SPILL IMPACT WATER QUALITY MONITORING PROGRAM

FOR

Winchester Municipal Utilities

Winchester, Kentucky

June 2008

Winchester Municipal Utilities (WMU)

Spill Impact Water Quality Monitoring

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Executive Summary

Winchester Municipal Utilities (WMU) finalized its Consent Decree with the Environmental Protection Agency (EPA) in April 2007 for violations of the Clean Water Act. These violations included 27 documented recurring sanitary sewer overflow (SSO) locations. The purpose of the Spill Impact Water Quality Monitoring Program is to assess any impacts from Unpermitted Discharges on the environment and public health. It is limited primarily to dry weather events where material from a SSO could reach the waters of the Commonwealth. Dry weather monitoring is required whenever the impacted areas include streams, creeks, storm waters or obvious paths to those waterways that could impact public safety. Monitoring may be performed during wet weather conditions if there are public safety concerns.

Implementation of the Spill Impact Water Quality Monitoring Program will allow WMU to maintain regulatory compliance and reduce the potential for nonrecurring SSOs in the WMU sanitary sewer collection system. The Program is used as a systematic tool to assess spills and implement appropriate actions. Additionally, the program will allow WMU to identify areas requiring maintenance and infrastructure deficiencies for rehabilitation and/or replacement.

WMU personnel responsible for performance of the Spill Impact Water Quality Monitoring Program will be trained to follow the procedures as they are outlined in the program.

The Spill Impact Water Quality Monitoring Program will be reviewed annually by WMU management to ensure all elements of the document are up-to-date and being implemented as outlined.

In conclusion, WMU is committed to efficiently maintaining and operating its sanitary sewer system to reduce the negative impact on the environment in Winchester and Clark County, and conforming to requirements set forth in the federal and state regulations.

Section 2 - Definitions

2.1 – General Definitions

Business Hours – Hours that WMU has customer service representatives available to handle inquires and/or complaints. 7:00 a.m. – 4:00 p.m. Monday - Friday

Cleanout – A vertical pipe with a removable cap extending from a service lateral to the surface of the ground. It is used for access to the service lateral for inspection and maintenance. Typically, the WMU cleanout is located at the property line or right-of-way line.

Closed-Circuit Television (CCTV) – Visual inspection of the internal condition of a pipe or other subsurface structure.

Collection System – The network of pipes, manholes, and associated appurtenances that conveys wastewater to the wastewater treatment plant.

Control Zone – The immediate area established around an SSO to warn of the potential health hazard associated with the SSO.

Environmental Protection Agency (EPA) – United States Environmental Protection Agency, Region 4. Regulatory agency with the mission of protecting the environment.

First Responder(s) – Qualified WMU personnel who assume initial responsibility for an SSO event. Typically, two (2) employees will be present during initial response.

Force Main Sewer – A pressurized sewer line that conveys wastewater to some point in the gravity collection system or to the wastewater treatment plant.

Gravity Sewer – A sewer line that utilizes gradient between sections to transport wastewater to a pump station or the wastewater treatment plant.

Infiltration – The penetration of water from the land surface into the soil, or the penetration of water from the soil into a sewer system by such means as defective pipes, pipe joints or connections, or manhole walls.

Inflow – Flows or extraneous water introduced into the wastewater conveyance system from sources other than sanitary sewer connections, such as roof leaders, basement drains, manhole covers, and cross connections from storm sewers.

Geographic Information System (GIS) – A spatially related, automated mapping database created and maintained by WMU that contains all of WMU's sanitary sewer system and appurtenant structures.

Kentucky Division of Water (KDOW) – Regulatory agency with the mission of managing, protecting, and enhancing the quality and quantity of the Commonwealth's water resources through voluntary, regulatory and educational programs.

Lift Station Technician(s) – WMU personnel who perform routine maintenance checks on the pump stations located in the collection system.

Non-business Hours – Hours that WMU customer service representatives are not available to handle customer inquiries and/or complaints. 4:00 p.m. – 7:00 a.m.

Priority Pollutants – Refers to a list of 126 specific pollutants that includes heavy metals and specific organic chemicals. The priority pollutants are a subset of "toxic pollutants" as defined in the Clean Water Act (USA). These 126 pollutants were assigned a high priority for development of water quality criteria and effluent limitation guidelines because they are frequently found in wastewater.

Private Sewer – A sewer not meeting any or a portion of the criteria for ownership and perpetual maintenance as set forth in WMU Policy 408.1.

Pump Station – That part of the sanitary sewer collection system responsible for conveying sewage under pressure from a gravity portion of the sewer collection system to another gravity sewer or to the treatment plant.

Sanitary Sewer Overflow (SSO)– Discharge of sewage from anywhere other than a permitted discharge point to the waters of the Commonwealth or to wet weather ditches or systems that discharge to waters of the Commonwealth. The two types of SSOs are outlined in Section 2.2.

Sanitary Sewer Overflow Response Plan (SORP) – Structured guidance that includes various options for responding to sanitary sewer system overflows.

Service Lateral – Pipes that receive sewage from homes and businesses and transport that sewage to the publicly-owned, collection system.

Waters of the Commonwealth – Means and includes any and all rivers, streams, creeks, lakes, ponds, impounding reservoirs, springs, wells, marshes, and all other bodies of surface or underground water, natural or artificial, situated wholly or partly within or bordering upon the Commonwealth or its jurisdiction as defined by KRS 224.01-010.

– <u>Types of Overflows</u>

- **Wet Weather Overflow**
  An SSO occurring during or after a significant rain event resulting from excessive sewer flows caused by elevated ground and surface water conditions. A wet weather overflow can be attributed to many factors, including, but not limited to the following:

Downspouts	Inflow/Infiltration
Foundation drains	Cross-connections
Sump pumps	Mechanical/Electrical Failures

- **Dry Weather Overflow**
  An SSO occurring during dry weather periods resulting from some type of flow restriction or collection system disruption. A dry weather SSO can be attributed to many factors, including, but not limited to the following.

Mechanical failures	Roots
Electrical failures	Blockages
Grease	Pipe failures

Section 3 – System and Organizational Structure

3.1 – WMU Wastewater System

Currently, WMU provides wastewater service to 11,533 residential, commercial, institutional, and industrial customers. The WMU wastewater treatment and collection system is comprised of the following.

- 137.7 miles of gravity sewer
- 9.8 miles of force main sewer
- 0.8 miles of private sewer (including 1 private pump station)
- 3,585 manholes
- 17 pump stations
- 1 wastewater treatment plant

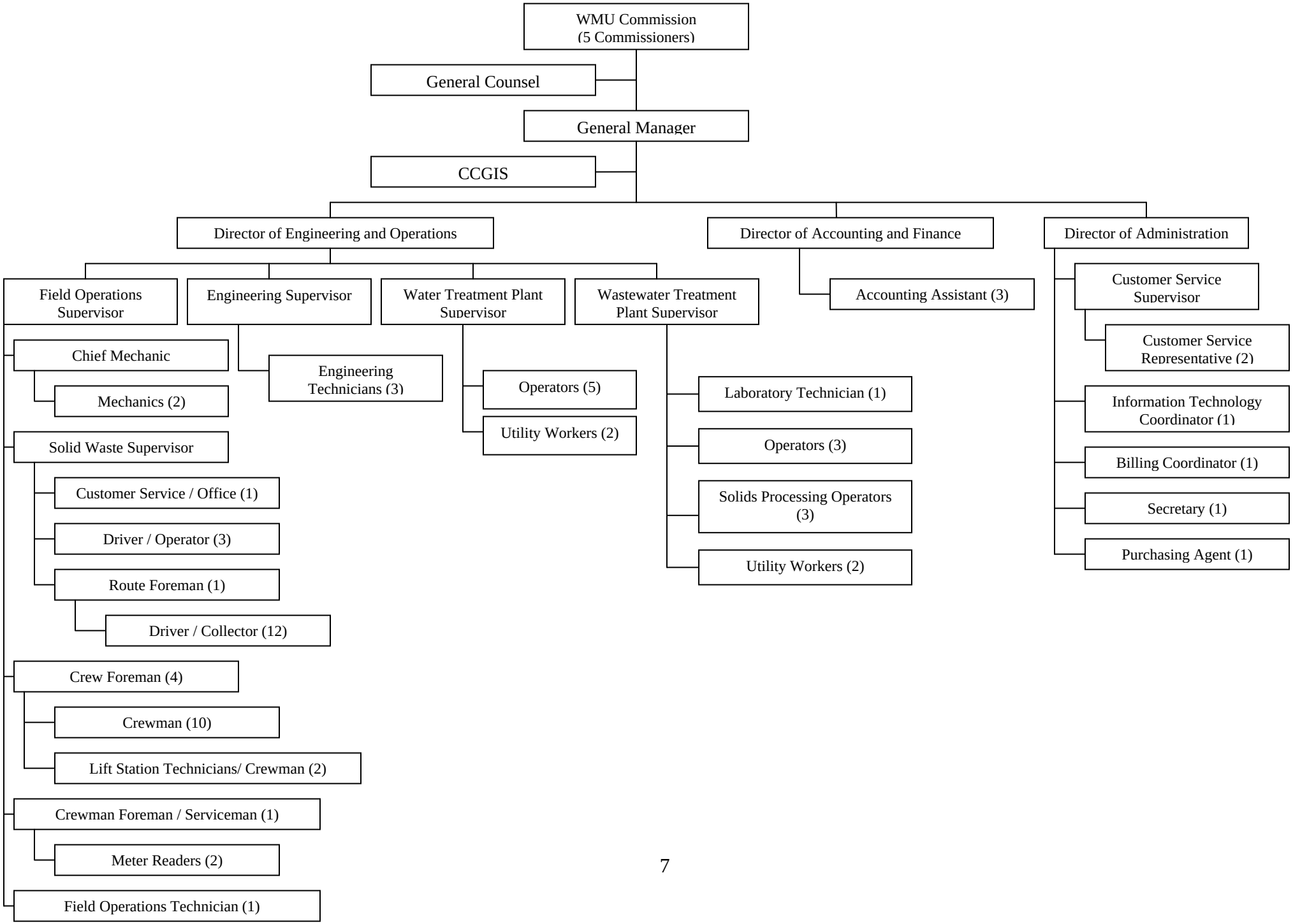
Construction of a new 7.2 MGD average day with 24.0 MGD peak hydraulic wastewater treatment plant was completed and operational January 21, 2008. The new facility utilizes influent pumping, screening, biological nutrient removal system (BNR), oxidation ditches, clarification, ultraviolet disinfection, and post aeration. Discharge is to Strodes Creek a tributary to the Licking River watershed.

WMU owns and maintains the collection system and appurtenances that transport the wastewater to the treatment plant. A copy of WMU Policies 402.2 and 408.1, (Appendix A), establishes points of ownership and maintenance for the utility and the customer. In general, WMU owns and maintains the sanitary sewer system to the right-of-way or easement limit. Typically, a cleanout is located at the right-of-way or easement limit to establish the point of responsibility. A private sanitary sewer line is defined in WMU Policy 408.1 and maintained per WMU Policy 203.1. In the event an SSO occurs on a private sanitary sewer and repair or maintenance is required to protect the public health, safety, and welfare of the general public, work may be initiated by WMU to alleviate, eliminate, or mitigate the problem.

3.2 – WMU Organizational Structure

A copy of WMU's organizational structure is shown in Figure 1: WMU Organization Chart. Winchester Municipal Utilities (WMU) is an enterprise fund of the city of Winchester, Kentucky (City). WMU was established in 1958 by ordinance of the City to provide water, sanitary sewer (wastewater) and solid waste services for the city of Winchester and portions of Clark County. WMU is governed by a Board of Commissioners appointed by the Major with approval of the Board of Commission of the City. The Winchester Municipal Utilities Commission (WMUC) provides direction and oversight of the utility and its operations, adopts the budget, sets the operating policies, hires the General manager and counsel of the utility, and recommends to the City utility rates necessary to support the operations of the utility, repair and replacement of the utility's assets, and the utility's debt service.

WMU ORGANIZATION CHART



3.3 – WMU Resources

An SSO may require a variety of resources to respond, report, assess the cause and impact, eliminate/mitigate the impact, and clean-up the area impacted. Therefore, a portion or all of the following resources may be utilized in the event of an SSO.

- 12-inch Godwin diesel dri-prime pumps (skid-mounted) (2)
- 4-inch Godwin diesel dri-prime pump (trailer-mounted) (1)
- Combination rodder/vaccum truck (1)
- Jet rodder truck (1)
- 3-inch portable trash pumps (4)
- Utility crew trucks (one equipped with crane) (3)
- Case Front Loader (1)
- Backhoes (3)
- Dump truck (3)
- Standard pick-up trucks (6)
- Roll-off container transfer vehicles (4)
- Roll-off transport tankers (3,000 gallons each) (2)
- CCTV inspection equipment and truck (1)
- Sewer mapping (GIS based)

During normal business hours WMU can respond to inquiries and/or concerns to a potential sewer problem via WMU's customer service department. WMU has seventeen (17) field personnel, two (2) of which are designated lift stations technicians, that are available to respond to a call-out during normal business hours.

During non-business hours (emergency, holidays, weekends, nights) WMU has a 24-hour phone number at the WMU water treatment plant (WTP) allowing for response to potential sewer problems. WMU maintains, at a minimum, one (1) supervisory personnel, and three (3) field operations personnel available for call-out during non-business hours. In the event more resources are needed, additional personnel are available for call-out using the employee emergency contact list (see Appendix B). Field operations staff is cross-trained in order that they may be able to respond to any potential sewer problem. Management and Engineering staff are available 24 hours/day, seven days/week (24/7).

WMU has a contract electrician available for call-out 24 hours a day, 7 days a week to address any electrical problems that may be experienced.

In the event, WMU does not have the material resources on-hand to perform the necessary work to mitigate/eliminate a SSO; resources may be acquired via contract services. WMU maintains a list of available resources to acquire services as needed. This may include additional pumping, excavation equipment, CCTV equipment, vacuum/rodding equipment, or service providers, contractors and engineering consultants as deemed necessary. A copy of the contract service providers is attached in Appendix B.

Section 4 – Methodology

4.1 – Protocols

The Sewer Overflow Response Plan (SORP) requires that the First Responder to an SSO identify the impacted area. In doing so, the Responder assesses the environmental concerns and potential hazards to public health in the surrounding area. Factors considered in determining the appropriate action are nearby waterways, stormwater infrastructure, private property, public safety, and public accessibility. The decision and action protocol associated with Spill Impact Monitoring is outlined in Figure 2, Appendix D.

When a SSO occurs, the First Responders Team will be dispatched. This team will decided if the SSO occurred on public or private property. If it occurs on private property, the team will determine if the public safety is at risk. If no public is at risk then the responsible party or owner will be notified. If the public is at risk, the team will determine if the weather conditions are wet or dry.

If the SSO occurs on public property, the team will determine if the occurrence is unpermitted and can it impact the waterways or public safety. If no to both of those conditions no spill monitoring happens. If yes to either conditions, then the team decides if the weather conditions are wet or dry. During wet conditions that impact the public safety and dry weather conditions, the team will make every effort to contain the spill to prevent any impacts and flag the area. If any Significant Industrial Users (SIUs) of the WMU Industrial Pretreatment Program are upstream of the SSO, the team will collect samples for fecal coliform, E. coli, pH, water temperature, dissolved oxygen. Samples will also be collected for all Pollutants of Concerns and Priority Pollutants known to be present in the wastewater for those SIUs. A list of Pollutants of Concerns for each SIU are located in Appendix C. Regulated Industry Priority Pollutants are also identified in Appendix C in 40 CFR Part 423. The map included in the Appendix D provides an example of how all SIUs can be identified in relation to the overflow location. The exact sampling locations will be based on the flow of the stream, the size of the waterway and nearby public access areas.

If no industries are upstream, the team will collect samples for fecal coliform and E.coli, and test the waterway for pH, water temperature, and dissolved oxygen upstream and downstream of the spill.

Monitoring will be performed and results reported as soon as possible. The results will be used to assess the initial spill impact for posting and reference purposes.

First Responders will perform the necessary cleanup procedures as described in the SORP. The responders will collect samples again both upstream and downstream of the SSO location if the initial sampling results are not acceptable. If pollutant levels downstream are higher than those obtained upstream, repeat sampling will be performed and area notification maintained.

4.1 – Information Management System

WMU's Industrial Pretreatment Program has a database that contains the sampling results for each significant industrial user since the inception of the program. The maps in Appendix D identify the watershed and sewer lines location of each significant industrial user. For manhole numbers, refer to WMU's Sanitary Sewer Road Index maps. Results of the SSO sampling will be forwarded to the IU pretreatment coordinator or his designee to include in the industrial pretreatment program

4.2 – Quality Assurance, Sampling, Data Analysis

Analysis procedures will be those approved for use in 40 CFR Part 136 for ambient water testing. WMU will allow split or duplicate samples to be taken by EPA, KDOW, or their authorized representatives. In addition, EPA and KDOW have the right to take any additional samples that they may deem necessary. The results of the SSO sampling will be evaluated immediately by the IU pretreatment coordinator or his designee. The evaluation will be discussed at the monthly industrial pretreatment meeting.

Section 5 – Records Management

5.1 – Work Performed

Work performed as part of the Spill Impact Water Quality Monitoring Program will be documented on the SSO Response Sheet and the example chain of custody (see Appendix E). Report forms will be filed and maintained for future reference.

Any follow-up fieldwork required as part of these activities will be reported to management.

5.2 – Reporting Procedures

All water quality data obtained through this program will be reported on a quarterly basis according to the requirements of Section VII of the Consent Decree. This report will include the following:

- Actions taken under the Spill Impact Water Quality Monitoring Program during the previous calendar quarter, including dates and times of all sampling.
- A summary of all sampling results during the previous calendar quarter.
- Actions including, but not limited to, data collection, which are scheduled for the next calendar quarter.

Section 6 – WMU Personnel Training

WMU management will provide and repeat training for the crews and support staff to ensure effectiveness of the Spill Impact Water Quality Monitoring Program. Training will occur on an as-needed broad basis for all personnel involved with implementation of this program and its procedures. The training will include how to report and document a SSO, how to activate the spill impact decision tree, and how to post an area of SSO.

WMU management will oversee implementation of the Spill Impact Water Quality Monitoring Program and ensure that established procedures are being followed during field operations.

Section 7 – Program Updates

WMU management will review the Spill Impact Water Quality Monitoring Program annually and amend as appropriate. Copies of the program and amendments will be distributed to WMU personnel directly responsible for performing the activities associated with Spill Impact Water Quality Monitoring Program. Revisions or updates will be documented in the Revision/Update Log (see Appendix E).

APPENDICES

Appendix A: Related WMU Policies

WMU Policy 402.2

WMU Policy 203.1

WMU Policy 408.1

Appendix B: List

Employee Emergency Contact List

Contract Service Providers

Appendix C: Tables

SIUs Pollutants of Concerns

Priority Pollutants

Appendix D: Figures

Locations of SIUs

Decision Tree

Appendix E: Report Forms

SSO Response Sheet

Chain of Custody (COC)

Revision/Update Log

APPENDIX A

RELATED WMU POLICIES

WINCHESTER MUNICIPAL UTILITIES
POLICY AND PROCEDURES

SECTION: 400 SECTION NUMBER: 402.2

EFFECTIVE DATE: 09-03 SUBJECT: MINIMUM LEVEL OF SERVICE FOR WATER, SANITARY SEWER, AND FIRE LINE EXTENSIONS

RE: ORDINANCE NO. 14-139

STATEMENT OF POLICY - The WMU Commission has established a minimum level of service for water, sanitary sewer, and fire line extensions. The minimum level of service requirements are:

Water:

- Minimum working pressure of 30 psi.
- Minimum residual pressure of 20 psi.
- WMU will maintain the WMU water service line to the meter, as defined in Policy 408.1. Water meters shall be located within the right-of-way or easement limit.

Sanitary Sewer:

- Sanitary sewers shall be of sufficient depth to receive wastewater from the first, grade-level floor served by gravity. In areas where the first, grade-level floor served is below the top of either of the two adjacent WMU maintained manholes or where basement service is provided but the basement floor elevation does not meet minimum requirements with respect to the two adjacent WMU maintained manholes, neither the city of Winchester nor the Winchester Municipal Utilities shall be responsible for backups of the sanitary sewer system resulting in personal property damage, in accordance with Section 14-139 of the City of Winchester Code of Ordinances.
- WMU will maintain the WMU sanitary sewer service lateral to the sanitary sewer service lateral clean-out, as defined in Policy 408.1. Clean-outs shall be located within the right-of-way or easement limit.

Fire Line:

- Minimum fire flow shall be 1,000 gpm for two hours in the following corridors:
    1. Industrial Park;
    2. Bypass Area;
    3. Central Business District, (bound by Maple Street, Iron Works Road, Highland Street, and Boone Avenue); and
    4. Lexington Avenue, Maryland Avenue to Bon Haven, McCann Drive, and Floyd Clay Drive.
- All other areas shall have a minimum fire flow of 750 gpm for two hours.
- WMU will maintain the fire line from the water main up to the first valve of the backflow prevention device located inside the vault. The fire line and vault shall be located within the right-of-way or easement limit.

STATEMENT OF PROCEDURE - All plans and specifications shall be reviewed in accordance with WMU established design standards and minimum level of service requirements.

Builders/property owners shall be given a copy of this policy at the time service is requested. It is the builders/property owner's responsibility for determining compliance with Section 14-139 of the City of Winchester Code of Ordinances prior to occupancy of any residential or commercial building.

Approved By - WMU Commission

Date

WINCHESTER MUNICIPAL UTILITIES
POLICY AND PROCEDURES

SECTION: 200 POLICY NUMBER: 203.1

EFFECTIVE DATE: 11-05-98 SUBJECT: PRIVATE SANITARY SEWER REPAIR AND MAINTENANCE

STATEMENT OF POLICY – The Winchester Municipal Utilities (WMU) will not repair or maintain any portion of any private sanitary sewer except under the following conditions: (1) when immediate emergency repair or maintenance is required for the protection of the public health, safety, and welfare or (2) when immediate repair or maintenance is required on facilities that are not known at the time to be a private sanitary sewer. The performance by WMU of emergency repair or maintenance on a private sanitary sewer shall not constitute an act of acceptance of the subject private sanitary sewer, or any component thereof, into the public sanitary sewer system.

STATEMENT OF PROCEDURE – Upon receiving a call for immediate or emergency repair or maintenance of a sanitary sewer, the request will be forwarded to the Operations Department which will assess the problem and make a determination as to the appropriate response. The following actions may occur as they relate to a private sanitary sewer: (1) If the subject sanitary sewer is known to be a private sanitary sewer and emergency repairs are not required, the customer will be informed immediately by the Operations Department that WMU does not own the subject facilities and that WMU does not repair or maintain a private sanitary sewer. (2) If the subject sanitary sewer is known to be a private sanitary sewer and emergency repairs are required to protect the public health, safety, and welfare. WMU may initiate necessary emergency repair or maintenance. At the same time, the customer will be informed by the Operations Department that WMU does not repair or maintain a private sanitary sewer, and that only emergency repair and maintenance will be performed. WMU will invoice through miscellaneous billing for emergency repairs to private sewers. (3) If repair or maintenance is performed on sanitary sewer facilities which are not known at the time to be a private sanitary sewer, the customer will be informed immediately upon identification of the facilities as a private sanitary sewer that WMU does not own the subject facilities, that WMU does not repair or maintain a private sanitary sewer, and that no further repair or maintenance will be performed on the subject facilities. Any question regarding the identification of a private sanitary sewer shall be directed to the Operations Department.

DEFINITION – Private Sanitary Sewer – A “private sanitary sewer main” is defined in policy number 408.1.

Approved by WMU Commission

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WINCHESTER MUNICIPAL UTILITIES
POLICY AND PROCEDURES

SECTION: 400 SECTION NUMBER: 408.1

EFFECTIVE DATE: 11-96 SUBJECT: EXTENSION OF WATER AND/OR SANITARY SEWER LINES

RE: ORDINANCE NO. N/A

STATEMENT OF POLICY - Water and sanitary sewer services shall be designed and constructed to the satisfaction of the WMU Commission such that the water and/or sanitary sewer lines shall be extended to the nearest property line of the last property or lot to be served.

A water and/or sanitary sewer main extension shall be required where there does not exist a WMU owned water and/or sanitary sewer main within 100 feet of the property or lot to be served or where, in the opinion of the Utilities Engineer, there is potential for further extension.

A water and/or sanitary sewer main extension shall not be required where there exists a WMU owned water and/or sanitary sewer main within 100 feet of the property or lot to be served and where, in the opinion of the Utilities Engineer, there is no potential for further extension. A WMU water service line shall be installed from the water main to the property line or easement limit. A WMU sanitary sewer service lateral shall be installed from the sanitary sewer main to the property line or easement limit.

All water mains, WMU water service lines, sanitary sewer mains, and WMU sanitary sewer service laterals, shall be in a dedicated easement or in a public right-of-way. In no case shall a building water service line or a building sanitary sewer service lateral extend across any property which is not part of the property to be served.

Effective with the date of this policy, connections of lots or properties to private water mains or private sanitary sewer mains shall not be permitted.

DEFINITIONS - Water Main - All water mains shall be a minimum of six (6) inches in diameter and shall conform to the WMU standard specifications and details for water lines. A fire hydrant shall be installed at the end of all water mains. Water mains are owned, operated, and maintained by WMU.

WMU Water Service Line - All WMU water service lines shall be a minimum of 3/4 inch in diameter and shall conform to the WMU standard specifications and details for water service connections. WMU water service lines shall transport water from the water main to the water meter. WMU water service lines are to be used by no more than two entities and each entity shall have its own water meter. Service lines serving two entities shall be 1 inch in diameter. The length of a WMU water service line shall not exceed 100 feet. A water meter setting shall be installed at the end of all WMU water service lines. WMU water service lines and water meter settings are owned, operated, and maintained by WMU. The water meter is the limit of WMU's responsibility.

Building Water Service Line - All building water service lines shall be a minimum of 3/4 inch in diameter and shall conform to the Kentucky State Plumbing Code. Building water service lines shall transport water from the water meter to the

building served. Building water service lines are to be used by one entity only. Building water service lines are owned operated, and maintained by the property owner.

Private Water Main - A water main serving one or more buildings; and for which there is no record of dedication to WMU; and/or for which there is no recorded or platted easement in favor of WMU; and/or which is not maintained by WMU; and/or which crosses a separate tract of land other than the one being served; and/or which exceeds 100 feet in length on the tract of land which is not being served; and which is at some point connected to a waterline which is owned and maintained by WMU.

Sanitary Sewer Main - All sanitary sewer mains shall be a minimum of eight (8) inches in diameter and shall conform to the WMU standard specifications and details for sanitary sewers. A manhole shall be installed at the end of all sanitary sewer mains. Sanitary sewer mains are owned, operated, and maintained by WMU.

WMU Sanitary Sewer Service Lateral - All WMU sanitary sewer service laterals shall be a minimum of six (6) inches in diameter and shall conform to the WMU standard specifications and details for sanitary sewer service laterals. WMU sanitary sewer service laterals shall transport sewage from the property line or easement limit to the sanitary sewer main. WMU sanitary sewer service laterals shall be used by one entity only. The length of a WMU sanitary sewer service lateral shall not exceed 100 feet. A clean-out shall be installed at the end of all WMU sanitary sewer service laterals. WMU sanitary sewer service laterals are owned, operated, and maintained by WMU. The clean-out is the limit of WMU's responsibility.

Building Sanitary Sewer Service Lateral - All building sanitary sewer service laterals shall be a minimum of four (4) inches in diameter and shall conform to the Kentucky State Plumbing Code. Building sanitary sewer service laterals shall transport sewage from the building served to the WMU sanitary sewer service lateral. Building sanitary sewer service laterals are to be used by one entity only, except as established in Section 14-141 of the Code of Ordinances of the City of Winchester. Building sanitary sewer service laterals are owned, operated, and maintained by the property owner.

Private Sanitary Sewer Main - A sanitary sewer main serving one or more buildings; and for which there is no record of dedication to WMU; and/or for which there is no recorded or platted easement in favor of WMU; and/or which is not maintained by WMU; and/or which crosses a separate tract of land other than the one being served; and/or which exceeds 100 feet in length on the tract of land which is not being served; and which is at some point connected to a sanitary sewer which is owned by WMU; except as defined by City of Winchester Code of Ordinance 14-141.

STATEMENT OF PROCEDURE - Developers, builders, or property owners desiring WMU water or sanitary sewer service for a property or lot that currently does not have a WMU owned water and/or sanitary sewer main within 100 feet of the property or lot to be served shall submit to WMU a plan or schematic of the proposed connections. WMU shall review said plan or schematic to ensure its compliance with this policy.

If an extension of water and/or sanitary sewer service is required, plans and specifications shall be submitted in accordance with Policy No. 401.1. Connection to the sanitary sewer system by force

main sewer shall constitute an extension. System development charges (SDCs) and all applicable tap fees shall apply on all water and sanitary sewer extensions.

If an extension of water and/or sanitary sewer service is not required, water and sanitary sewer tap fees shall be paid in accordance with Policy Nos. 104.1, 201.1, and 202.1.

Chairman - WMU Commission

Date

APPENDIX B

LIST

EMPLOYEE EMERGENCY CONTACT LIST

CONTRACT SERVICES PROVIDERS

Updated 10/23/07

EMPLOYEE EMERGENCY CONTACT LIST

WMU AFTER HOURS CALL LIST			
NAME	**BUILDING**	**HOME**	**CELL**
Vernon Azevedo	Administration	859-737-0009	859-771-6644
Janice Eldridge	Administration	859-745-1188	859-595-0590
Mike Flynn	Operations	859-744-4498	859-771-6650
Foster Taulbee	Operations	859-745-0610	859-771-6645
Verlon Johnson	Water Plant		859-771-6649
Killis Sinkhorn	Wastewater Plant	502-535-5331	859-771-6648
Purchasing	Administration		859-771-6651
WTP	Water Plant	859-744-6582	859-595-0583
WWTP	Wastewater Plant	859-744-3031	859-595-0584
WWTP 2	Wastewater Plant	859-744-2822	
Columbia Gas	Columbia Gas	859-744-3081	
BUD	Before You Dig	800-752-6007	
Kentucky American	Distribution		859-537-0770
Kentucky American	Distribution-Standby		859-537-0771
Kentucky American	Customer Service	800-678-6301	
Kentucky American	Treatment Plant	859-268-6345	
East Clark County	Office	859-745-1458	
Division of Water	24-Hour Number	800-928-2380	
CCGIS	Court House	859-737-9255	859-595-6642
WATER LINE BREAKS, WASTEWATER & DISTRIBUTION PROBLEMS			
NAME	**HOME**	**CELL**	**COMMENTS**
Crew Cell Phone	859-771-6646	859-771-6646	Evening Callout
Matthew Ray	606-768-6988	606-776-5598	Crewman
Tony King		859-771-2306	Crewman
Joey Perkins	859-744-1430	859-595-5566	Crewman
Tracy Stone	859-744-8605	859-749-2113	Crewman
Donald Holder	859-771-4233	859-749-0291	Crewman
Anthony Morton		859-749-7396	Crewman
Brian Durham	859-745-1012		Crewman
Cleveland Lawrence	859-745-1652	859-749-9436	Crewman
Paul D. Smith	859-745-6097	859-771-0201	Crewman
BACKHOE			
NAME	**HOME**	**CELL**	**COMMENTS**
Backhoe Cell Phone	859-771-6647		Evening Callout
Johnny Tipton	859-744-0872	859-513-2790	Crewman
Roger Smallwood	606-768-6145	606-585-8093	Crewman
Jason Gomez	606-768-9079	606-359-1715	Crewman
Verlon Rowland	606-723-0223		Crewman
John Schweikart	859-842-4762		Crewman
SERVICE CALLS			
NAME	**HOME**	**CELL**	**COMMENTS**
Serviceman		859-595-0585	Evening Callout
David Lucas	859-745-6527	859-808-1792	Serviceman
James Willoughby	859-737-5581	859-771-2674	Meter Reader
Eric Pedigo	859-737-1927	859-595-2499	Meter Reader
SOLID WASTE / MAINTENANCE			
NAME	**HOME**	**CELL**	**COMMENTS**
Solid Waste	859-744-1170	859-595-0587	Evening Callout
Tom Felts	859-744-3823	859-595-0586	Supervisor
John Stone	859-745-7803	859-771-1840	Route Foreman
Jon Covey		859-797-7924	Driver/Collector
Stacy Smallwood	606-768-2914		Head Mechanic
Danny Abner	859-744-6188		Mechanic
Michael Lane	859-498-3797	859-749-8184	Mechanic
ENGINEERING			
NAME	**HOME**	**CELL**	**COMMENTS**
Duke Dryden	859-744-7631	859-595-0588	Supervisor
Ronnie Leggett	859-744-2975	859-595-6657	Engineer
Danny Banks	859-745-9577	859-595-0589	Engineer
Pascal Baber	859-745-2149	859-595-6647	Engineer
Brad Amos		859-595-6658	Engineer

CHEMICAL SPILL OR CHLORINE LEAK CALL BRENNTAG / ULRICH CHEMICAL 1-800-888-5586

CONTRACT SERVICES PROVIDERS

Pipe Line Contractor

Jeff Monohan/Tommy Lisle
The Allen Co.
131 Jefferson Street
Winchester, KY 40391
(859) 744-3361 – office
(859) 749-3817 – cell

Melvin T. Vivian
Vivian Contractors
10 Dixie Street
P.O. Box 4315
Winchester, KY 40392
(859) 737-4111 – office
(859) 771-0623 – cell

Julian Harris
Harris Construction
226 Mutual Avenue
Winchester, KY 40391
(859) 744-5328 – office

Steve Goff
Dirt Diggers, Inc.
10 Northern Avenue
Winchester, KY 40391
(859) 744-1227 – office

Ray Watson
Watson Building, Inc.
110 Vine Street
Winchester, KY 40391
(859) 745-4128 – office

Tommy Boone
Boone Excavating Co., Inc.
17 Long Avenue
Winchester, KY 40391
(859) 744-6522 – office

Pipe/Material Suppliers

Chip Boone
Water Works Supply
611 S. Keeneland Drive
Richmond, KY 40476
(859) 624-2800 – office
(859) 625-4588 – cell

Todd VanGundy
HD Water Works
2141 Christian Road
Lexington, KY 40509
(800) 999-2126 – office
(859) 338-3589 – cell

Stanley Shields
CI Thornburg
740 Enterprise Drive
Lexington, KY 40510
(800) 274-0852 – office
(859) 619-0039 – cell

Tony Omonhondro
Mueller Company
147 Avawam Drive
Richmond, KY 40475
(859) 624-3412 – cell

Rick Reynolds
Godwin Pumps
5329 Sissonville Drive
Charleston, WV 25312
(304) 984-0200 – office
(304) 546-8190 – cell

Sewer Line Maintenance/Cleaning and Video Inspection

Troy Thompson/Bobby Chestnut
Pipe Eyes
P.O. Box 5343
Paris, KY 40361
(859) 955-5288 – office
(859) 983-3873 – cell

Neighboring Municipal Utility Contacts

Dave Pierce/Rick Fletcher
Mt. Sterling Water/Sewer
300 E. Main Street
Mt. Sterling, KY 40353
(859) 498-0166 – office
(859) 497-0481 – WWTP

Bill Jenkins
Georgetown Water and Sewer
125 W. Clinton Street
Georgetown, KY 40324
(502) 863-7816 – office
(502) 509-3674 – cell

Matt Belcher
City of Paris Utilities
525 High Street
Paris, KY 40361
(859) 987-2110 – office

Don Blackburn
Berea Municipal Utilities
P.O. Box 926
Berea, KY 40403
(859) 986-4391

Consultants

CDP Engineers
Cole Mitcham
3250 Blazer Parkway
Lexington, KY 40509
(859) 264-7500 – office

Palmer Engineering Company
Brian Ward
400 Shoppers Drive
Winchester, KY 40391
(859) 744-1218 – office

Tetra Tech Inc.
Jim Buckles
800 Corporate Drive, Suite 200
Lexington, KY 40503

APPENDIX C

TABLES

SIGNIFICANT INDUSTRIAL USERS (SIUs) POLLUTANTS OF CONCERN

PRIORITY POLLUTANTS

WMU Industrial Pretreatment Program
SIUs Pollutant of Concerns

Updated 6/10/08

Watershed	Map Location	Significant Industrial User	Business	Pollutant of Concern
Strodes Creek Basin C	08	Advanced Green Components	Bearing parts manufacturer	Oil and Grease, Chromium, Copper, Nickel
Strodes Creek Basin A	01	Ale-8-One Bottling Company	Soft drink bottler/producer	Biochemical Oxygen Demand, pH, Cadmium, Lead
Strodes Creek Basin C	10	Catalent Pharma Solutions	Form pharmaceutical tablets	---
Strodes Creek Basin A	02	Clark Regional Medical Center	Hospital	Biochemical Oxygen Demand, Silver
Strodes Creek Basin C	06	Contech Construction Products, Inc.	Galvanized corrugated culverts	Lead, Zinc
Strodes Creek Basin C	12	The Freeman Corporation	Wood veneer manufacturing	Biochemical Oxygen Demand
Strodes Creek Basin C	11	G & J Pepsi-Cola Bottlers, Inc.	Soft drink bottler	Biochemical Oxygen Demand, pH
Strodes Creek Basin C	26	Kentucky Heat Treating Company	Heat treating and coating steel with phosphate	Cn, Cd, Cr, Cu, Pb, Ni, Ag, Zn, Phosphate
Strodes Creek Basin C	09	Leggett Partners, L.P.	Bed parts manufacturer and assembly	Copper, Phosphate
Strodes Creek Basin C	04	Martek Biosciences Corporation	DHA (nutrient) production	Biochemical Oxygen Demand, pH, Hexane
Strodes Creek Basin C	03	Osram Sylvania Products, Inc.	Specialty bulb manufacturer	Copper
Strodes Creek Basin C	07	Sekisui Chemical Co., LTD	Film manufacturing	---
Strodes Creek Basin C	14	Walle Corporation	Flexographic printing	Copper
Hoods Creek Basin	25	Winchester Coatings, Inc.	E-coating metal parts	Lead, Zinc, Phosphate
Strodes Creek Basin C	17	Winchester Farms Dairy	Dairy products processing	Biochemical Oxygen Demand, Milk Solids

WMU Industrial Pretreatment Program
Manhole Information

Updated 6/10/08

Watershed	Map Location	Significant Industrial User	Discharge Manhole	Manhole Notes	Upstream of Monitoring Manholes
Strodes Creek Basin C	8	Advanced Green Components	19-57 & 19-73	19-57-Discharges sanitary 19-73-Discharges process	None Known
Strodes Creek Basin A	1	Ale-8-One Bottling Company	16-21	16-21-Discharges both industrial and sanitary wastewater	None Known
Strodes Creek Basin C	10	Catalent Pharma Solutions	19-119A	19-119A-Dishcarges both process and sanitary wastewater	None Known
Strodes Creek Basin A	2	Clark Regional Medical Center	16-230A & 16-225	16-230A-Discharge is insignificant 16-225-Discharges Domestic and Process	None Known
Strodes Creek Basin C	6	Contech Construction Products, Inc.	19-126A	19-126A-Discharges sinks and sanitary wastewater	None Known
Strodes Creek Basin C	12	The Freeman Corporation	19-141	19-141-Discharges sanitary and process water	None Known
Strodes Creek Basin C	11	G & J Pepsi-Cola Bottlers, Inc.	12-153 & 12-155	12-153-Discharges process 12-155-Discharges backwash from water treatment system	None Known
Strodes Creek Basin C	26	Kentucky Heat Treating Company	19-105	19-105-Discharges sanitary and industrial wastewater	Catalent Pharma Solutions

WMU Industrial Pretreatment Program
Manhole Information (cont.)

Updated 6/10/2008

Watershed	Map Location	Significant Industrial User	Discharge Manhole	Manhole Notes	Upstream of Monitoring Manholes
Strodes Creek Basin C	9	Leggett Partners, L.P.	20-206	20-206-Discharges washer, compressor, floor, scrubber, and domestic wastewater	None Known
Strodes Creek Basin C	4	Martek Biosciences Corporation	19-159, 19-280, & 19-114B	19-159-Discharges sanitary 19-280-Discharges sanitary and industrial from extraction facility 19-114B-Discharges industiral wastewater from main plant and storage/office facility	None Known
Strodes Creek Basin C	3	Osram Sylvania Products, Inc.	12-175B	12-175B-Discharges process and sanitary wastewater	None Known
Hoods Creek Basin	7	Sekisui Chemical Co., LTD	19-320	19-320-Discharge manhole but Sekisui has private monitoring manhole	None Known
Strodes Creek Basin C	14	Walle Corporation	19-50	19-50-Discharges both sanitary and process wastewater (on site manhole used for monitoring)	Advanced Green Components
Hoods Creek Basin	25	Winchester Coatings, Inc.	19-84	19-84-Discharges process and domestic wastewater	None Known

Appendix A to 40 CFR, Part 423--126 Priority Pollutants

001 Acenaphthene
002 Acrolein
003 Acrylonitrile
004 Benzene
005 Benzidine
006 Carbon tetrachloride (tetrachloromethane)
007 Chlorobenzene
008 1,2,4-trichlorobenzene
009 Hexachlorobenzene
010 1,2-dichloroethane
011 1,1,1-trichloreothane
012 Hexachloroethane
013 1,1-dichloroethane
014 1,1,2-trichloroethane
015 1,1,2,2-tetrachloroethane
016 Chloroethane
018 Bis(2-chloroethyl) ether
019 2-chloroethyl vinyl ether (mixed)
020 2-chloronaphthalene
021 2,4, 6-trichlorophenol
022 Parachlorometa cresol
023 Chloroform (trichloromethane)
024 2-chlorophenol
025 1,2-dichlorobenzene
026 1,3-dichlorobenzene
027 1,4-dichlorobenzene
028 3,3-dichlorobenzidine
029 1,1-dichloroethylene
030 1,2-trans-dichloroethylene
031 2,4-dichlorophenol
032 1,2-dichloropropane
033 1,2-dichloropropylene (1,3-dichloropropene)
034 2,4-dimethylphenol
035 2,4-dinitrotoluene
036 2,6-dinitrotoluene
037 1,2-diphenylhydrazine
038 Ethylbenzene
039 Fluoranthene
040 4-chlorophenyl phenyl ether
041 4-bromophenyl phenyl ether
042 Bis(2-chloroisopropyl) ether
043 Bis(2-chloroethoxy) methane
044 Methylene chloride (dichloromethane)
045 Methyl chloride (dichloromethane)
046 Methyl bromide (bromomethane)
047 Bromoform (tribromomethane)
048 Dichlorobromomethane
051 Chlorodibromomethane
052 Hexachlorobutadiene
053 Hexachloromyclopentadiene
054 Isophorone
055 Naphthalene
056 Nitrobenzene
057 2-nitrophenol
058 4-nitrophenol
059 2,4-dinitrophenol
060 4,6-dinitro-o-cresol
061 N-nitrosodimethylamine
062 N-nitrosodiphenylamine
063 N-nitrosodi-n-propylamin
064 Pentachlorophenol
065 Phenol
066 Bis(2-ethylhexyl) phthalate
067 Butyl benzyl phthalate
068 Di-N-Butyl Phthalate
069 Di-n-octyl phthalate
070 Diethyl Phthalate
071 Dimethyl phthalate
072 1,2-benzanthracene (benzo(a) anthracene
073 Benzo(a)pyrene (3,4-benzo-pyrene)
074 3,4-Benzofluoranthene (benzo(b) fluoranthene)
075 11,12-benzofluoranthene (benzo(b) fluoranthene)
076 Chrysene
077 Acenaphthylene
078 Anthracene
079 1,12-benzoperylene (benzo(ghi) perylene)
080 Fluorene
081 Phenanthrene
082 1,2,5,6-dibenzanthracene (dibenzo(,h) anthracene)
083 Indeno (,1,2,3-cd) pyrene (2,3-o-pheynylene pyrene)
084 Pyrene
085 Tetrachloroethylene
086 Toluene
087 Trichloroethylene
088 Vinyl chloride (chloroethylene)
089 Aldrin
090 Dieldrin
091 Chlordane (technical mixture and metabolites)
092 4,4-DDT
093 4,4-DDE (p,p-DDX)
094 4,4-DDD (p,p-TDE)
095 Alpha-endosulfan
096 Beta-endosulfan
097 Endosulfan sulfate
098 Endrin
099 Endrin aldehyde
100 Heptachlor
101 Heptachlor epoxide (BHC-hexachlorocyclohexane)
102 Alpha-BHC
103 Beta-BHC
104 Gamma-BHC (lindane)
105 Delta-BHC (PCB-polychlorinated biphenyls)
106 PCB-1242 (Arochlor 1242)
107 PCB-1254 (Arochlor 1254)
108 PCB-1221 (Arochlor 1221)
109 PCB-1232 (Arochlor 1232)
110 PCB-1248 (Arochlor 1248)
111 PCB-1260 (Arochlor 1260)
112 PCB-1016 (Arochlor 1016)
113 Toxaphene
114 Antimony
115 Arsenic
116 Asbestos
117 Beryllium
118 Cadmium
119 Chromium
120 Copper
121 Cyanide, Total
122 Lead
123 Mercury
124 Nickel
125 Selenium
126 Silver
127 Thallium
126 Silver
128 Zinc
129 2,3,7,8-tetrachloro-dibenzo-p-dioxin (TCDD)

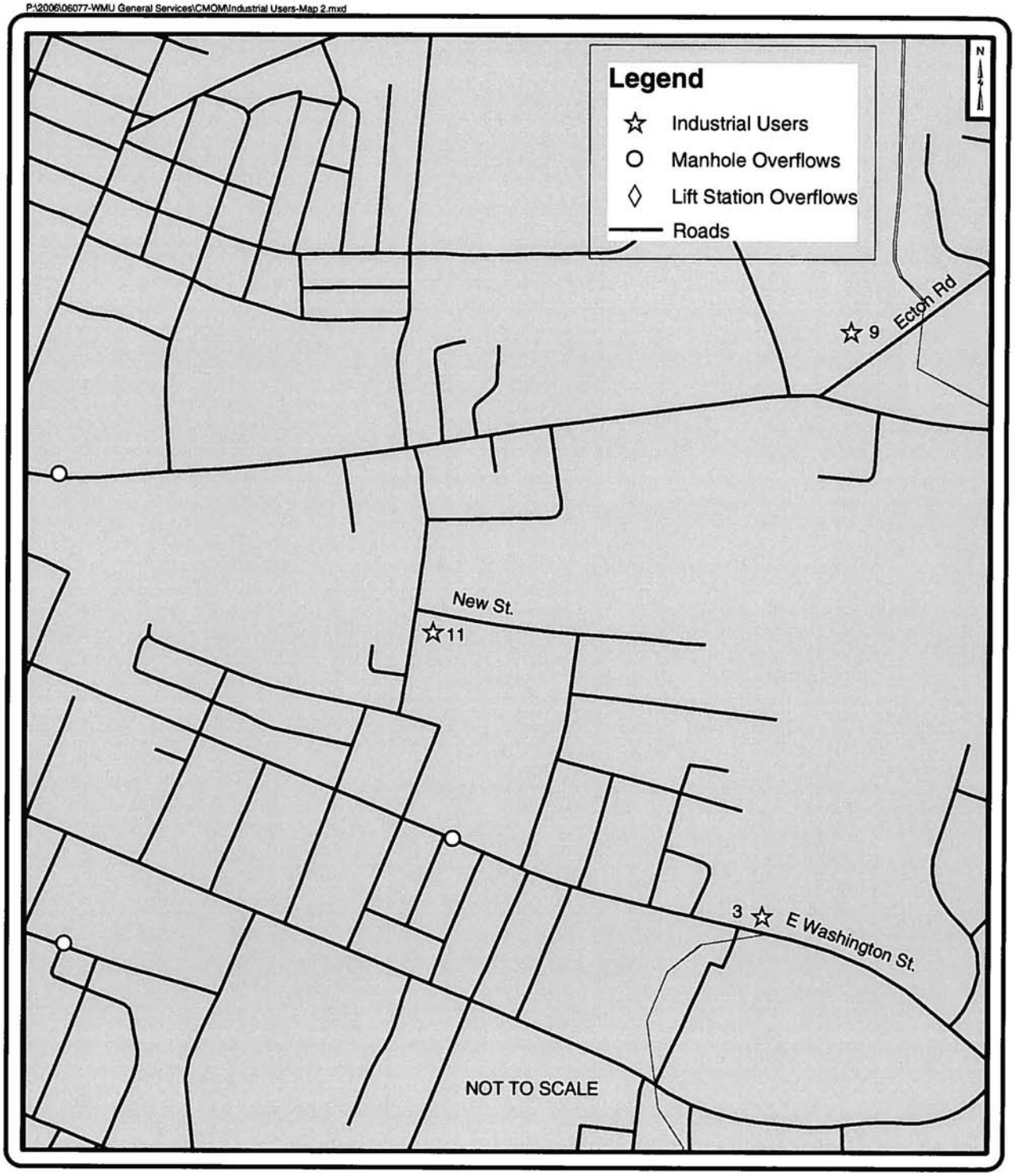
APPENDIX D

FIGURES

Locations of SIUs

Decision Tree

P:\2006\06077-WMU General Services\CMOM\Industrial Users-Map 2.mxd



SCALE:	NTS
JOB No:	
DESIGNED BY:	PDD
CHECKED BY:	JB
DATE:	6/16/08

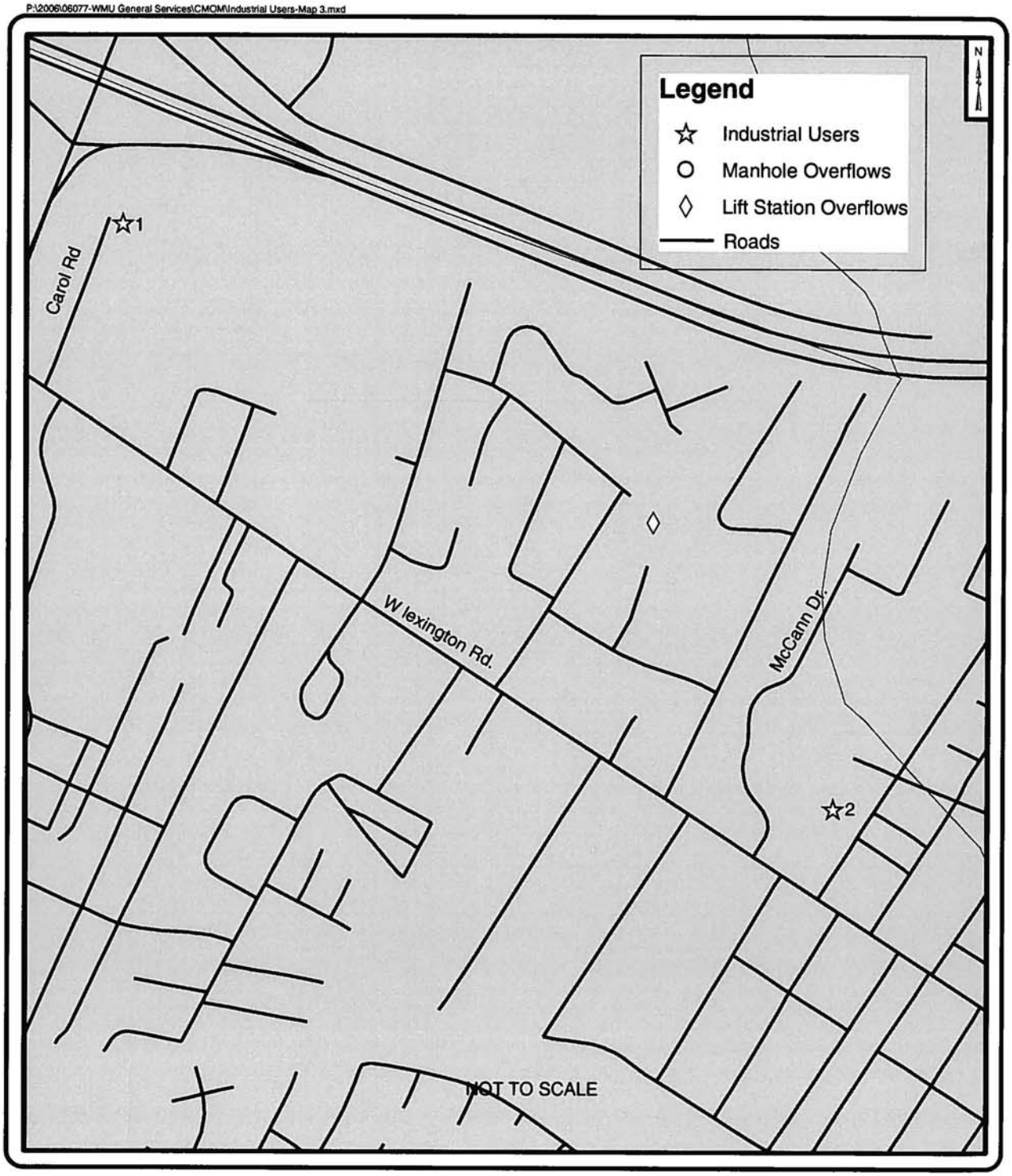
SHEET NAME General Location Map 2

Project Title: Winchester Municipal Utilities
Owner
Location

TETRA TECH, INC.

800 Corporate Drive, Suite 200
Lexington, KY 40503
859-223-8000

P:\2006\06077-WMU General Services\CMOM\Industrial Users-Map 3.mxd



SCALE:	NTS
JOB No:	
DESIGNED BY:	PDD
CHECKED BY:	JB
DATE:	6/16/08

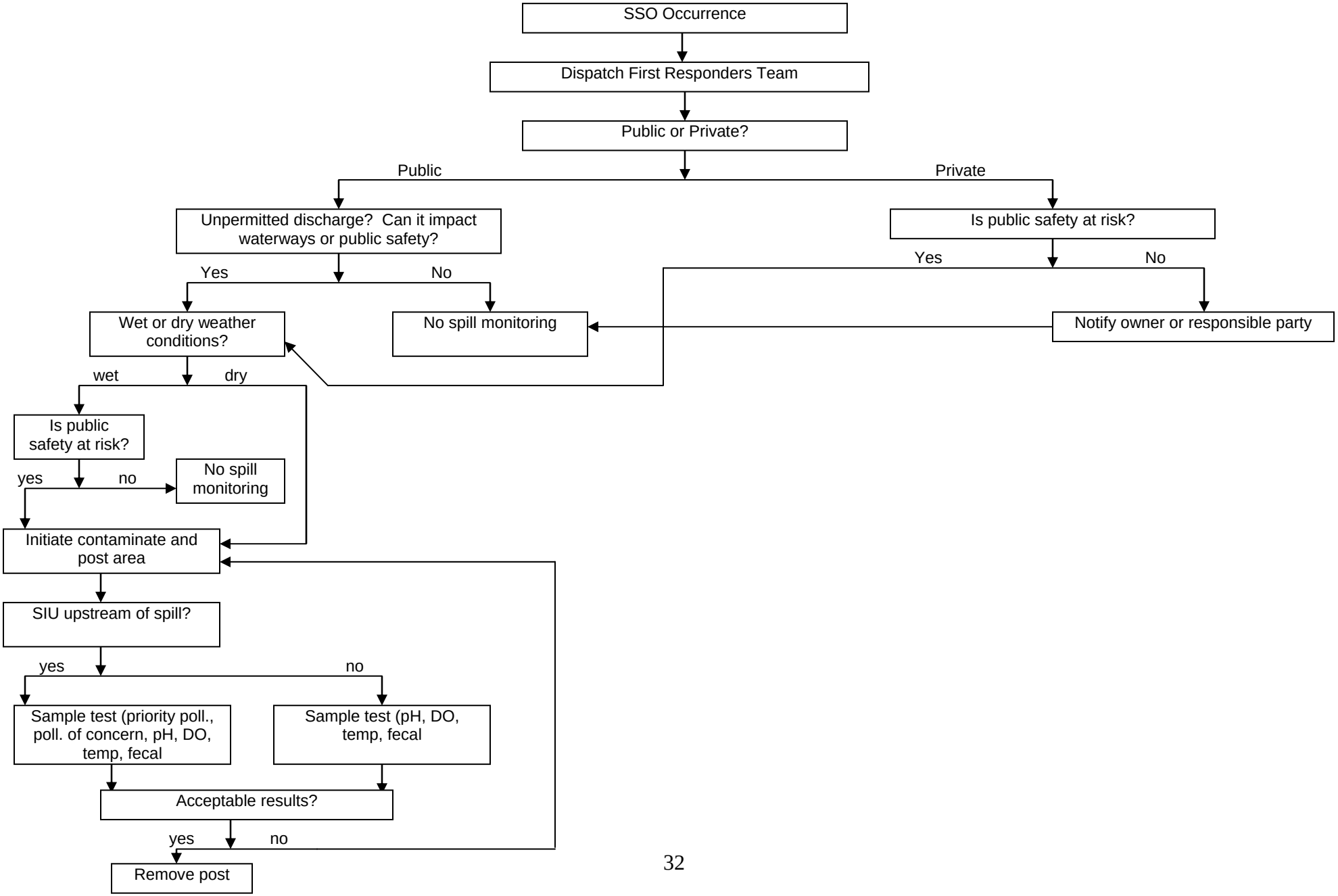
SHEET NAME General Location Map 3

Project Title: Winchester Municipal Utilities
Owner
Location

TETRA TECH, INC.

800 Corporate Drive, Suite 200
Lexington, KY 40503
859-223-8000

Figure 2
Spill Impact Monitoring



APPENDIX E

REPORT FORMS

Winchester Municipal Utilities

SSO RESPONSE SHEET

Date Reported: _____ Time Reported: _____	Reported By: Name_____ Address_____
Approximate Start Time of the SSO:	End Time of the SSO:

Time First Responders Arrived:

First Responders (Names):

Location of SSO and Manhole Number if applicable:

MH Number _____ Pump Station _____

Street _____

SSO Discharge To:

_____ Blueline Stream _____ Wet Weather Ditch
_____ Intermittent Stream _____ Storm Sewer

Drainage Basin (indicate sub-basin):

_____ Lower Howard Creek, Basin A,B,C _____ Hancock Creek, Basin A,B,C
_____ Strodes Creek, Basin A,B,C _____ Four Mile Creek, Basin A,B,C
_____ Town Branch

Cause of the SSO:

_____ Electrical Failure _____ Grease Blockage _____ Pipe Failure
_____ Mechanical Failure _____ Root Blockage _____ Other
_____ Inflow/Infiltration _____ Other Blockage _____

Identify Area Impacted:

_____ Residential _____ Industrial
_____ Commercial _____ Agricultural
_____ Institutional

Quantity Contained and Pumped (Dry Weather Only):

Action Taken:

Have Photographs Been Taken (Before/After): Yes No

KDOW Notified: Date Time By

CHAIN OF CUSTODY RECORD

Page of

Laboratory COC ID #:

Client: WMU

Purchase Order Number: **Quote Number:**

Project #:

Project Name:

Project Manager:

Project Contact (for laboratory):

Collected By:

Analytical Report & Invoice To:

PROJECT: LWWDEPOTBBM

Field Remarks: _____

Turnaround Time:
_x_10-Day/__5-Day/__3-Day/__24-Hours/__Other _____
Date/Time Needed:_____
EDD Required: Yes_x_ No__
QC Level :_____
Other: _____

*** Matrix Code**

A - Air
DW - Drinking Water
GW - Groundwater
L - Liquid
SE - Sediment
S - Soil
LS - Liquid Sludge
STW - Stormwater
SS - Solid Sludge
SW - Surface Water
WW - Wastewater
W - Water O - Other_____

*** * Preservation Type**

Container Size/Type

Requested Analyses

*** * Preservation Code**

AA - Ascorbic Acid
AC - NH4Cl
E - EnCore
HA - HCl
M - Methanol
NA - HNO3
SA - H2SO4
SH - NaOH
SS - Na2SO3
ST - Na2S2O3
ZA - Zinc Acetate I - Ice O - Other _____

Sample I.D.	Location	Collection Date	Collection Time	Matrix *	Grab / Comp	Filt'd Y/N	# of Containers Per Analysis										Laboratory #	Methodology

Relinquished By:	Date / Time	Received By:	Date / Time

Sample Receiving Information

Temperature Upon Receipt (degrees C): _____ **Measured By:** _____
COC Seals Intact: __Yes __No __NA
Containers Intact: __Yes __No
Headspace (as applicable): __Yes __No
Containers Properly Preserved: __Yes __No
Additional Documentation Attached: __Yes __No

Original COC To Laboratory (Accompany Samples & Report) **COC Copy - WMU**

SPILL IMPACT WATER QUALITY MONITORING PROGRAM
REVISION/UPDATE LOG

Revision	Date