	0	2221	Chatham Av	Tree roots blockage
1/18/2004	375	375	Little Sugar Creek tributary	0	1107	Cone Av	Tree roots blockage
1/18/2004	3300	3300	McAlpine Creek tributary	0	1335	Charter PI	Tree roots & grease blockage
1/18/2004	1300	1300	Kings Branch tributary	0	143	Willetta Dr	Grease blockage
1/20/2004	180	0	McMullen Creek	0	4819	Lindstrom Dr	Tree roots blockage
1/21/2004	100	0	McMullen Creek	0	8200	Inverary PI	Tree roots blockage

				I			
1/22/2004	675	675	Briar Creek	0	1312	Meadow Ln	Broken pipe
			Little Sugar Creek				
1/23/2004	300	300	tributary	0	2548	Remus Rd	Grease blockage
1/23/2004	800	400	Irwin Creek	0	1243	Spruce St	Grease blockage
			Torrence Creek				
1/24/2004	15	0	tributary	0	14333	Hunters Rd	Grease blockage
1/24/2004	200	200	McMullen Creek	0	3613	Haverstick PI	General debris blockage (I.e. Sticks, dirt & paper)
1/24/2004	120	90	Lake Norman	0	16813	Baywatch Ct	Broken pipe (low pressure) by truck
1/26/2004	780	390	Toby Creek	0	640	Ann Elizabeth Dr	Tree roots blockage
.,_,,_,			,				
1/29/2004	9275	9275	Sugar Creek	0	5715	Oakcrest Green Dr	Tree roots blockage
=5/=55						McAlpine Creek	
						WWTP	
						12701 Lancaster	
1/29/2004	3,000	0	McAlpine Creek	0		Highway, Pineville	Contractor error at wastewater plant
1/30/2004	200	200	Sugar Creek	0	2401	Pine St (North)	Grease blockage
1/31/2004	800	800	Little Sugar Creek	0	1323	Townes Rd	Cause unknown
month total =							
32 spills	41,965	35,740					
February Date	Total Estimate	Volume Reaching Surface Water	Surface Water Name	# Fish Killed	Block	Street Name	Cause of Spill / Bypass
Date	Estimate	vvalei	Name	Killeu	DIOCK	Street Name	Cause of Spill / Bypass
2/2/2004	30	0	Little Curer Creek	0	706	Marrayy Av	Tree rests blockers
2/2/2004	30	U	Little Sugar Creek	0	706	Morrow Av	Tree roots blockage
0/0/0004	000	0.40	0 1 11 0 1		7040	Rockwood Forest	
2/2/2004	900	810	Campbell Creek	0	7219	Dr	Grease blockage
			Catawba River				
2/4/2004	120	0	tributary	0	1200	Ballina Wy	Broken pipe (air relief valve on force main)
2/5/2004	10	0	McAlpine Creek	0	6624	Walsh BI	Contractor plugged sewer pipe causing blockage
0/5/0004	60	60	Big Sugar Creek	0	11107	Commerce Bv (South)	Tree roots blockage
2/5/2004							
2/6/2004	15000	15000	Four Mile Creek	0	3203	Keegan Wy	Grease blockage

2/6/2004	400	400	Irwin Creek	0	2400	Statesville Av	Tree roots blockage
2/7/2004	2250	2250	Briar Creek tributary	0	6706	Holston Ct	General debris blockage (i.e. paper)
2/7/2004	1500	1500	Paw Creek	0	8924	Old Dowd Rd	Heavy rains caused surcharge
2/9/2004	5063	4556	Campbell Creek tributary	0	2816	Flintridge Dr	Grease blockage
2/9/2004	600	600	Briar Creek	0	2237	Purser Dr	Grease blockage
2/9/2004	90	0	McDowell Creek	0	20844	Catawba Av	Tree roots blockage
2/9/2004	60	0	Torrence Creek	0	202	Dallas St	Tree roots blockage
2/9/2004	900	900	Little Sugar Creek	0	8601	Kirchenbaum Dr	Grease blockage
2/9/2004	400	0	Campbell Creek	0	6345	Lakefill Rd	Grease blockage
2/10/2004	1050	1050	Irwin Creek tributary	0	2523	Jefferson Davis St	Tree roots blockage
2/10/2004	3750	3750	Little Sugar Creek tributary	0	1247	Tom Hunter Rd	Grease blockage
2/12/2004	60	60	Irwin Creek	0	3428	Cypress Pond Dr	Grease blockage
2/13/2004	52	52	Stewart Creek	0	1815	Northbrook Dr	Tree roots blockage
2/13/2004	56	56	McAlpine Creek	0	3501	Sharon Rd	Grease blockage
2/16/2004	180	180	Briar Creek tributary	0	3333	Biscayne Dr	Grease blockage
2/16/2004	800	80	Toby Creek	0	440	Neal Dr	Grease blockage
2/17/2004	600	600	Four Mile Creek	0	2006	Trowbridge Ct	Tree roots blockage
2/17/2004	210	210	Taggart Creek	0	1601	Brooksvale St	Grease blockage
2/17/2004	480	48	Little Sugar Creek	0	1500	Edgewater Dr	Grease blockage
2/17/2004	330	330	McAlpine Creek	0	5577	Five Knolls Dr	Grease blockage
2/18/2004	330	330	Paw Creek tributary	0	718	Merridale Dr	Grease blockage
2/19/2004	18400	1840	Sugar Creek	0	436	Cone Av, Pineville	General debris blockage (i.e. rocks & bricks)
2/19/2004	400	400	Little Sugar Creek tributary	0	5518	South Bv	Grease blockage
2/19/2004	120	0	Little Sugar Creek	0	8925	Sharonbrook Dr	Tree roots blockage

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2/19/2004	225	112	Stewart Creek tributary	0	3900	Brookshire Bv	General debris blockage (i.e. rags & paper)
2/19/2004	225	112	libulary	U	3900	DIOOKSIIIE DV	General debris blockage (i.e. rags & paper)
0/00/0004	000	000	Little Occure Occure	0	0500	Fair in Di	One and blade are
2/20/2004	200	200	Little Sugar Creek	0	6500	Fairview Rd	Grease blockage
2/21/2004	400	400	McIntyre Creek	0	2722	Clarencefield Dr	Grease blockage
			Stewart Creek				
2/23/2004	300	300	tributary	0	3144	Freedom Dr	Grease blockage
						Pineville-Matthews	
2/23/2004	635	635	Little Sugar Creek	0	9840	Rd	General debris blockage (i.e. bricks)
2/24/2004	1987	0	Paw Creek	0	700	Toddville Rd	Tree roots blockage
2/24/2004	1670	835	Stewart Creek	0	526	Pennsylvania Av	General debris blockage (i.e. sticks, rags & paper)
2/25/2004	42	42	Little Sugar Creek	0	1006	Echo Glen Rd	Grease blockage
2/25/2004	460	460	Little Sugar Creek	0	1125	Sugar Creek Rd	Tree roots blockage
			Stewart Creek				
2/25/2004	30	0	tributary	0	3900	Brookshire Bv	Broken pipe blockage
2/26/2004	1200	1200	McMullen Creek	0	2917	Rustic Ln	Grease blockage
2/27/2004	30	0	Briar Creek tributary	0	2415	Mecklenburg Av	Tree roots blockage
2/28/2004	562	562	Briar Creek	0	4237	Folkston Dr	Grease & tree roots blockage
2/29/2004	1125	844	Torrence Creek	0	9308	Old Barnette PI, Huntersville	Grease blockage
month total =							-
44 spills	63,067	40,652					
Manak Dai	Total	Volume Reaching Surface	Surface Water	# Fish	Dissi	Oters of Nierra	0
March Date	Estimate	Water	Name	Killed	Block	Street Name	Cause of Spill / Bypass
3/2/2004	3375	3375	Mallard Creek	0	3425	Lazy Day Ln	Grease blockage
3/3/2004	12500	12500	McAlpine Creek	0	6324	Thermal Rd	Grease blockage
3/3/2004	400	0	Briar Creek	0	4142	Larkspur Ln	Grease blockage
			Mallard Creek				
3/5/2004	960	960	tributary	0	12725	Candle Leaf Ct	General debris blockage (i.e. dirt & sand)
3/5/2004	275	275	Little Hope tributary	0	4651	Fairbluff PI	Broken pipe blockage

3/6/2004	800	0	McMullen Creek	0	8308	Tifton Rd	Grease blockage
			McAlpine Creek				
3/6/2004	300	0	tributary	0	5101	Birchbark Ln	Tree roots blockage
						Craighead Rd	
3/6/2004	240	0	Little Sugar Creek	0	525	(West)	Grease blockage
			Little Sugar Creek				
3/6/2004	6200	6200	tributary	0	5516	Chedworth Dr	Tree roots blockage
3/7/2004	360	360	McMullen Creek	0	5341	Silabert Av	Tree roots blockage
3/9/2004	4800	4800	Irwin Creek tributary	0	300	Orchard Cr	Tree roots blockage
			Campbell Creek			W T Harris Bv	
3/10/2004	60	60	tributary	0	9005	(East)	Grease blockage
3/11/2004	90	90	Toby Creek	0	6028	McDaniel Ln	Grease blockage
3/12/2004	112	112	Little Sugar Creek	0	2700	Archdale Dr	Broken pipe blockage
			McAlpine Creek				
3/13/2004	250	250	tributary	0	1525	Piccadilly Dr	Tree roots blockage
3/13/2004	135	135	Little Sugar Creek	0	9524	Loblolly Ln	Tree roots blockage
			Taggart Greek				
3/14/2004	150	150	tributary	0	3954	Bristol Dr	Broken pipe blockage
			McAlpine Creek				
3/15/2004	60	0	tributary	0	7332	Swans Run Rd	Grease blockage
3/15/2004	200	0	Irwin Creek tributary	0	1910	Ranchwood Dr	Grease blockage
3/16/2004	735	735	Little Sugar Creek	0	2058	Edgewater Dr	Grease blockage
3/16/2004	1530	1530	Six Mile Creek tributary	0	11142	Knight Castle Dr	Grease blockage
3/19/2004	3795	949	Twelve Mile Creek tributary	0	36	Aringill (Lot # 36) Ln, Unincorporated	Broken force main pipe
		600	Sugar Creek			·	
3/19/2004	1260	630	tributary Sugar Creek	0	3722	Tryon St (South)	Broken pipe blockage
3/19/2004	1170	585	tributary	0	4115	Sarah Dr	Grease blockage

3/19/2004	900	900	Irwin Creek	0	2400	Statesville Av	Grease blockage
			Four Mile Creek				
3/20/2004	540	540	tributary	0	5418	Burwash Ct	Grease blockage
			Twelve Mile Creek			Aringill Ln, Union	
3/20/2004	3,795	949	tributary	0	36	County	Broken pipe
3/24/2004	300	300	Little Sugar Creek	0	1400	Starmount Cove Ln	Tree roots blockage
2/24/2224							
3/24/2004	600	600	Little Sugar Creek	0	1607	Longleaf Dr	Tree roots blockage
3/24/2004	60	60	McMullen Creek	0	9244	Deer Spring Ln	Grease blockage
0/00/0004	0450	4005	Campbell Creek	0	7004	0	One and Markets
3/26/2004	2150	1935	tributary	0	7001	Snow Ln	Grease blockage
3/27/2004	200	200	Irwin Creek	0	5110	Elizabeth Rd	Grease blockage
3/29/2004	800	800	Irwin Creek tributary	0	1824	Mint St (South)	Broken pipe blockage
3/29/2004	360	270	Lake Norman	0	18424	Harbor Light	Low pressure valve box broken
3/29/2004	980	980	Irwin Creek tributary	0	504	Kingston Av (West)	Grease blockage
3/29/2004	2650	2650	Little Sugar Creek	0	2008	Canterwood Dr	Grease blockage
3/31/2004	1000	0	Long Creek	0	1528	McCorkle Rd	Broken force main pipe - used by-pass to contain spill during repair
month total =	1000	Ů.	Long Greek	- 0	1020	Woodhie Na	Topan
37 spills	54,092	43,880					
April Date	Total Estimate	Volume Reaching Surface Water	Surface Water Name	# Fish Killed	Block	Street Name	Cause of Spill / Bypass
4/1/2004	2250	2250	Pawtucket Branch	0	5816	Silver Eagle Dr	Grease blockage
4/5/2004	120	120	McMullen Creek	0	3624	School House Ln	Grease blockage
4/7/2004	980	784	Sardis Branch	0	342	Trafalgar Pl	Tree roots blockage
4/9/2004	16600	13280	McAlpine Creek	0	8812	Sweetwater Ct	Vandalism
4/12/2004	2540	2540	McAlpine Creek tributary	0	9226	New Towne Dr	Tree roots & boken pipe blockage

					1		
4/13/2004	315	315	Stewart Creek	0	2629	Booker Av	Grease blockage
4/14/2004	900	900	Long Creek tributary	0	6900	Pleasant Grove Rd	Grease blockage
			McAlpine Creek				
4/15/2004	180	0	tributary	0	439	Boyce Rd	Grease blockage
			McAlpine Creek				
4/16/2004	540	405	tributary	0	305	Bon-Rea Dr	Tree roots blockage
4/16/2004	120	0	McIntyre Creek	0	9713	Trinity Rd	Tree roots blockage
4/16/2004	2700	2700	Back Creek	0	9724	Faires Farm Rd	Vandalism
4/17/2004	200	200	Long Creek	0	1830	Colin Creek Ln	Vandalism
4/19/2004	360	360	McMullen Creek	0	4624	Colony Rd	Grease blockage
4/19/2004	1500	150	Stewart Creek	0	432	Woodvale Pl	Grease blockage
4/19/2004	1300	150	Stewart Creek		432	McAlpine Creek	Grease blockage
						WWTP	
						12701 Lancaster	A mechanical failure caused partially treated waste materials to
4/19/2004	23,800	17,850	McAlpine Creek	0		Highway, Pineville	overflow.
4/20/2004	9275	9275	Briar Creek	0	2723	Commonwealth Av	Grease blockage
4/20/2004	60	0	McMullen Creek	0	5301	Sharon Rd	Grease blockage
			McMullen Creek				
4/20/2004	600	600	tributary	0	5920	Monroe Rd	Grease blockage
4/21/2004	120	0	Briar Creek tributary	0	2616	Country Club Ln	Grease blockage
4/25/2004	225	225	Little Sugar Creek	0	301	30th St (West)	General debris blockage
4/27/2004	50	50	Taggart Creek	0	4936	Eleanor Dr	Grease blockage
4/27/2004	22	22	Sugar Creek	0	4900	Zephyr Ln	Grease blockage
4/28/2004	1600	1600	McAlpine Creek tributary	0	1215	Brockton Ln	Tree roots blockage
.,,					,		
4/29/2004	30	0	Lake Cornelius tributary	0	20198	Holiday Ln	Grease blockage
4/29/2004	12000	0	Long Creek	0	1528	McCorkle Rd	Broken pipe (force main) did not reach a water source
4/30/2004	237	237	Briar Creek	0	2219	7th St (East)	Tree roots blockage
., 00, 200 1			2 0.00.0			0. (= 0.01)	·····

4/30/2004	1000	900	Taggart Creek tributary	0	3036	Markland Dr	Tree roots blockage
	1000	900	libulary	U	3030	Markianu Di	Tiee Tools blockage
month total = 27 spills	78,324	54,763					
		0.,00					
May Date	Total Estimate	Volume Reaching Surface Water	Surface Water Name	# Fish Killed	Block	Street Name	Cause of Spill / Bypass
5/5/2004	180	180	Irwin Creek tributary	0	3312	Pine Meadow Dr	Tree roots blockage
5/5/2004	90	45	Irwin Creek	0	1425	Clanton Rd	Grease blockage
5/7/2004	105	105	Kings Branch	0	500	East Arrowood Rd (East)	Grease blockage
5/11/2004	273	273	McAlpine Creek	0	8043	Bald Ridge Dr	Tree roots blockage
5/11/2004	90	90	Rocky Branch	0	8923	St Croix Ln	Grease blockage
5/11/2004	30	0	Sugar Creek	0	1819	Tyvola Rd	Tree roots blockage
5/12/2004	750	750	Little Sugar Creek	0	7805	Andover Woods Dr	Grease blockage
5/12/2004	720	720	Clarks Creek	0	12215	Dearmon Rd	Grease blockage
5/12/2004	53	53	Walkers Branch	0	13628	Walkers Creek Dr	Contractor extended plastic sewer pipe through manhole causing blockage
5/14/2004	2250	0	Dixon Branch	0	9902	Forest Dr	General Debris blockage (i.e. sticks, logs & dirt from I-485 contractor)
5/16/2004	60	0	McAlpine Creek	0	527	Wilby Dr	Grease blockage
5/17/2004	400	400	Little Sugar Creek	0	148	Wellingford St	Contractor plugged wrong pipe causing overflow
5/17/2004	420	0	Campbell Creek	0	5835	Executive Center Dr	Grease blockage
5/17/2004	135	0	McMullen Creek tributary	0	3441	Sharon Amity Rd	Grease blockage
5/18/2004	228	228	Little Sugar Creek	0	900	Seigle Av	Grease blockage
5/19/2004	120	120	Coffey Creek	0	3140	West Arrowood Rd	General Debris blockage (i.e. rocks, bricks, & concrete)
5/20/2004	180	0	Sugar Creek tributary	0	518	Fallingswood Ct	Grease blockage

5/00/0004	450		McMullen Creek	0	470	Listenstee De	Too and bladen
5/20/2004	150	0	tributary	0	470	Livingston Dr	Tree roots blockage
5/21/2004	600	540	Briar Creek	0	1418	Green Oaks Ln	Grease blockage
			McAlpine Creek				
5/24/2004	270	270	tributary	0	6501	Tuskan Dr	Tree roots blockage
5/24/2004	240	240	Back Creek	0	9319	Oren Thompson Rd	Grease blockage
5/25/2004	300	300	McAlpine Creek	0	7111	Cedar Lake Ct	Grease blockage
5/26/2004	600	0	McAlpine Creek	0	2223	Bleckley Ct	Grease blockage
			McAlpine Creek	0		•	· ·
5/27/2004	480	0	tributary		6565	Folger Dr	Broken Pipe
5/27/2004	1125	845	Little Sugar Creek	0	7828	Forest Point Bv	Grease blockage
5/27/2004	600	600	Irvins Creek	0	10901	Brandonwood Ln	Vandalism
5 (00 (000 t	45	45	Six Mile Creek	0	44704	01 101	V 18
5/28/2004	45	45	tributary	0	11731	Charnwood Ct	Vandalism
5/28/2004	1270	1270	McAlpine Creek		3800	Cedarbark Dr	Grease blockage
5/29/2004	120	0	McAlpine Creek tributary	0	7831	Winterset Dr	Grease blockage
5/31/2004	2100	1050	Rocky Branch	0	9221	Rainbow Forest Dr	Tree roots blockage
month total =			rteeny 2 anon				oo roote brooklage
30 spills	13,984	8,124					
-							
	Total	Volume Reaching Surface	Surface Water	# Fish			
June Date	Estimate	Water	Name	Killed	Block	Street Name	Cause of Spill / Bypass
0/4/0004	450	450	Stewart Creek	0	2000	Manla may a Du	Canada blackara
6/1/2004	450	450	Tributary McAlpine Creek	0	3000	Maplegrove Dr	Grease blockage
6/2/2004	1050	1050	Tributary	0	1027	Court Dr	Unknown blockage
6/2/2004	105	105	Briar Creek Tributary	0	6820	Barrington	Grease blockage
			Little Sugar Creek	-			-
6/2/2004	900	900	Tributary	0	217	Tremont Av (East)	Grease blockage
6/2/2004	630	630	Stewart Creek Tributary	0	2617	Pitts Dr	Grease blockage
6/5/2004	400	0	McAlpine Creek	0	138	Dovershire Rd	Grease blockage
0/3/2004	400	U	WicAlpine Creek	U	130	Poversille Kg	Grease blockage
0/5/0004	00.40	0040	Marking One 1	_	440		
6/5/2004 6/5/2004	2340 8350	2340 5010	McAlpine Creek McAlpine Creek	0	413 8934	Livingston Dr Elkins Park Dr	Tree roots blockage

6/6/2004	800	400	Clear Creek	0	5600	Crown Hill Dr	Grease blockage
6/7/2004	495	495	Campbell Creek	0	6245	Cross Creek	Grease blockage
6/1/2004	495	495	Stewart Creek	0	6243	Closs Cleek	
6/7/2004	4500	4500	Tributary	0	710	Hoskins Rd (North)	General debris blockage (i.e. trash, bottles & cans)
6/8/2004	105	0	McAlpine Creek	0	6720	Tara Dr	Tree roots blockage
6/8/2004	30	30	McAlpine Creek	0	6116	Sharon Hills Rd	Broken Pipe
6/11/2004	835	835	Irwin Creek	0	3240	Dalecrest Dr	Grease blockage
							Grease blockage
6/15/2004	315	157	Mallard Creek	0	5603	Mallard Grove Rd	
							Grease blockage
6/17/2004	120	120	Little Sugar Creek	0	5508	Hughes Dr	
6/19/2004	200	200	Briar Creek Tributary	0	6520	Rosecran Dr	Tree roots blockage
0/00/0004	450	450	Little Sugar Creek		004	Worthington Av	Grease blockage
6/22/2004	450	450	Tributary Campbell Creek	0	831	(East)	Grease blockage
6/23/2004	345	310	Tributary	0	7306	Barcliff Rd	Croase blookage
6/23/2004	600	600	Briar Creek	0	2215	Queens Rd (East)	Tree roots blockage
6/23/2004	120	120	Mallard Creek Tributary	0	10924	Kempsford Dr	Grease blockage
6/23/2004	120	120	Tributary	U	10924	Kempsiora Di	Grease Diockage
6/25/2004	360	360	Steele Creek Tributary	0	12200	York	General debris blockage (i.e. lumber, dirt & rocks)
0/23/2004	300	300	Steele Creek	U	12200	TUIK	General debits blockage (i.e. lumber, dirt & rocks)
6/25/2004	662	331	Tributary	0	13445	Cassington	Vandalism
6/28/2004	120	0	Sugar Creek	0	300	Tyvola Rd	Grease blockage
month total =							
24 spills	24,282	19,393					

TOTAL # OF FY04 COLLECTION SYSTEM SPILLS: 345

TOTAL # OF FY04 PLANT SPILLS: 3

VOLUME SAFELY COLLECTED, TREATED & DISCHARGED: 29,601,650,000 GALLONS
TOTAL VOLUME OF FY04 SPILLED: 736,967 GALLONS
TOTAL VOLUME OF FY03 THAT REACHED SURFACE WATERS: 624,327 GALLONS

% OF WASTWATER SAFELY COLLECTED, TREATED AND RELEASED DURING FY04: more than 99.997%

FY03: more than 99.932% FY02: more than 99.995% FY01: more than 99.99% FY00: more than 99.97%

SECTION IIB. Permit Compliance and Reporting Violations, by plant

PLANT NAME	MONTH	PERMIT LIMIT COMPLIANCE	REPORTING REQUIREMENT COMPLIANCE
Irwin Creek WWTP		The first toxicity test run in this month had a result of 72.3%, the test was re-run later in the month with a result of >100%. The average result for the month was 86.2%. Toxicity should be passed	
Irwin Creek	•		Compliant Compliant
WWTP	August, 2003		
Irwin Creek WWTP		Violation of the daily maximum cyanide limit on 9/17/03 resulting in a weekly average violation of the cyanide limit for the week of 9/14 - 9/20/03. This sample was analyzed by an outside Lab that had several problems with other CMU samples during this same period.	Compliant
Irwin Creek WWTP	October, 2003	Compliant	Compliant
Irwin Creek WWTP	November, 2003	Compliant	Compliant

Irwin Creek WWTP	December, 2003	Compliant	Compliant
Irwin Creek	December, 2003	Compliant	
WWTP			Field sampling on 1/26 and 1/27/04 was not conducted due to inclement weather keeping lab personnel from the plants. An
			extra day of sampling was conducted on Saturday 1/31/04 to
	January, 2004		make up at least one of these dates.
Irwin Creek WWTP		Compliant	During the week of 2/15 - 2/21/04 effluent metals samples
WWIP			were not collected as required. A rigorous check and balance
			procedure has now been put in place to ensure this does not
			occur again. On Friday 2/27/04 field parameters were not
			collected due to lab personnel not being able to get to the
	Folomore 2004		plants due to inclement weather. Sampling was conducted on Saturday 2/28/04 to make up for this date.
Irwin Creek	February,.2004	Compliant	Compliant
WWTP	March, 2004	Compnant	Compilant
Irwin Creek	,	Compliant	Compliant
WWTP	April, 2004		
Irwin Creek		Compliant	Compliant
WWTP	May, 2004		
Irwin Creek WWTP	June, 2004	Compliant	Compliant
Mallard Creek		Compliant	Compliant
WWTP	July, 2003		
Mallard Creek		Compliant	Compliant
WWTP	August, 2003		G V
Mallard Creek WWTP	Santambar 2002	Compliant	Compliant
Mallard Creek	September, 2003	Compliant	Compliant
WWTP	October, 2003	Comphant	Compnant
Mallard Creek		Compliant	Compliant
WWTP	November, 2003		

Mallard Creek			
WWTP	December, 2003	Monthly average flow violation. The average flow for the month was 8.77 MGD with a Permit limit of 8.0 MGD. The ultra sonic flow meter on the effluent is not properly reading the flow rates due to white foam building up under the meter. We corrected this problem. The Engineer submitted a completion of Construction certification in December, 2004. This completion raised the permit limit to 12.0 MGD.	Compliant
Mallard Creek WWTP	December, 2003	Compliant	Field sampling on 1/26 and 1/27/04 was not conducted due to
	January, 2004		inclement weather keeping lab personnel from the plants. An extra day of sampling was conducted on Saturday 1/31/04 to make up at least one of these dates.
Mallard Creek WWTP		Compliant	On Friday 2/27/04 field parameters were not collected due to lab personnel not being able to get to the plants due to inclement weather. Sampling was conducted on Saturday
Mallard Creek	February,2004	Compliant	2/28/04 to make up for this date. Compliant
WWTP	March, 2004	Compilant	Comphani
Mallard Creek WWTP	April, 2004	There is a monthly average cBOD violation in the month of April. During the month of April the sand filter and UV system have been rehabilitated. One UV unit and sand filter were off-line during this time. The rehab project has been completed and the problem should be corrected.	Compliant
Mallard Creek WWTP	, ,		Compliant
	May, 2004	There is a monthly average cBOD violation in the month of May. The monthly average limit is 4.2 mg/l and the average was 4.4 mg/l. It has been determined that the sampling probe for the effluent was located in an area where it collected debris that was not discharged with the effluent. The sampling probe has been relocated and the problem should be resolved.	
Mallard Creek	June, 2004	Compliant	Compliant

WWTP			
McAlpine Creek WWTP	July, 2003	Compliant	Compliant
McAlpine Creek WWTP	August, 2003	Compliant	Compliant
McAlpine Creek WWTP	September, 2003	Compliant	Compliant
McAlpine Creek WWTP	October, 2003	Compliant	Compliant
McAlpine Creek WWTP	November, 2003	Compliant	Compliant
McAlpine Creek WWTP	December, 2003	Compliant	Compliant
McAlpine Creek WWTP	January, 2004	Compliant	Field sampling on 1/26 and 1/27/04 was not conducted due to inclement weather keeping lab personnel from the plants. An extra day of sampling was conducted on Saturday 1/31/04 to make up at least one of these dates.
McAlpine Creek WWTP	February,.2004	Compliant	On Friday 2/27/04 field parameters were not collected due to lab personnel not being able to get to the plants due to inclement weather. Sampling was conducted on Saturday 2/28/04 to make up for this date.
McAlpine Creek WWTP	March, 2004	Compliant	Compliant
McAlpine Creek WWTP	April, 2004	Compliant	Compliant
McAlpine Creek WWTP	May, 2004	Compliant	Compliant
McAlpine Creek WWTP	June, 2004	Compliant	Compliant
McDowell Creek WWTP	July, 2003	Compliant	Compliant
McDowell Creek WWTP	August, 2003	Compliant	Compliant
McDowell Creek	September, 2003	Compliant	Compliant

WWTP			
McDowell Creek WWTP	October, 2003	Compliant	Compliant
McDowell Creek WWTP	November, 2003	Compliant	Compliant
McDowell Creek WWTP	December, 2003	Compliant	Compliant
McDowell Creek WWTP	January, 2004	Compliant	Field sampling on 1/26 and 1/27/04 was not conducted due to inclement weather keeping lab personnel from the plants. An extra day of sampling was conducted on Saturday 1/31/04 to make up at least one of these dates.
McDowell Creek WWTP	February,.2004	Compliant	On Friday 2/27/04 field parameters were not collected due to lab personnel not being able to get to the plants due to inclement weather. Sampling was conducted on Saturday 2/28/04 to make up for this date.
McDowell Creek WWTP	March, 2004	Compliant	Compliant
McDowell Creek WWTP	April, 2004	Compliant	Compliant
McDowell Creek WWTP	May, 2004	Compliant	Compliant
McDowell Creek WWTP	June, 2004	Compliant	Compliant
Sugar Creek WWTP	July, 2003	Compliant	Compliant
Sugar Creek WWTP	August, 2003	Compliant	Compliant
Sugar Creek WWTP	September, 2003	A weekly average cyanide violation occurred the week of 9/14 - 9/20/03. These samples were analyzed by an outside lab. The outside lab experienced several analytical problems on CMU samples during this time.	Compliant
Sugar Creek	October, 2003	Compliant	Compliant

WWTP			
Sugar Creek WWTP	November, 2003	Compliant	Compliant
Sugar Creek WWTP	December, 2003	Compliant	Compliant
		Compliant	
Sugar Creek WWTP	January, 2004		Field sampling on 1/26 and 1/27/04 was not conducted due to inclement weather keeping lab personnel from the plants. An extra day of sampling was conducted on Saturday 1/31/04 to make up at least one of these dates.
		Compliant	
Sugar Creek WWTP	February,.2004		On Friday 2/27/04 field parameters were not collected due to lab personnel not being able to get to the plants due to inclement weather. Sampling was conducted on Saturday 2/28/04 to make up for this date.
Sugar Creek WWTP	March, 2004	There is a weekly average violation of the mercury limit during the week of 3/14 - 3/20/04.	Compliant
Sugar Creek WWTP	April, 2004	Compliant	Compliant
Sugar Creek WWTP	May, 2004	Compliant	Compliant
Sugar Creek WWTP	June, 2004	Compliant	Compliant