

# SEWER OVERFLOW RESPONSE PLAN (SORP)

FOR



***Winchester Municipal  
Utilities***

***Winchester, Kentucky***

OCTOBER 2007

# Winchester Municipal Utilities (WMU)

## Sewer Overflow Response Plan (SORP)

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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 that included 27 documented recurring sanitary sewer overflow (SSO) locations. The purpose of the Sewer Overflow Response Plan (SORP) is to assist WMU in maintaining regulatory compliance and reducing the environmental impacts of the documented recurring SSOs and other potential nonrecurring SSOs in the WMU sanitary sewer collection system.

Implementation of the SORP will allow WMU personnel to promptly respond to a reported SSO, assess the cause and potential impact of the SSO, communicate with proper staff regarding the SSO, eliminate/mitigate the impact of the SSO, clean-up the area impacted by the SSO, and follow specific criteria for reporting (cause, amount, duration) of the SSO to the proper regulatory authorities. The SORP will allow for each potential SSO to be evaluated and appropriate measures taken as required.

WMU personnel responsible for responding to an SSO will be trained to follow the procedures as they are outlined in the SORP.

The SORP will be reviewed annually by WMU management to ensure all elements of the document are up-to-date and being implemented as outlined.

WMU is committed to reducing and eliminating the cause and impact of recurring SSOs throughout its service area in Winchester and Clark County, and conforming with 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 customer inquiries and/or complaints. 7:00 a.m. – 4:00 p.m.

**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.

**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.

**Infiltration** – The introduction of ground water into the gravity wastewater conveyance system by such means as defective pipes, pipe joints, connections, or manholes.

**Inflow** – The introduction of surface water runoff to the gravity wastewater conveyance system from sources such as roof leaders, basement, driveway and yard drains, manhole covers, and cross connections from storm sewers.

**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 appurtenant to 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.

**Private Sewer** – A sewer not meeting any or a portion of the criteria for ownership and perpetual maintenance but which discharges to a sanitary sewer owned and maintained by WMU 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** – 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.

**WMU 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 from the limits of the easement or the right-of-way to the publicly-owned, gravity sewer for inspection and maintenance. Typically, the WMU cleanout is located at the limit of the easement or right-of-way line.

## **2.2 – Types of Sanitary Sewer Overflows (SSOs)**

**Wet Weather SSO** – A SSO occurring during or after a significant rainfall 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  
Foundation drains  
Sump pumps

Inflow/Infiltration  
Cross-connections

**Dry Weather Overflow** – An SSO occurring during dry weather periods resulting from some type of flow restriction or collection system blockage or mechanical failure. 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

The wastewater treatment plant is designed with a capacity of 7.2 MGD (average) and 24.0 MGD (peak). The 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.

Solids are processed to Class A (per 503 regulations) utilizes the alkaline stabilization (RDP) and are distributed on agricultural land.

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. Procedures for notification and personnel response are outlined in Section 3.4.

FIGURE 1: WMU ORGANIZATION CHART

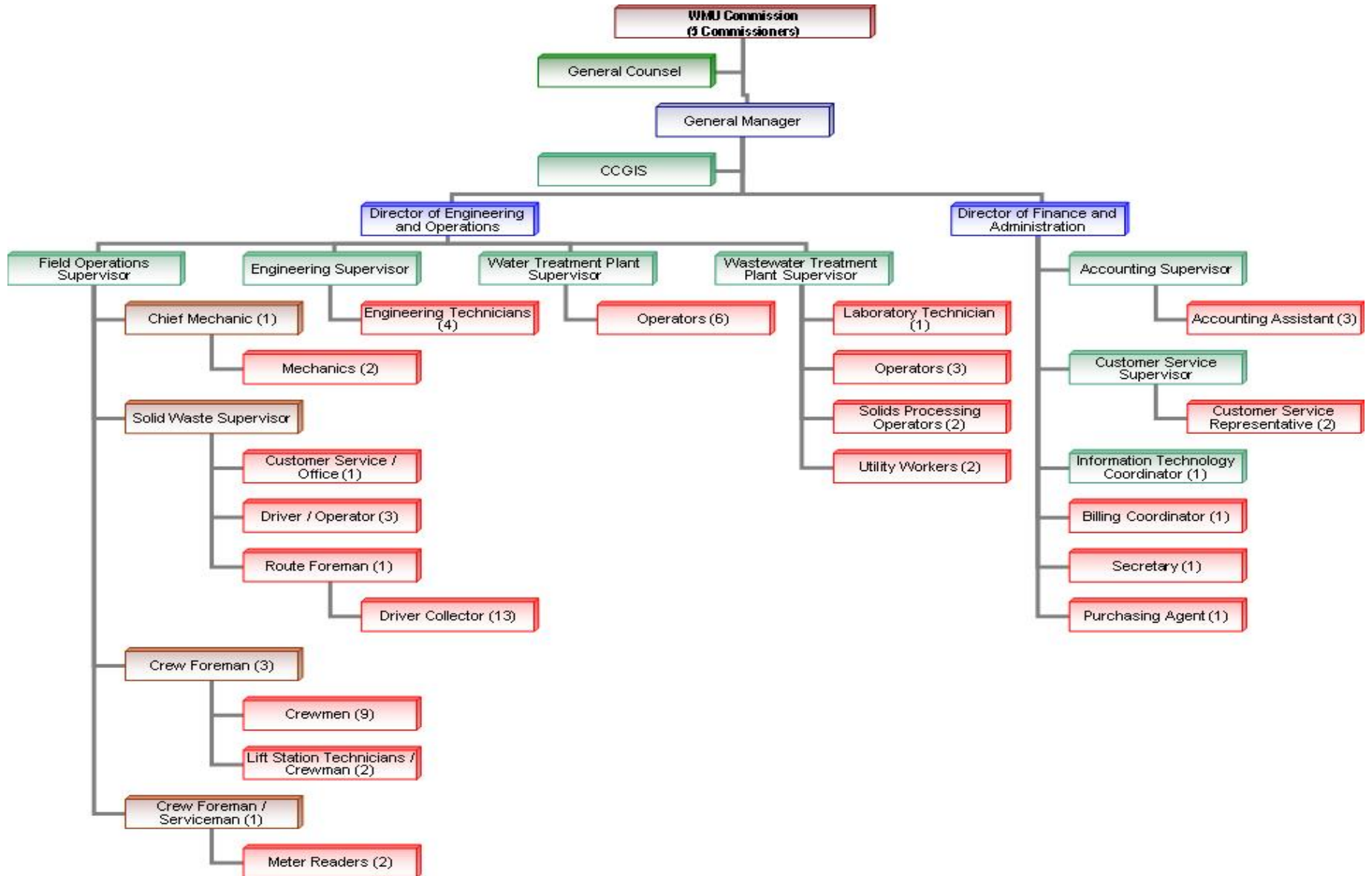


FIGURE 1: WMU ORGANIZATION CHART

### 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/vacuum 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 are cross-trained in order that they may be able to respond to any potential sewer problem. WMU's procedure for call-outs is outlined in Section 4. 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 – SORP Procedures/Implementation**

### **4.1 – Initial Response**

Report of a potential SSO event including but not limited to pump station failure, line blockages, building back-ups, and wet weather events during normal business hours will be routed through the Customer Service Department. A work order (see Appendix C) will be generated and a Crew Foreman or the Supervisor of field operations will be promptly notified in order that proper personnel can be dispatched to the reported location for assessment of the situation.

Report of a potential SSO event including but not limited to pump station failure, line blockages, building back-ups, and wet weather events during non-business hours will be routed through the 24-hour phone number at the water treatment plant (WTP). The on-call operations staff will be promptly notified of the report and dispatched to the reported location for assessment of the situation. During non-business hours a work order will be generated the next business day by the Customer Service Department.

The work orders allow WMU personnel to identify areas of recurring problems. Identification of problem areas will enhance WMU's ability to eliminate future SSOs in the area.

For all SSO events, data as outlined on the SSO Response Sheet (see Appendix C) will be collected by WMU personnel during the initial response. The SSO Response Plan Flow Chart (see Appendix C) will be utilized to ensure proper procedures are followed during the event as well as notification to the proper authorities.

Recurring SSO locations outlined in the Consent Decree have been identified by WMU personnel and are monitored during significant wet weather events. Also, WMU performs checks on the seventeen (17) sewage pumping stations, a minimum of three (3) times per week, and other areas within the collection system that have been identified as trouble spots by WMU staff. This allows WMU staff to proactively identify potential SSOs before they occur.

### **4.2 – Scene Assessment and Response**

Procedures will vary for a wet weather overflow and dry weather overflow event. All SSOs require Kentucky Division of Water (KDOW) and WMU management notification. First responders shall contact the on-call supervisor who will in turn contact the Director of Operations/Engineering and General Manager. Upon identifying an SSO the following protocol will be implemented.

#### *Wet Weather Overflow*

First responders during a wet weather overflow will obtain and document information relevant to the SSO event (see Appendix C: SSO Response Sheet).

Upon identification of the area impacted the first responders will establish a control zone with appropriate signage and barricades to warn of the potential health hazard associated with the SSO.

During a wet weather overflow the first responders will determine if there are any mitigation options available. Typically, a wet weather overflow cannot be contained, thus filtering the SSO to reduce the impact of solids, paper, and floatables is the most feasible approach. Straw bales, absorption mats and/or booms may be used to filter the SSO. Mitigation activities will be documented on the SSO Response Sheet.

The amount of discharge from the SSO will be calculated using the SSO estimated discharge chart (see Appendix C: SSO Estimated Discharge Form).

At such time as the SSO, is eliminated or subsides necessary steps will be taken to clean and disinfect the site and report the SSO as outlined in Sections 4.3 and 4.4. The control zone will not be removed until cleaning and disinfection of the site is complete.

### *Dry Weather Overflow*

First responders during a dry weather overflow will obtain and document information relevant to the SSO event (See Appendix C: SSO Response Sheet).

The first responders will identify the problem and determine if the SSO is reaching the Waters of the Commonwealth. If not, the first responders can initiate the appropriate response for eliminating the SSO. Typically, line blockages due to roots, grease, or other obstructions can be removed with the combination cleaner/vacuum truck or jet rodder truck. At such time the SSO is eliminated the necessary steps will be taken to clean and disinfect the site and report the SSO as outlined in Sections 4.3 and 4.4.

If the SSO is reaching the Waters of the Commonwealth the responders will establish a control zone with appropriate signage and barricades to warn of the potential health hazard associated with the SSO. The appropriate response for eliminating the SSO will coincide with establishing the control zone. The onsite supervisor will add personnel as necessary to initiate the appropriate response.

It may be possible to contain/isolate the SSOs that reach the Waters of the Commonwealth by establishing barriers downstream of the impacted area and pumping the SSO into the collection system or tanker trucks.

To contain/isolate an SSO, crews may mechanically construct an earthen dam downstream or install straw bale barriers in a low spot for pumping. If pumping the SSO into the collection system is not an option, the SSO will be pumped into tankers and returned to the collection system via an alternate location. A list of the pumps and tankage available is outlined in Section 3.3.

Responders can use the GIS mapping to identify the sewer configuration and what points of the system require access for maintenance and/or repair. Typically, blockages due to roots, grease, or other obstructions can be removed with the combination rodder/vacuum truck or jet rodder truck. Should emergency repair be required on any part of the collection system appropriate measures will be implemented. A list of equipment available to WMU for repair is outlined in Section 3.3. Should contract services be required for repair a copy of the contract service providers list is attached in the Appendix B.

In the event of a mechanical/electrical failure at one of the pumping stations the contract electrician will be notified for repair and/or observation of the equipment prior to placing back into service.

All containment/isolation procedures will remain in place until repairs are complete. Once repairs are complete, necessary steps will be taken to clean and disinfect the site and report the SSO as outlined in Sections 4.3 and 4.4. The control zone will not be removed until cleaning and disinfection of the site is complete.

The estimated amount of discharge recovered and not recovered from the SSO and the recorded SSO contained and pumped will be estimated using the SSO Estimated Discharge Chart (Appendix C).

### **Section 4.3 – Cleaning and Disinfection**

WMU will implement the following disinfection practices depending upon the location of the SSO and the area impacted.

Typically, manual techniques are used during the clean-up process. Manual practices include the use of hand tools, including but not limited to, rakes, shovels, and brooms, to remove all identifiable solid material from the SSO site.

Mechanical techniques may be used if deemed necessary by management based upon the size, duration, and impacted area of the overflow. Mechanical practices may include the use of the combination cleaner/vacuum truck, bypass pumps, and other equipment to remove and dispose of the SSO.

Disinfection of the site will be by application of lime.

WMU policy does not allow personnel to enter private property buildings for cleaning or disinfection due to an SSO. All private property owners are provided a business card identifying WMU's insurance carrier if they wish to file a claim for compensation for clean-up and/or property damage.

### **Section 4.4 – Reporting Procedures**

When an SSO occurs, WMU performs the appropriate notification procedures as specified in its KPDES permit that includes an e-mail transmittal to Kentucky Division of Water (KDOW) detailing the SSO location, discharge volume, and cause of the SSO within 24 hours of the event.

The KDOW contact is Ms. Barbara Risk, Kentucky Division of Water, 14 Reilly Road, Frankfort, Kentucky 40601, (502) 564-3358.

Monthly and quarterly reports are transmitted to KDOW detailing the above-mentioned information. WMU management personnel are provided copies of the reports for internal review. All data for reporting is maintained in the SSO Response Sheet and is estimated using the SSO Estimated Discharge Chart. Data obtained from each SSO event will be used to prioritize WMU capital projects and elimination of SSOs.

The General Manager will determine the need for additional reporting during or after an SSO including, but not limited to, door hangers, news release, and customer letters.

### **Section 5 – WMU Personnel Training**

WMU management will provide and repeat training for the appropriate response crews and support staff to ensure compliance with the SORP. Training will occur not less than annually for all personnel involved with implementation of the SORP and its procedures.

WMU management will oversee implementation of the SORP and ensure that established procedures are being followed during field operations.

### **Section 6 – SORP Updates**

WMU management will review the SORP annually and amend as appropriate. Copies of the SORP and amendments will be distributed to WMU personnel directly responsible for responding to SSOs.

# **APPENDICES**

## **Appendix A: Related WMU Policies**

WMU Policy 402.2

WMU Policy 203.1

WMU Policy 408.1

## **Appendix B: Emergency Contact Lists**

Employee Emergency Contact List

Contract Service Providers

## **Appendix C: Report Forms**

SSO Response Sheet

SSO Estimated Discharge Form

SSO Response Plan Flow Chart

Work Order (Sample)

## **Appendix D: SSO Database**

List of Recurring SSOs

SORP 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.

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Approved By - WMU Commission

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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.

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Chairman - WMU Commission

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Date

## **APPENDIX B**

### **EMERGENCY CONTACT LISTS**

<b>WMU AFTER HOURS CALL LIST</b>			
<b>NAME</b>	<b>BUILDING</b>	<b>HOME</b>	<b>CELL</b>
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
<b>WATER LINE BREAKS, WASTEWATER &amp; DISTRIBUTION PROBLEMS</b>			
<b>NAME</b>	<b>HOME</b>	<b>CELL</b>	<b>COMMENTS</b>
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
<b>BACKHOE</b>			
<b>NAME</b>	<b>HOME</b>	<b>CELL</b>	<b>COMMENTS</b>
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
<b>SERVICE CALLS</b>			
<b>NAME</b>	<b>HOME</b>	<b>CELL</b>	<b>COMMENTS</b>
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
<b>SOLID WASTE / MAINTENANCE</b>			
<b>NAME</b>	<b>HOME</b>	<b>CELL</b>	<b>COMMENTS</b>
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
<b>ENGINEERING</b>			
<b>NAME</b>	<b>HOME</b>	<b>CELL</b>	<b>COMMENTS</b>
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  
Lexington, KY 40503

## **APPENDIX C**

### **REPORT FORMS**



**SSO Estimated Discharge Estimating Form**

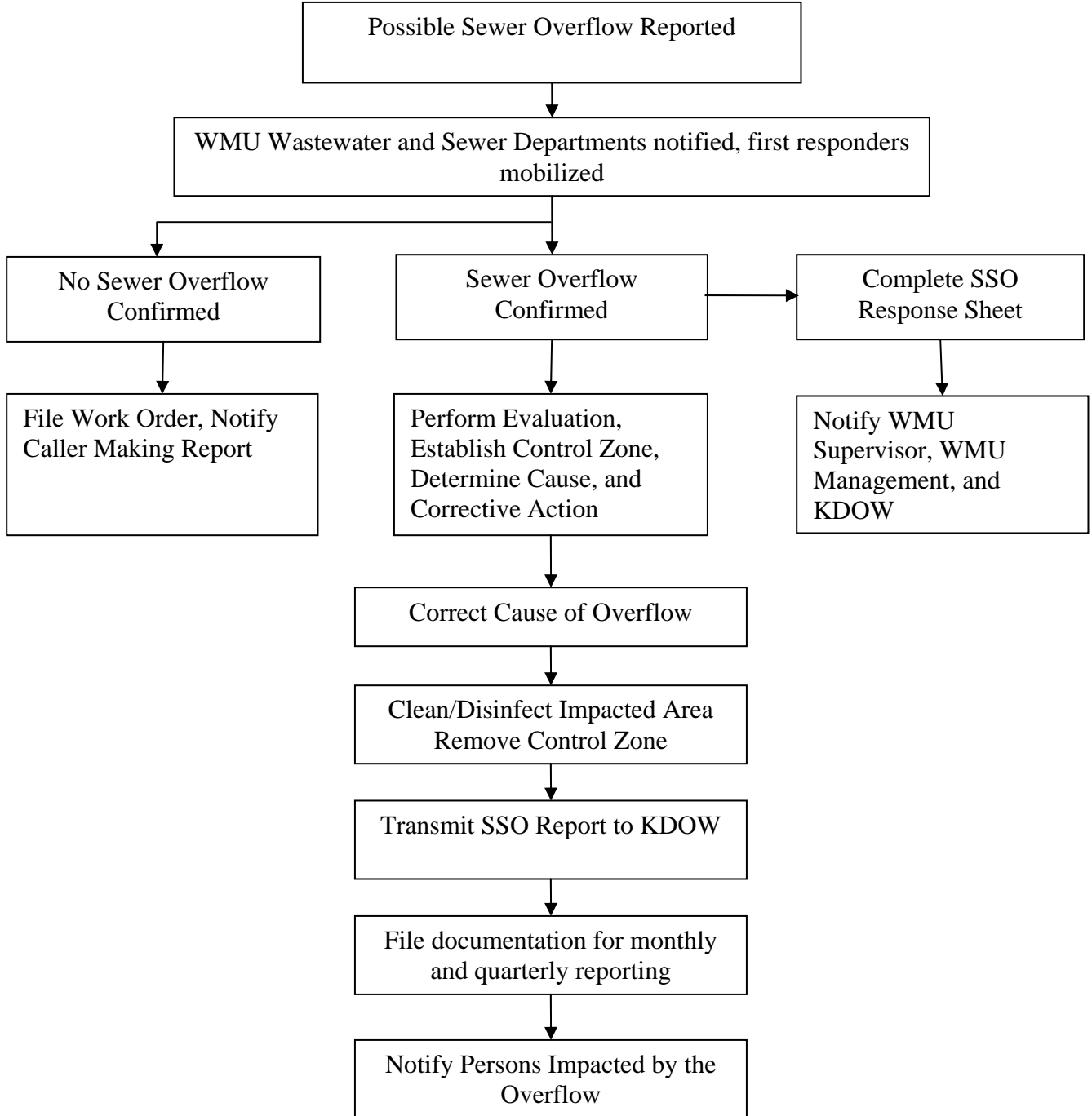
Flow of Pipe in "G.P.M."				
DIAMETER	1 / 4 FULL	1 / 2 FULL	3 / 4 FULL	FULL
36	2,026	4,053	6,079	8,105
30	1,316	2,632	3,948	5,264
24	853	1,705	2,558	3,410
21	668	1,335	2,003	2,670
18	485	971	1,456	1,941
15	334	667	1,001	1,334
12"	223	446	668	891
10"	154	308	462	617
8"	101	203	304	405
6"	56	112	168	224
4"	24	49	73	98

**W.M.U. Sanitary Sewer Structural Bypasses**

MADISON AVE.	MANHOLE BASIN NO.9	NO.09	8"
FLANAGAN STR.	MANHOLE BASIN NO.12	NO.73	8"
E.WASHINGTON STR.	MANHOLE BASIN NO.12	NO.160	10"
SMITH MANOR L.S.	MANHOLE BASIN NO.10	NO.160	6"
MARYLAND AVE.L.S.	MANHOLE BASIN NO.10	NO.179	8"
BEL-AIR L.S.	MANHOLE BASIN NO.16	NO.201	8"
LYNNWAY DR.	MANHOLE BASIN NO.8	NO.02	12"
SNOWFALL L.S.	MANHOLE BASIN NO.13	Wetwell	12"

For purposes of estimating manhole overflow, record difference between existing "inflow" pipe "full" and next larger size pipe.

# SSO Response Plan Flow Chart



**WORK ORDER  
(SAMPLE)**

## **APPENDIX D**

### **SSO DATABASE**

**Winchester Municipal Utilities  
List of Recurring Sanitary Sewer Overflows (SSOs)**

<b>SSO Location</b>	<b>Basin</b>	<b>Structure ID</b>
Bonnie Brook Lane	Lower Howards Creek Basin A	MH # 14-76A
Boonesboro Road	Lower Howards Creek Basin A	MH # 13-3
Cherokee Drive	Lower Howards Creek Basin A	MH # 8-261
Cherokee Drive	Lower Howards Creek Basin A	MH # 8-248
Calmes Drive	Lower Howards Creek Basin A	MH # 8-222
Lynnway Drive	Lower Howards Creek Basin A	MH # 8-2
Mockingbird Valley Road	Lower Howards Creek Basin A	MH # 14-51
Northern Avenue	Lower Howards Creek Basin A	MH # 14-115
Old Boonesboro Road	Lower Howards Creek Basin A	MH # 8-151
Snowfall PS	Lower Howards Creek Basin A	Pump Station
Stoneybrook PS	Lower Howards Creek Basin A	PumpStation
Vaught Court	Lower Howards Creek Basin A	MH # 13-7
Vaught Road	Lower Howards Creek Basin A	MH # 13-8
Bel-Air PS	Strodes Creek Basin A	Pump Station
East Washington Street	Strodes Creek Basin C (Town Branch)	MH # 12-160A
Flanagan Street	Strodes Creek Basin C (Town Branch)	MH # 12-73
Madison Avenue	Strodes Creek Basin C (Town Branch)	MH # 9-9
Maryland Ave PS	Strodes Creek Basin C	PumpStation
North Main Street	Strodes Creek Basin C (Town Branch)	MH # 20-501
Smith Manor PS	Strodes Creek Basin C	Pump Station
West Interceptor	Strodes Creek Basin D	MH # 19-1
West Interceptor	Strodes Creek Basin D	MH # 19-2
West Interceptor	Strodes Creek Basin D	MH # 19-3
West Interceptor	Strodes Creek Basin D	MH # 19-4
Washington Street	Strodes Creek Basin C (Town Branch)	MH # 10-120
West Washington	Strodes Creek Basin C (Town Branch)	MH # 9-48
Winn Avenue	Strodes Creek Basin C (Town Branch)	MH # 9-31



