

# **IVINS CITY**

# SEWER SYSTEM MANAGEMENT PLAN



Public Works Department Adopted 1/21/2016

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# SECTION 1 – GENERAL SEWER SYSTEM MANAGEMENT PLAN

#### A. Introduction

A Sewer System Management Plan (SSMP) is a document that describes activities used to manage a wastewater collection system effectively. This SSMP is to aid Ivins City in effectively managing operations. Effective management of a wastewater collection system includes the following:

- Maintaining or improving the condition of the City's collection system infrastructure in order to provide reliable service into the future.
- Cost-effectively minimizing infiltration/inflow (I/I) and providing adequate sewer capacity to meet demands.
- Minimizing the number and impact of sanitary sewer overflows (SSOs) that occur.

This SSMP meets the requirements of the State of Utah code, section R317-801, "Utah Sewer Management Program (USMP)," which was finalized in October 2012.

Basic elements of a typical SSMP should include the following:

- 1. Collection system management goals (See Section 1.D).
- 2. Organization of personnel, including the chain of command and communications (See Section 1.E).
- 3. Operation and Maintenance Plan (See Section 2).
- 4. Overflow emergency response plan (See Section 4).
- 5. Fats, oils, and grease (FOG) control program (See Section 5).
- 6. Legal authority for permitting flows into the system as well as enforcement of proper design, installation, and testing standards, and inspection requirements for new and rehabilitated sewers (See Appendix A).
- 7. Measures and activities to maintain the wastewater collection system (See Section 2).
- Design and construction standards (See Section 3).
- 9. Capacity management (See Section 6).
- 10. Monitoring plan for SSMP program effectiveness (See Section 7.A).
- 11. Periodic SSMP Audits, periodic SSMP updates, and implementation of program improvements (See Section 7.B-C).

# **B. Background Information**

Ivins City, Utah is located west of St. George City. Ivins City has an approximate population of 9,000 full and part time residents and includes an area of approximately 10.2 square miles. An area map showing the location of Ivins City is shown in Figure 1.



Figure 1 – Area Map

# **C. Definitions**

The following are definitions of terms that appear frequently in this report:

<u>Confined Space</u> – a space that:

- a) is large enough and so configured that an employee can bodily enter and perform assigned work; and
- b) has limited or restricted means for entry or exit (for example: tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry); and
- c) is not designed for continuous employee occupancy.

<u>Food Service Establishment (FSE)</u> – An establishment which serves food and potentially releases FOG into the wastewater collection system. Examples of FSE's are restaurants, cafes, cafeterias, hotels, hospitals, and meat preparation facilities.

<u>Fats, Oils, and Grease (FOG)</u> – Byproducts of cooking, food preparation, and clean-up. FOG can build up on sewer lines and eventually cause SSO's.

<u>Infiltration/Inflow (I/I)</u> – Infiltration is generally considered to be extraneous water that enters the sewer system over longer periods of time such as groundwater seepage through cracks in the sewer pipe. Inflow is generally considered to be extraneous water that enters the system as a direct result of a rain event such as through improper connections to the sanitary sewer, through flooded manhole covers, or through defects in the sewer. While it is virtually impossible to control all I/I, it is certainly desirable to reduce I/I when cost effective.

Lateral – The portion of a sewer that connects a home or business with the main line in the street.

<u>Occupational Safety & Health Administration (OSHA)</u> – A part of the U.S. Department of Labor and is the main Federal Agency charged with the establishment, issuance, and enforcement of safety and health legislation.

<u>Sanitary Sewer Overflow (SSO)</u> – A spill, release, or unauthorized discharge of wastewater from a sanitary sewer system at any point upstream of a wastewater treatment facility that is caused by a problem in or with the City's sewer lines.

<u>Class 1 SSO</u> – Classified as "significant SSO," is an SSO or backup that is not caused by a private lateral obstruction or problem that:

- a) affects more than five private structures;
- b) affects one or more public, commercial, or industrial structure;
- c) may result in a public health risk to the general public;
- d) has a spill volume that exceeds 5,000 gallons, excluding those in single private structures; or
- e) discharges to waters of the State.

<u>Class 2 SSO</u> – Classified as "non-significant SSO," is a SSO or backup that is not caused by a private lateral obstruction or problem that does not meet the Class 1 SSO criteria.

<u>Sewer Overflow Response Plan (SORP)</u> – A written plan to ensure that every report of a sewage overflow incident is immediately dispatched for confirmation and that in the event of an SSO, the SSO is contained and cleaned in an efficient and timely manner so as to limit the impacts to the public and environment.

<u>Sewer System Management Plan (SSMP)</u> – A written plan which describes activities used to manage a wastewater collection system effectively (See Section 1.A).

<u>Stoppage</u> – A buildup of debris in the sewer which stops the flow of wastewater and allows the water to back up behind the stoppage, sometimes causing an overflow. A stoppage is also known as a blockage.

USMP – Defined as the "Utah Sewer Management Program."

<u>Wastewater Collection System</u> – All pipelines, pump stations, and other facilities upstream of the headworks of the wastewater treatment plant that transport wastewater from its source to the wastewater treatment plant.

#### **D.** Goals

Ivins City's goals for the City's wastewater collection system are as follows:

- To properly manage, operate, and maintain all parts of the wastewater collection system
- To provide adequate capacity to convey peak flows
- To minimize the frequency of SSO's
- To mitigate the impact of SSO's

Ivins City will accomplish these goals by adhering to the management practices outlined in this report.

#### E. Organization

The following organizational chart identifies the City staff responsible for implementing, managing, and updating the SSMP.



Figure 2. Organizational Chart

<u>City Manager</u> – Oversees Public Works Director. Provides information updates to City Council. Arranges for emergency meetings if necessary.

<u>Public Works Director/City Engineer</u> – Plans strategy, leads staff, allocates resources, delegates responsibility, authorizes outside contractors to perform services, arranges necessary emergency meetings, provides information updates to the City Manager and City Council, directs Public Works Supervisor, and ensures that the wastewater system is operated in accordance with State requirements and within its budget.

<u>Public Works Office Assistant</u> – Receives applications and handles customer requests and complaints. Handles management of filing system.

<u>Assistant PW Director of Administration</u> – Prepares and updates collection system planning documents. Updates Design and Construction Standards. Participates in design and performs construction management of projects involving the wastewater system.

<u>Assistant PW Director of Operations</u> – Manages field operations and maintenance activities, provides relevant information to City management, prepares and implements contingency plans, leads emergency response, tracks expenditures, investigates and reports SSO's, and trains and directs Operators.

<u>Public Works Operators</u> – Performs staff preventive maintenance activities, mobilizes and responds to notification of stoppages and SSO's, completes forms developed by the City, and monitors system operation.

Position	Name	Email Address	Phone Number	Cell Phone
City Manager	Dale Coulam	dcoulam@ivins.com	(435) 628-0606	(435) 414-5798
Public Works Director	Chuck Gillette	cgillette@ivins.com	(435) 634-0689	(435) 668-9909
Ast. PW Dir. Of	Tom Jorgensen	tjorgensen@ivins.com	(435) 634-0689	(435) 359-6731
Administration				
Ast. PW Dir. Of	Shiloh Pentz	spentz@ivins.com	(435) 634-0689	(435) 680-1089
Operations				
Operator II	Matt Cooper			(435) 773-5645
Operator I	Page Bowler			(435) 773-5646
Operator I	Travis Gubler			(435) 773-5643
Operator I	Bryan Finley			(435) 773-1260
Operator I	Justin Davenport			(435) 773-8763
Public Works Office	Jennifer Chapman	jchapman@ivins.com	(435) 634-0689	
Emergency After Hours				(435) 668-7443

Current staff, their position, and contact information is shown in Table 1 below:

Table 1. Contact Information

#### F. Sewer System Ordinances

Chapter 3 of Title 10 of the Ivins City Code includes provisions for the following: connection requirements; connection fees and user rates; required permits; requirements regarding construction materials and installation; prohibited uses and discharges; powers and authority of inspections; information of industrial processes; pretreatment requirements and maintenance; violations and penalties; etc. The City's sewer system ordinances are included in Appendix A.

# SECTION 2 – OPERATIONS AND MAINTENANCE PLAN

# A. Introduction

The purpose of the Operations and Maintenance Plan is to provide a summary of the sewer collection system and the operations and maintenance activities necessary to maintain the system operating properly. The Operations and Maintenance Plan includes the following:

- An up to date map of the sewer collection system
- Routine preventative operation and maintenance activities
- Rehabilitation, Replacement, and Improvement Plan
- Operator Safety
- Schedule for training on a regular basis

This Plan is not intended as a training manual, but is written as a reference guide for operators. It is the responsibility of Ivins City to operate the wastewater collection system such that it does not create a nuisance or a health hazard to the community. Furthermore, the City must coordinate with government agencies which include among others the following: the Utah Department of Environmental Quality (UDEQ), Washington County Health Department, and the U.S. EPA.

# B. Map of the Sewer Collection System

An up to date map of the sewer collection system is provided in Appendix B. The existing wastewater collection system consists of gravity sewer piping, force mains, manholes, and lift station for Ivins City that collect and transmit wastewater to the regional wastewater treatment facility.

# C. Routine Preventative Operation and Maintenance Activities

In order to keep the system in good repair, the City has implemented routine preventive maintenance activities. These activities aid in preventing excessive infiltration/inflow, service interruption, and system failures that could result in sanitary sewer overflow (SSO) events. These activities also aid in preserving the capital investment made by the City and prevent more frequent costly repairs and replacements. The following are routine preventive maintenance activities performed by City staff:

#### **Cleaning:**

- <u>Scheduled cleaning of gravity sewers and forced mains.</u> Ivins City has joint ownership in a sewer vacuum truck and now provides its own cleaning rather than contracting the service out. The City will clean the entire system within a two year timeframe and under no circumstance exceed a three year period. Any areas with a history of problems will generally be cleaned more frequently.
- <u>Obstructions.</u> Wastewater obstructions are difficult to locate in the pipe unless they start to back up wastewater and become obvious. Wastewater obstructions generally occur on runs of piping with flatter slopes. If the line becomes completely obstructed, it may cause backups into homes. Partial obstructions often result in obnoxious odors emanating from manholes, which can be a clue to obstructions. The most common types of obstructions result from grease, grit, and miscellaneous debris. Sometimes obstructions can be broken free by an unusually large flow. Ivins City has the use of a sewer vacuum truck capable of unclogging and cleaning sewer line spans of up to 800 feet. This apparatus can loosen grease and grit in large quantities and is

especially useful in cleaning out sewer mains. Large accumulations of grease and grit may be removed by jetting or heavy flushing to a downstream manhole. This must be followed by manual removal of the debris to ensure that buildup and subsequent obstructions do not occur in downstream lines. Once an obstruction is located, it is recommended that the line segment be flushed or cleaned regularly to discourage future obstructions.

• <u>Sewer laterals are privately owned and not maintained by the City.</u> See 10.03.406 of Part 4, Sanitary Sewers, Building Sewers and Connections of the Ivins City Code in Appendix A.

#### **Maintenance & Inspections:**

- <u>Weekly inspections and scheduled maintenance of the 800 South lift station</u>. The manufacturer's preventative maintenance check list is shown in Appendix C.
- <u>Visual inspection of sewer manholes.</u> A sewer manhole inspection form is included in Appendix C and should be used to document inspections. Visual inspections are performed annually and are primarily performed at ground level. The inspector looks for the following during the inspection:
  - Frame and cover defects
  - I/I into the manhole
  - Evidence of grease
  - Roots
  - Structural integrity of the manhole
  - Flow rate and/or depth
  - Conditions at the bottom of the channel (debris, accumulation of solids, color of sewage, nature of flow entering and leaving manhole)

Visual inspections include two inspectors working as a team with the intent to obtain an overview of the system annually.

- <u>Video inspection of sewer manholes and sewer pipes.</u> The City has video inspection records for the entire sewer system. Although video inspections are performed at a much less frequency than cleaning, viewing the inspection videos can identify possible problem locations of main lines. Video inspections should be updated every ten years at a minimum. The inspector looks for the following during the inspections:
  - Apparent blockages in the pipe and the probable cause of the blockage
  - Structural integrity of the pipe
  - Grease buildup on the pipe
  - Apparent I/I into the pipe
  - Cross connections or illegal connections
  - Verifies accuracy and completeness of records
  - Video inspection is performed on all new construction and is provided to the City by the contractor
  - Infiltration or exfiltration is verified by comparing the flows in a particular manhole with the flows of manholes feeding it. Infiltration will be evidenced by an increase in wastewater flow. Exfiltration will be evidenced by a decrease in flow. If either is suspected, the system should be televised to determine the extent and source of

infiltration or exfiltration.

All preventive maintenance forms included in Appendix C and are kept for future reference. For each manhole, the results of each inspection are compared to past results. Significant or unexplained differences require additional investigation and corrective action if necessary. Maintenance activities are also documented in a work order system and are entered by the Public Works Supervisor and Operators.

# D. Rehabilitation, Replacement, and Improvement Plan

A Rehabilitation, Replacement, and Improvement Plan is meant to ensure that not only the collection system remains in good condition, but also guides the City to take a proactive approach in managing structural deficiencies in the system. A key component of a proactive approach in correcting system deficiencies is the concept of condition assessments. With a condition assessment, the system's facilities (manholes, main lines, lift stations, etc.) are inspected with the results evaluated to determine and prioritize needed repairs or replacements. The process is defined as follows:

- Inventory database This step includes identifying all possible components of the wastewater collection system that could be inspected. For the City, the database primarily consists of manholes, gravity pipes, force mains, and the lift station.
- Impact Assessment This step of the process involves assessing each component on the list and giving each component a rating for risk (low, medium, or high) and for consequences of failure (low, medium, and high). Risk should be based on the age, pipe material, soil conditions, and history of failures. Consequences of failure should be based on location, number of people that would be affected, and nature of area affected in the case of a failure.
- Prioritization Based on the impact assessment, components should be prioritized starting with the high risk, high consequence components.
- Rehabilitation Actions Based on the condition assessment, those components to be rehabilitated, repaired, or replaced should be identified.
- Rehabilitation, Repair, Replacement This step includes the actual rehabilitation of the sewer system component selected during the condition assessment process.
- In lift stations, rehabilitation and replacement generally includes replacing the part identified (i.e. pump components).
- Various rehabilitation methods of sewer manholes are shown below:
  - Chemical grouting
  - Cementitious spray application
  - Epoxy coating
  - Internal or external rubber seals (chimney seals)

#### **E.** Schedule for Training

The Utah Division of Water Quality requires continuing education for personnel to maintain their wastewater certificate. The following is required during the three year period prior to expiration date of certificate:

- For grades I and II, 2 CEUs are required for renewal
- For grades III and IV, 3 CEUs are required

The Utah DWQ defines 1 hour of specialized training as 0.1 CEU. Up to half of the required CEUs can be earned through attendance at the annual technical program meetings such as the Rural Water Association of Utah, Water Environment Association of Utah, and Water Environment Federation.

Ivins City's wastewater collection system requires a Grade II operator certification (population 3,501-15,000). The education and experience requirements for Grade II operators are a high school diploma or equivalency and two years operating experience (refer to R317-10-7 of the Utah Administrative Code regarding qualifications for operator grades). Ivins City encourages employee education and training and therefore supports training opportunities to meet certification requirements.

# F. Equipment and Replacement Parts

An adequate supply of replacement materials and parts is important in order to maintain uninterrupted and efficient service. Ivins City stores replacement materials and parts for items that may not be readily available. For smaller items the City relies on local suppliers to maintain an inventory and adequate supply of spare parts.

# **SECTION 3 – DESIGN AND PERFORMANCE PROVISIONS**

The purpose of design and performance provisions is to mitigate sanitary sewer overflow (SSO) events and other operational problems that are caused by poor design or construction of the sewer system components. Effective design and performance provisions can minimize system deficiencies that could create or contribute to future overflows or operations and maintenance problems.

Ivins City has Standard Specifications for Design and Construction and has also adopted the APWA Manual of Standard Specifications which includes the installation of new sewer system components. Some sections of these documents which specifically apply to the installation of the sewer collection system are listed below. This list is not intended to be all inclusive, but provide an idea of details pertaining to the sewer system included in the specifications.

Ivins City Standard Specifications for Design and Construction

- 2.8 Sanitary Sewer Design
  - 2.8.1 Design Flows
  - 2.8.2 Minimum Slopes
  - 2.8.3 Minimum Size and Depth
  - 2.8.4 Alignment
  - 2.8.5 Service Connections
  - 2.8.6 Manholes
  - 2.8.7 Sewer Main Pipelines
  - 2.8.8 Utility Clearances
  - 2.8.9 Pumping and Force Mains
  - 2.8.10 Suspended Crossings

APWA Manual of Standard Specifications - Division 33 Utilities

33 05 07 – Polyvinyl Chloride Pipe

- 33 05 20 Backfilling Trenches
- 33 08 00 Commissioning of Water Utilities
- 33 31 00 Sanitary Sewerage Systems

Some of the standard drawings which specifically apply to the installation of the sewer collection system are detailed below. This list is not intended to be all inclusive, but provide an idea of details pertaining to the sewer system included in the Standard Drawings.

- Std. Dwg S-01 Standard Manhole Detail
- Std. Dwg S-02 Junction & Drop Manhole Detail

Std. Dwg S-03 – Manhole Step Detail

Std. Dwg S-04 – Manhole Frame & Cover Detail

Std. Dwg S-05 – Typical Sewer Connection Details

Std. Dwg S-06 – PVC Service Connection to Existing PVC Main

Std. Dwg S-07 – PVC Service Connection to New PVC Sewer Main

# SECTION 4 – SEWER OVERFLOW RESPONSE PLAN

# A. Introduction

The primary purpose of the Sewer Overflow Response Plan (SORP) is to protect public health and the environment by providing a program to respond to sanitary sewer overflow (SSO) events. A SORP provides a standardized course of action for City personnel to follow in the event of an SSO and ensures that the City is adequately prepared to respond to SSO events.

The overall objectives of the SORP are shown below:

- Protect public health and the environment
- Satisfy regulatory agencies and discharge permit requirements
- Address procedures for managing sewer SSOs
- Minimize risk of enforcement actions against Ivins City
- Protect private and public property beyond the sewer collection system facilities
- Provide appropriate customer service in the event of a SSO
- Protect wastewater collection system personnel in the event of a SSO

This plan is meant to serve as a guide to responding to the following applicable emergencies:

- Sanitary sewer overflows to the waters of the state
- SSOs that reach the surface, but not the waters of the state
- Sanitary sewer breaks which remain in the trench
- SSOs from City mains that reach basements
- City owned lateral backups
- Private sewer lateral backups

Each of the events mentioned above shall be treated as an emergency. In the event that the SSO is caused by a private lateral backup, City personnel can treat it as any of the other emergencies at their discretion; however, they should treat the backup as a serious problem. The ultimate responsibility in the case of a private sewer lateral backup resides with the property owner. City personnel can offer advice to the property owner, but the property owner is ultimately the decision maker.

The four basic elements of an effective SORP is notification, response, reporting, and impact mitigation as explained below:

- <u>Notification</u> this refers both to the methods for the public to notify the City in the event of a SSO and to internal communications during and after the event
- <u>Response</u> the SORP should include a plan of action to mobilize for response given a report of a SSO
- <u>Reporting</u> this element refers to the determination of whether the SSO is a Class 1 or Class 2 SSO and if the 24 hour report to the State is required as well as preparation of reports to be included in the USMP annual report and other reports that may be necessary for other agencies
- <u>Impact Mitigation</u> The plan should include descriptions of potential failure modes and strategies and emergency operations for responding to these potential system failures

### **B.** Notification of SSOs

The first step in the process of mitigating SSOs is knowing where and when they occur. Notification of a SSO can come through the public or directly from City personnel. During business hours, City personnel would be responsible to receive phone calls from the public regarding possible SSOs. However, during non-business hours, one Public Works staff member is assigned and responsible for 24-hour emergency response each day. For both scenarios, City staff members gather information from the caller and immediately contact the Public Works Supervisor to notify him of the emergency.

The following information should be documented in the City's work order system for each phone call regarding a possible SSO:

- Time and date the call was received
- Address or specific location of possible SSO
- Description of the problem
- The time that the SSO was noticed by caller
- Caller's name and phone number
- Caller's observations (odor, duration, location on property)
- Other relevant information that may aid in a more effective response to the SSO

Failures at the lift station will be designed to trigger an alarm via the building's SCADA system. The alarm system will send a text message to the on-call Public Works staff member advising them of the potential problem.

#### C. Responding to SSOs

Responding to SSOs in an efficient and timely manner is critical. This is the step that eliminates the cause, and cleans up the effects, of the SSO. After the Public Works Supervisor has been notified of the potential SSO and has confirmed that it indeed is an SSO (whether he is personally on-site or whether he sends an Operator to verify), the Supervisor will dispatch Operators with appropriate equipment and supplies to mitigate the problem. The Supervisor is responsible to notify the Public Works Director and advise him of the situation.

Once crews have been dispatched, they shall report immediately to the site of the SSO. The first responders at the site shall identify and mitigate the cause of the SSO. They shall then identify and protect all waters of the State, and shall address all other issues.

When arriving at the site, if the Operators sense a suspicious odor not common to sewer systems (e.g. gasoline), or if a suspicious substance is on the ground (e.g. oil sheen, foamy residue), the Operators shall immediately contact the Supervisor for further guidance. In the event that it is determined that a hazardous material response team is needed, the Operators shall await the arrival of the Fire Department to take over the scene. When the Fire Department arrives, the Supervisor and Operators shall take direction from the Fire Department until they indicate that the City can proceed with the containment, correction, and cleanup activities.

If the Supervisor is not present for the entire event, he shall discuss with the Operators their findings during his absence. The Supervisor shall also further interview the public at the site to determine other relevant information. He shall include all discussions in his report (See Sanitary Sewer Overflow Report in Appendix D).

The following are the responsibilities of the responding crew upon arrival at the SSO:

- Determine the cause of the SSO (see list of possible causes in Section 4.E)
- Evaluate the need for additional resources to correct the SSO (including possible help from private contractors)
- If private property is impacted, notify appropriate City Staff so that they can notify the Washington County Health Department
- Take action to stop the cause of the SSO

The following are the initial measures for containment of the SSO after the cause has been determined and stopped or during the stopping phase:

- Determine the immediate direction of the SSO
- Identify and request additional resources needed to contain or isolate the SSO
- Take action to contain the SSO

The following are the measures to clean up the SSO after the SSO has been contained or isolated:

- The area shall be thoroughly flushed and cleaned of any sewage and wash-down water. Solids and debris shall be properly disposed of
- The SSO site is to be secured to prevent contact by members of the public until the site has been thoroughly cleaned
- Where appropriate, the SSO site shall be disinfected

# **D.** Reporting SSOs

Per the requirements of the State of Utah code, section R317-801, "Utah Sewer Management Program (USMP), SSOs shall be reported as follows:

#### **Division of Water Quality:**

- A Class 1 SSO shall be reported orally within 24 hours and a written report submitted to the Division of Water Quality within five calendar days. Class 1 SSOs shall also be included in the USMP annual report
- All Class 2 SSOs shall be reported on an annual basis in the USMP annual report
- A USMP annual report shall be submitted to the Division of Water Quality covering information from the previous calendar year by April 15 of the following year

#### **County Health Department:**

- In the case that the sanitary sewer overflows to waters of the State, the County Health Department shall be contacted immediately
- For all other cases, if in the opinion of the Public Works Director there is a threat of a public health issue due to the SSO, the Public Works Director shall contact the County Health Department

# **E.** Public Notification

In the event of a significant SSO that cannot be contained, the public should be notified via a press release to the local news, publications in the area paper, or information handouts to affected or potentially affected property owners. In general, as the extent of the SSO increases, the public notification should also increase.

# **SECTION 5 – FOG CONTROL PLAN**

# A. Introduction

One of the leading causes of sanitary sewer overflow (SSO) events in a wastewater collection system is from fats, oils, and grease (FOG). FOG caused blockages are currently not a major problem in Ivins City, but future growth may lead to the necessity of implementation of the FOG Control Plan. Ivins City contracts with St. George City for treatment of wastewater and must follow St. George's pretreatment requirements which require grease traps be in place and inspected for Food Service Establishments (FSEs). In addition, Ivins City's current Sewer System Ordinance (see Section 10.03.604 in Appendix A) limits the discharge of certain wastes to the public sewer system.

The intent of the FOG control plan is to limit FOG caused SSOs by reducing the amount of FOG discharge to the wastewater collection system.

The general process of the FOG Control plan includes the following:

- Characterizing FOG sources
- Identifying collection system hot spots
- Identifying City staff responsible for FOG Control Plan
- Establishing FOG handling and disposal practices
- Establishing a FSE and grease handler database
- Providing outreach to FSEs
- Developing an inspection and monitoring approach

#### **B. FOG Sources and Problem Sites**

FOG is a byproduct of cooking, food preparation, and cleanup activities. FOG becomes a problem in the wastewater collection system because it cools in the pipes and starts to solidify, eventually becoming a solid which can build up on the walls of pipes and cause blockages in the wastewater collection system.

In order to mitigate the effects of FOG, it is important to understand FOG sources in the system. The City must first determine the location of collection system problem sites, how these sites are related to FOG discharges, and where the FOG originates. The City should then focus their resources at eliminating FOG discharges at the sources.

In determining sources of FOG it may become necessary to review records pertaining to the collection system. The following is useful information to review which may aid in locating FOG sources:

- Identify any particular problem sites within the collection system based on SSOs, extent of cleaning frequency, odor reports, and any other type of citizen complaints.
- Review collection system operator's notes, especially on the type of materials being removed during cleaning.
- Compile the information and categorize the sites by the cause of the operational problems (e.g., roots, FOG, structural issues).
- Produce collection system maps using GIS that show the spatial relationships between the problem sites and particular areas in the City (e.g., high density or single family residential areas, business districts, and restaurant districts).

- Rate the severity of each problem site on the map and use this information to determine correlations between upstream use and FOG-related sites.
- Characterize the sources of FOG at each FOG-related site. Depending on the source of the FOG, program resources should be allocated accordingly. For example, if FOG is accumulating downstream of a residential area, resources should be directed towards public education. However, if FOG problems are occurring downstream of restaurants and business districts, program resources should be allocated towards educating FSEs.

# C. FOG Handling and Disposal Practices

The following are FOG control practices that may be implemented to reduce the amount of FOG in the wastewater collection system:

- Correct type and size of grease removal equipment
  - Correct types and sizes of grease removal equipment is important. Equipment that does not
    include enough capacity may not remove the desired amount of grease. Equipment that is
    oversized produces a long detention time which can result in the formation of hydrogen
    sulfide which is odor causing, corrosive, and damaging to grease removal equipment and
    downstream sewer piping. Guidelines for proper sizing can be found in the International
    Plumbing Code.
- Operation and Maintenance (O&M) of grease removal equipment
  - O&M of grease removal equipment include requirements such as prohibition on dishwasher or garbage disposal connections to grease control devices and specifying cleaning frequencies, effective cleaning methods, and retaining pump-out records.
- Best Management Practices (BMPs)
  - BMPs are used to aid in reducing the amount of FOG discharged to the collection system. These include activities such as dry clean-up methods for FOG spills, scraping plates prior to washing, using baskets in sink drains, prohibiting addition of chemical or biological grease control agents, posing of instructional signs, and general equipment recommendations.
- Grease Storage for Recycling
  - Recommendations for storage of yellow greases that are stored for pickup by recycling companies include specifications of the type of container, tight-fitting lids, and establishing a secondary containment in case of spills.
- Allowable FOG Disposal Methods and Locations
  - Recommendations for disposal methods and locations of FOG may be given.

#### **D.** Outreach Program

An outreach program to both FSEs and residents is essential to limiting the amount of FOG in the collection system. If they understand the negative effects caused by FOG, they should be more willing to take preventative measures to reduce FOG discharge into the system.

Since Ivins City has very few FSEs, individual visits to the businesses to convey the importance of the FOG Control Plan should suffice. Visits should include discussions regarding appropriate FOG handling and disposal methods. Specific information given could include:

- The impact of grease waste on the sewer system (overflows, increased O&M costs, and increased sewer user rates)
- Information on types of grease removal equipment
- Proper grease disposal methods
- The effects of FOG related sewer line blockages on businesses and the environment (public health and water quality concerns)
- A list of certified grease haulers and recyclers
- A list of approved disposal facilities
- BMPs
- Installation and maintenance requirements for grease removal equipment
- Correct sizing and design specifications for grease removal equipment

Outreach to residents should be similar to FSE's except it may be done by posting articles in the monthly newsletter and on the City's website to convey the message in lieu of individual site visits.

# E. FOG Inspection and Monitoring

FOG inspection and monitoring of both FSEs and the collection system is not only important to Ivins because of the potential buildup of grease on the interior of the pipes, but equally important to St. George City because of the potential buildup on their transmission lines and also at the treatment plant.

Since St. George realizes the importance of inspections and monitoring, they provide a pretreatment specialist to conduct the necessary inspections of grease removal equipment at FSEs within Ivins City. If the specialist finds evidence of grease discharges to the City's collection system, he should call the City with the information needed to have the collection system in the area inspected and cleaned if necessary. Follow-up procedures for establishments with evidence of FOG discharge is an important part of the FOG Control Plan. The extent of the procedures depends on the severity of the problem.

Ivins City staff is responsible for cleaning the collection system and are trained to identify areas where excessive FOG is present. Documentation of areas where FOG is found is an important part of the FOG Control Plan. This documentation can be referenced to determine the severity of an ongoing FOG problem and for mitigating FOG in the system.

Appendix A

Sewer Ordinance

2016 Ivins City SSMP

#### CHAPTER 3

#### SEWER SYSTEM

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#### PART 1. DEFINITIONS

10.03.101: DEFINITIONS: Unless the context specifically indicates otherwise, the meaning of terms used in this chapter shall be as follows:

ADDENDUM: The document amended hereto entitled service user charge system. The addendum is incorporated in this chapter the same as though fully set forth herein. The service user charge system includes sections A through H of the addendum.

ADVANCED ON SITE WASTEWATER TREATMENT SYSTEM: A state approved on site system for treatment and disposal of domestic wastewater or wastes which consists of a building sewer, a septic tank or other sewage treatment or storage unit, and treating the effluent through an advanced treatment media such that the effluent total nitrogen concentration is no more than twenty milligrams per liter (20 mg/l) as nitrogen.

BIOCHEMICALThe quantity of oxygen utilized in the<br/>biochemical oxidation of organic matter under<br/>standard laboratory procedure in five (5) days at<br/>twenty degrees centigrade (20°C), expressed in<br/>milligrams per liter.

BUILDINGThe lvinsCity building department.SaidDEPARTMENT:department is responsible for administering,<br/>interpreting and enforcing all state adopted

building codes. The building department processes permit applications, performs plan checks and conducts inspections for all commercial, industrial and residential structures in the city.

BUILDING DRAIN: That part of the lowest horizontal piping of a drainage system which receives the discharge from soil, waste and other drainage pipes inside the walls of the building and conveys it to the building sewer, beginning five feet (5') (1.5 meters) outside the inner face of the building wall.

- BUILDING SEWER: The extension from the building drain to the public sewer or other place of disposal, also called house connection.
- CESSPOOL: A reservoir for liquid waste (as household sewage).

CITY: Ivins City, Washington County, state of Utah.

COMBINED SEWER: A sewer intended to receive both wastewater and storm or surface water.

- EASEMENT: An acquired legal right for the specific use of land owned by others.
- FLOATABLE OIL: Oil, fat or grease in physical state such that it will separate by gravity from wastewater by treatment in an approved pretreatment facility. Wastewater shall be considered free of floatable fat if it is properly pretreated and the wastewater does not interfere with the collection system.
- GARBAGE: The animal and vegetable waste resulting from processes, trade or business as distinct from domestic or sanitary wastes.
- HEARING BOARD: The board appointed according to provisions of section 10.03.901 of this chapter.

INDUSTRIAL WASTES: The wastewater from industrial processes, trade or business as distinct from domestic or sanitary wastes.

MAY: Is permissive (see also definition of Shall).

NATURAL OUTLET: Any outlet, including storm sewers and combined sewer overflows, into a watercourse, pond, ditch, lake or other body of surface or ground water.

PERSON: Any individual, firm, company, association, society, corporation or group.

pH: The logarithm of the reciprocal of the hydrogenous concentration. The concentration is the weight of hydrogen ions, in grams, per liter of solution. Neutral water, for example, has a pH value of 7 and a hydrogen ion concentration of 10<sup>7</sup>.

PRIVY: A small building having a bench with holes through which the user may defecate or urinate.

PROPERLYThe wastes from the preparation, cooking and<br/>dispensing of food that have been shredded to<br/>such a degree that all particles will be carried<br/>freely under the flow conditions normally<br/>prevailing in public sewers, with no particle<br/>greater than one-half inch  $(1/2^{"})$  (1.27<br/>centimeters) in any dimension.

PUBLIC SEWER: A common sewer controlled by a governmental agency or public utility.

RESIDENTIAL FLOWS: The flow strengths and flow volume set out in the addendum hereto.

RESIDENTIAL,Any industrial or commercial user who dis-<br/>charges waste into the system requiring higher<br/>than normal biochemical oxygen demand, or<br/>greater than normal total suspended solids.

- SANITARY SEWER: A sewer that carries liquid and water carried wastes from residences, commercial buildings, industrial plants and institutions, together with minor quantities of ground, storm and surface waters that are not admitted intentionally.
- SEPTIC SYSTEM: An on site underground wastewater treatment system consisting of a septic tank wherein solid wastes settle and a drainfield or leach field that allows liquid wastewater to percolate into the native soils.
- SEWAGE: The spent water of a community. The preferred term is "wastewater".
- SEWER: A pipe or conduit that carries wastewater or drainage water.
- SHALL: Is mandatory (see also definition of May).
- SLUG: Any discharge of water or wastewater which in concentration of any given constituent or in quantity of flow exceeds for any period of duration longer than fifteen (15) minutes more than five (5) times the average twenty four (24) hour concentration or flows during normal operation and shall adversely affect the collection system and/or performance of the wastewater treatment works.
- STORM DRAINA drain or sewer for conveying water,(Sometimes Termed<br/>STORM SEWER):groundwater, subsurface water, or unpolluted<br/>water from any source.
- SUPERINTENDENT: The superintendent of wastewater facilities, and/or of wastewater treatment works, and/or of water pollution control of the city, or his authorized deputy, agent or representative.
- SUSPENDED SOLIDS: Total suspended matter that either floats on the surface of, or is in suspension in water, wastewater or other liquids, and is removable by laboratory filtering as prescribed in standard methods for the examination of water and

10.03.101

wastewater and referred to as nonfilterable residue.

SYSTEM: The sewer, wastewater or combined wastewater and storm or surface water facilities of the city.

UNPOLLUTED WATER: Water of quality equal to or better than the effluent criteria in effect or water that would not cause violation of receiving water quality standards and would not be benefited by discharge to the sanitary sewers and wastewater treatment facilities provided.

- WASTEWATER: The spent water of a community. From the standpoint of source, it may be a combination of the liquid and water carried wastes from residences, commercial buildings, industrial plants and institutions, together with any groundwater, surface water and stormwater that may be present.
- WASTEWATER The structures, equipment and processes FACILITIES: required to collect, carry away, and treat domestic and industrial wastes and dispose of the effluent.

WASTEWATER An arrangement of devices and structures for TREATMENT WORKS: An arrangement of devices and structures for treating wastewater, industrial wastes and sludge. Sometimes used as synonymous with "waste treatment plant" or "wastewater treatment plant" or "water pollution control plant".

WATERCOURSE: A natural or artificial channel for the passage of water either continuously or intermittently.

WINTERTIME FLOW RATES: The average monthly flows contributed to the sewer system based upon the average monthly culinary water usage meter readings for the months of January, February and March. (Ord. 2005-14, 2005; amd. Ord. 2009-08, 2009)

#### PART 2. USE OF PUBLIC SEWERS REQUIRED

10.03.201: DEPOSIT OF WASTE IN UNSANITARY MANNER UNLAWFUL: It is unlawful for any person to place, deposit or permit to be deposited in any unsanitary manner in or upon public or private property within the city or in any area under the jurisdiction of the city, any human or animal excrement, garbage or other objectionable waste. (Ord. 2005-14, 2005)

10.03.202: DISCHARGE OF WASTE INTO NATURAL OUTLET UNLAWFUL: It is unlawful to discharge into any natural outlet within the city, or in any area under the jurisdiction of the city, any sewage or other polluted waters, except where suitable treatment has been provided in accordance with subsequent provisions of this chapter. (Ord. 2005-14, 2005)

#### 10.03.203: CONSTRUCTION OF PRIVY OR CESSPOOL PROHIBITED: It is unlawful to construct or maintain any privy, privy vault, cesspool or other facility intended or used for the disposal of wastewater, with the limited exception of a private septic system which may be allowed for the limited circumstances expressly authorized herein. (Ord. 2005-14, 2005)

#### 10.03.204: CONNECTION TO PUBLIC SEWER REQUIRED<sup>1</sup>:

- (1) The owner of real property on which will be constructed a house or other building to be used for human occupancy, situated within the city, shall be required to connect to the public sewer system prior to occupancy, provided a public sewer system is within three hundred feet (300') of the owner's property line.
- (2) The owner of real property located within the city on which is already constructed a house or other building used for human occupancy that is presently connected to a private septic system, shall be required to connect to the public sewer system, at the owner's expense, within two (2) years of the city giving notice to do so, provided that a public sewer system is within three hundred feet

<sup>1.</sup> See also subsection 7.01.102(2) of this code.

(300') of the owner's sewer connection point of the building unless the sewer main is not adjacent to the owner's property.

(a) Unless mandated by state or federal law, an exception to the requirement for existing homes to connect to the public sewer shall be allowed for single-family residential real property if all of the following conditions are found to exist:

(i) The public sewer was not installed low enough to allow the existing home to gravity feed;

 (ii) The existing septic system is currently operating and has no history of problems;

(iii) The septic drainfield soil is a type that would allow for the continued effective use of the existing septic system;

(iv) The existing septic system poses a low risk to groundwater and/or surface water resources;

(v) There are geological or other exigent circumstances that make the cost of connecting to the public sewer unreasonably high when compared to average connection costs; and

(vi) The existing home is not part of a special assessment area for public sewer.

- (3) Connection to the public sewer system must be in a manner consistent with the city's sewer master plan.
- (4) In the event the owner of real property claims inability to connect to the sewer system within the required time due to severe economic hardship, the owner may file a petition for relief with the city's land use appeal authority based upon one or more of the following grounds:

 (a) The owner or spouse is currently on active military duty status out of the area;

(b) The owner is currently receiving federal or state public assistance, such as temporary assistance for needy families (TANF), supplemental security income (SSI), food stamps, or state general public assistance; (c) The property owner's current monthly income is less than one hundred fifty percent (150%) of the United States poverty level as defined by the most recently revised poverty income guidelines published by the United States department of health and human services; or

(d) Other exigent circumstances, such as extraordinary medical expenses or loss of employment.

(5) In the event the appeal authority makes a finding that the property owner is unable to connect to the sewer system due to severe economic hardship as defined in this section, then the appeal authority shall grant a onetime extension of time of an additional two (2) years for the property owner to connect to the sewer system as required by this section. (Ord. 2012-03, 2012)

10.03.205: SEWER CONNECTION FEES: A sewer connection fee of five hundred doltars (\$500.00), together with any other applicable fees, including impact fees, permit fees, and inspection fees, shall be collected by the building department before commencement of construction of a building used for human occupancy. (Ord. 2009-04, 2009)

10.03.206: SEWER CONNECTION; INSTALLATION AND INSPECTION FEE: With respect to actual connection of each owner's house or building to the public sewer system (private service line), the actual connection may be performed through services provided by a special improvement district if one is created by the city. (Ord. 2009-04, 2009)

10.03.207: FAILURE TO CONNECT TO PUBLIC SEWER SYSTEM: Failure to connect to the public sewer system as required herein shall be unlawful and shall constitute a class C misdemeanor. In addition to any other legal or equitable remedies that may be available to the city, the city may:

- Impose penalties for violations of this chapter under the city administrative code enforcement program; and/or
- (2) Pursuant to Utah Code Annotated section 10-8-38, cause the water to be shut off from the premises until the owner has hooked up to the sewer at the owner's own expense. (Ord. 2009-04, 2009)

#### PART 3. PRIVATE ON SITE WASTEWATER TREATMENT SYSTEMS

#### 10.03.301: PRIVATE SEPTIC SYSTEMS; WHEN PERMITTED:

- (1) Where a public sewer system is not available to a currently platted lot under the provisions of section 10.03.204 of this chapter, the building sewer may be connected to a private septic system complying with the provisions of this chapter until such time a public sewer system is installed as provided in section 10.03.204 of this chapter.
- Private septic systems are not permitted in any new subdivisions. (Ord. 2009-08, 2009)

#### 10.03.302: PRIVATE ADVANCED ON SITE WASTEWATER TREAT-MENT SYSTEMS; WHEN PERMITTED:

- (1) Wherever a private septic system is allowed, a private advanced on site wastewater treatment system shall also be allowed as an alternative to the private septic system.
- (2) Private advanced on site wastewater treatment systems are permitted as an approved sewer system on new subdivision lots within the Kayenta Wash natural drainage area provided:

(a) The effluent from the treatment systems contain total nitrogen concentrations to twenty milligrams per liter (20 mg/l) or less as nitrogen;

(b) The subdivision densities are at least one acre per equivalent residential unit, unless the systems are equipped to reuse water for subsurface or drip irrigation, in which case the subdivision densities must be at least one-half (1/2) acre per equivalent residential unit;

(c) The treatment systems serve no more than one property;

(d) The treatment systems are continuously monitored by electronic telecommunication technologies and maintained by a certified technician who visually inspects the unit at least once per year;

(e) The treatment systems are approved by the city engineer, state of Utah and Southwest Utah public health department;

(f) The treatment systems' discharges are subsurface through a drainfield or irrigation system that must be a subsurface or drip system as approved by the state of Utah; and

(g) The treatment systems are installed by a manufacturer certified installer. (Ord. 2009-08, 2009)

10.03.303: CONSTRUCTION OF PRIVATE DISPOSAL SYSTEM; PERMIT REQUIRED: Before commencement of construction of a private septic or advanced on site wastewater treatment system, the owner shall first obtain a written permit issued by the city's building department. The application for such permit shall be made on a form furnished by the city, which the applicant shall supplement by any plans, specifications, and other information as are deemed necessary. A permit and inspection fee shall be paid to the city at the time the application is filed. (Ord. 2009-08, 2009)

10.03.304: USE OF PRIVATE SYSTEM; INSPECTION AND PERMIT: Permission to use a private septic or advanced on site wastewater treatment system shall not become authorized until the installation is completed in compliance with the approved plans in conformity with all state and local codes and this chapter. Authorized city employees shall be allowed to inspect the work at any stage of construction. The applicant for the permit shall notify the building department when the work is ready for final inspection, and before any underground portions are covered. The inspection shall be made within a reasonable time after the receipt of notice by the building department. (Ord. 2009-08, 2009)

10.03.305: **PERMIT ISSUANCE; REQUIREMENTS:** The type, capacities, location, and layout of a private septic or advanced on site wastewater treatment system shall comply with all requirements of the Southwest Utah public health department. No permit shall be issued for any private septic or advanced on site wastewater treatment system employing subsurface soil absorption facilities where the area of the lot is less than ten thousand (10,000) square feet. No septic tank or cesspool shall be permitted to discharge into any natural outlet. (Ord. 2009-08, 2009)

10.03.306: **PRIVATE SYSTEMS TO BE PROPERLY ABANDONED:** At such time as a property connects to a public sewer or for any other reason abandons a private system with a septic tank, the septic tank

shall be completely removed or filled with earthen materials such that the tank will not become a public safety hazard in the future. (Ord. 2009-08, 2009)

10.03.307: OPERATION AND MAINTENANCE OF PRIVATE SEPTIC OR ADVANCED ON SITE WASTEWATER TREATMENT SYSTEM: When a public sewer is not available, the owner(s) shall operate and maintain a private septic or advanced on site wastewater treatment system in a sanitary manner at all times, and at no expense to the city. (Ord. 2009-08, 2009)

10.03.308: PROVISIONS NOT EXCLUSIVE: No statement contained in this part shall be construed to conflict with, modify, or change any additional requirements that may be imposed by the Utah state department of health now or at any time in the future enacted. (Ord. 2009-08, 2009)

PART 4. SANITARY SEWERS, BUILDING SEWERS AND CONNECTIONS

10.03.401: **PERMITS REQUIRED WHEN:** No unauthorized person shall uncover, make any connections with or opening into, use, alter or disturb any public sewer or appurtenance thereof without first obtaining a written permit from the city. (Ord. 2005-14, 2005)

10.03.402: PERMITS; CLASSIFICATION; APPLICATION FEES: There shall be two (2) classes of sewer connection permits: a) class I for residential and light commercial services; and b) class II for services to heavy commercial establishments producing industrial wastes. "Class I for residential and light commercial services" is defined to include users of less

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than twelve thousand (12,000) gallons of culinary water per month based on wintertime flow rates; and "class II for heavy commercial establishments" is defined to include users with over twelve thousand (12,000) gallons of culinary water use per month based on wintertime flow rates. In either case, the owner or its agent shall make application on a form obtained from the city. The permit application shall be supplemented by any plans, specifications or other information considered pertinent in the judgment of the city water and sewer superintendent. A permit and inspection connection fee of five hundred dollars (\$500.00) for a residential or light commercial sewer permit and one thousand dollars (\$1,000.00) for industrial or heavy commercial sewer permit with culinary water usage greater than five hundred (500) gallons per day, shall be paid to the city at the time the application is filed. (Ord. 2005-14, 2005)

10.03.403: SERVICE USER CHARGE SYSTEM: The city has previously adopted a service user charge system. The rates for connecting to and use on monthly or any other basis may be fixed and amended by resolution or amending ordinance. (Ord. 2005-14, 2005)

- 10.03.404: **RATES:** Until otherwise provided by resolution or an amending ordinance, the rates shall be as follows:
- Residential and light commercial: Twenty three dollars (\$23.00) per month.
- (2) Heavy commercial users of greater than twelve thousand (12,000) gallons of water per month: As determined with exhibit A attached to the ordinance codified herein. Commercial user fees shall be established yearly, based upon measured wastewater flows and strengths. (Ord. 2005-14, 2005)

10.03.405: LIABILITY FOR COSTS AND DAMAGES; OWNER RESPONSIBLE: All costs and expense incidental to the installation and connection of the building sewer from the home or other building to the main sewer line, shall be borne by the owner. The owner shall indemnify the city from any loss or damage that may directly or indirectly be occasioned by the installation of the building sewer. (Ord. 2005-14, 2005) 10.03.406: MAINTENANCE AND REPAIR; OWNER RESPONSIBLE: All repair and/or maintenance of a sewer line from a home or other building to the main sewer line shall be paid for by the owner and not the city. (Ord. 2005-14, 2005)

10.03.407: EXTENSION OF SEWER FROM FRONT BUILDING TO REAR BUILDING; ALLOWED WHEN: A separate and independent building sewer shall be provided for every building; except, where one building stands at the rear of another on an interior lot and no private sewer is available or can be constructed to the rear building through an adjoining alley, court, yard or driveway, the building sewer from the front building may be extended to the rear building and the whole system will be considered as one building sewer. The city does not and will not assume any obligation or responsibility for damage caused by or resulting from any such single connection aforementioned. (Ord. 2005-14, 2005)

10.03.408: OLD BUILDING SEWERS ALLOWED WHEN: Old building sewers may be used in connection with new buildings only when they are examined and tested by the city sewer and water superintendent and found to meet all requirements of this chapter. (Ord. 2005-14, 2005)

10.03.409: CONSTRUCTION MATERIALS AND METHODS TO CONFORM TO CITY REGULATIONS: The size, slope, alignment, materials or construction of all sanitary sewers, including building sewers, and the methods to be used in excavating, placing of the pipe, jointing, testing and backfilling the trench, shall all conform to the requirements of the building and plumbing codes or other applicable rules and regulations of the city and the state. In the absence of any of these code provisions, or in amplification thereof, the materials and procedures set forth in appropriate specifications of the American society for testing and materials (ASTM) and water pollution control federation (WPCF) manual of practice no. 9 shall apply. (Ord. 2005-14, 2005)

10.03.410: ELEVATION OF SEWER: Whenever possible, the building sewer shall be brought from the building at an elevation below the basement floor. In all buildings in which any building drain is too low to permit gravity flow to the public sewer, sanitary sewage carried by such building drain shall be lifted by an approved means and discharged to the building sewer. Where such means are necessary, the owner shall be t

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responsible for all purchases, installations, maintenance and operating costs for such means and their operation. (Ord. 2005-14, 2005)

10.03.411: **DISPOSAL OF POLLUTED SURFACE DRAINAGE:** No person shall make connection of roof downspouts, foundation drains, areaway drains or other sources of surface runoff or ground water to a building sewer or building drain which in turn is connected directly or indirectly to a public sanitary sewer, unless such connection is approved by the city and the state department of health for purposes of disposal of polluted surface drainage. (Ord. 2005-14, 2005)

10.03.412: CONFORMANCE TO BUILDING AND PLUMBING CODES REQUIRED: The connection of the building sewer into the public sewer shall conform to the requirements of the building and plumbing codes or other applicable rules and regulations of the city and the state, or the procedures set forth in appropriate specifications of the ASTM and the WPCF manual of practice no. 9. All such connections shall be made gastight and watertight and any deviation from the prescribed procedures and materials must be approved by the building official before installation. (Ord. 2005-14, 2005)

10.03.413: EXCAVATIONS FOR INSTALLATION; BARRICADES AND LIGHTS: All excavations for building sewer installation shall be adequately guarded with barricades and lights so as to protect the public from hazard. Streets, sidewalks, parkways and other public property disturbed in the course of the work shall be restored in a manner satisfactory to the building official. The city shall have no liability for damage to property or injury to persons from any defective or insufficient guards, signing or lighting, and any person responsible for or placing guards, signing or barricades unequivocally indemnifies the city from any liability, costs and expenses, and any defense costs, including attorney fees, arising from defective or inappropriate warning measures, whether negligent or not. (Ord, 2005-14, 2005)

#### 10.03.414: CHARGES, FEES, ASSESSMENTS AND OTHER CHARGES; OWNER RESPONSIBLE:

(1) Irrespective of whether or not the occupant, user, tenant, cotenant, permissive user or any other person, firm, partnership, corporation or entity is in possession of the premises to which a connection is supplied or service made available, the owner of the premises according to the records of the Washington County recorder shall be legally responsible for the payment of all charges, fees, assessments and any other obligation or liability of a user. If any delinquent sewer connection, sewer user charge, repairs, maintenance or any other obligation is imposed against any premises, property, buildings or structures, the obligation shall be deemed by the city as a lien upon all of the real property on which any use is made from a sewer connection. Water service to delinquent property shall be turned off by the city for failure to pay such fee, assessment, charge or liability and will not be turned on again to those premises where a delinquency occurs unless and until all liabilities to the city for sewer service are paid in full.

(2) All payments for utilities, whether water or sewer (and, if added, electrical power) shall be credited first to sewer assessments, fees and charges. (Ord. 2005-14, 2005)

10.03.415: INTEREST CHARGE ON DELINQUENT OR PAST DUE CONNECTION FEES: The mayor and city council may, at their discretion and in circumstances that are equitable, impose interest at the highest legal rate (but not to exceed  $1\frac{1}{2}$  percent per month) on all past due accounts either for connection fees, user charges, maintenance, repair or any other charge which is provided for, imposed or authorized by this chapter. (Ord. 2005-14, 2005)

#### PART 5. ANNUAL REVIEW OF OPERATION COSTS

10.03.501: **REVIEW AND REVISION OF USER CHARGE SYSTEM:** The city should periodically review the total annual cost of operation and maintenance, long term debt service relating to the wastewater treatment works, as well as each user's wastewater contribution percentage, and revise the user charge system as necessary, to assure equity of the system established herein and to assure that sufficient funds are obtained from the city's user system established herein and to assure that sufficient funds are obtained from the city's user charge system to: a) adequately operate and maintain the wastewater treatment works; and b) cover said debt service. The city will apply excess revenues collected from a class of users to the costs of operation and maintenance attributable to that class for the next year, and adjust this rate accordingly. (Ord. 2005-14, 2005)

10.03.502: USER NOTIFICATION OF REVIEW: Each user will be notified at least annually, in conjunction with a regular bill, of the rate and that portion of the user charges which are attributable to wastewater treatment services. (Ord. 2005-14, 2005)

10.03.503: CALCULATION OF RATES: The city service user charge system shall be used as a formula for calculating rates, fees and charges for connection, use and access to the system. (Ord. 2005-14, 2005)

#### PART 6. USE OF PUBLIC SEWER

10.03.601: DISCHARGE OF UNPOLLUTED WATER TO SEWER: No person shall discharge or cause the discharge of any unpolluted waters such as storm water, surface water, ground water, roof runoff, subsurface drainage or cooling water to any sewer, except storm water runoff from limited areas, which storm water may be polluted at times and may not be discharged to the sanitary sewer except by permission of the city and state department of health. (Ord. 2005-14, 2005)

10.03.602: STORM WATER DISCHARGE: Storm water, other than that exempted under section 10.03.601 of this chapter, and all other unpolluted drainage, shall be discharged to such sewers as are specifically designated as combined sewers or storm sewers, or to natural outlets approved by the city and the state department of health. Unpolluted industrial cooling water or process waters shall also be discharged to a storm sewer, combined sewer or natural outlet. (Ord. 2005-14, 2005)

# 10.03.603: DISCHARGE OF CERTAIN WASTES TO PUBLIC SEWERS PROHIBITED:

(1) No person shall discharge or cause to be discharged any of the following described water or wastes to any public sewers: a) any gasoline, benzene, naphtha, fuel oil or other flammable or explosive liquid, solid or gas; b) any waters containing toxic or poisonous solids, liquids or other wastes, to contaminate or interrupt any sewage treatment process, constitute a hazard in or have an adverse effect on the waters receiving any discharge from the works; c) any waters or wastes having a pH lower than 5.5 or having any

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other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the wastewater works; and d) solid or viscous substances in quantities or of such size capable of causing obstruction to the flow in sewers, or other interference with the proper operation of the wastewater facilities such as, but not limited to, ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, underground garbage, whole blood, paunch manure, hair and fleshings, entrails and paper dishes, cups, milk containers, etc., either whole or ground by garbage grinders.

(2) Each user which discharges any toxic pollutants which cause an increase in the cost of managing the effluent or the sludge of the city treatment works shall pay for such increased costs. (Ord. 2005-14, 2005)

DISCHARGE OF CERTAIN WASTES TO PUBLIC SEWERS 10.03.604: LIMITED: The following described substances, materials, waters or wastes shall be limited in discharges to the system to concentrations or quantities which will not harm either the sewers, the sludge of any municipal system, the wastewater treatment process or equipment, will not have an adverse effect on the receiving stream, or will not otherwise endanger lives, public property or constitute a nuisance. The city may set limitations more severe than the limitations established in the regulations below if such more severe limitations are necessary to meet the above objectives. In setting these requirements, the city will give consideration to such factors as the quantity of subject waste in relation to flows and velocities in the sewers, materials of construction of the sewers, the wastewater treatment process employed, capacity of the sewers, the wastewater treatment process employed, capacity of the wastewater treatment plant and other pertinent factors. The limitations or restrictions on materials or characteristics of waste or wastewaters discharged to the sanitary sewer which shall not be violated without approval of the city are as follows:

- (1) Wastewater having a temperature higher than one hundred fifty degrees Fahrenheit (150°F) (65° Celsius);
- (2) Wastewater containing more than twenty five milligrams (25 mg/l) per liter of petroleum, oil, nonbiodegradable cutting oils or products of mineral oil origin;
- (3) Wastewater from industrial plants containing floatable cils, fat or grease;

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- (4) Any garbage that has not been properly shredded. Garbage grinders may be connected to sanitary sewers from homes, hotels, institutions, restaurants, hospitals, catering establishments or similar places where garbage originates from the preparation of food in commercial kitchens or the purpose of consumption on the premises;
- (5) Any waters or wastes containing iron, chromium, copper, zinc and similar objectionable or toxic substances to such degree that any such material received in the composite wastewater at the wastewater treatment works exceeds the limits established by the state for such materials;
- (6) Any waters or wastes containing odor producing substances exceeding limits which may be established by the state;
- (7) Any radioactive wastes or isotopes of such half life of concentration as may exceed limits established in compliance with applicable state or federal regulations;
- Quantities of flow, concentrations, or both, which constitute a "slug", as defined in section 10.03.101 of this chapter;
- (9) Water or wastes containing substances which are not amenable to treatment or reduction by the wastewater treatment processes employed or are amenable to treatment only to such degree that the wastewater treatment plant effluent cannot meet the requirements of other agencies having jurisdiction over discharge to the receiving waters;
- (10) Any water or wastes which, by interaction with other water or wastes in the public sewer system, release obnoxious gases, form suspended solids which interfere with the collection system, or create a condition deleterious to structures and treatment processes. (Ord. 2005-14, 2005)

10.03.605: **PROHIBITED WASTE FOUND IN SEWER; CITY RESPONSE:** If any water or wastes are discharged, or are proposed to be discharged to the public sewers, which waters contain the substances or possess the characteristics enumerated in section 10.03.604 of this chapter, and which are determined by the city to have a deleterious effect upon the wastewater facilities, processes, equipment or receiving waters, or which otherwise create a hazard to life or constitute a public nuisance, the city may:

- Reject the wastes;
- Require pretreatment to an acceptable condition for discharge to the public sewers;
- (3) Require control over the quantities and rates of discharge and/or wastes not covered by existing taxes or sewer charges under the provisions of section 10.03.607 of this chapter. If the city permits the pretreatment or equalization of waste flows, the design and installation of the plants and equipment shall be subject to the review and approval of the city and the state department of health;
- (4) A plot plan of sewers of the user's property showing sewer and pretreatment facility location;
- (5) Details of wastewater pretreatment facilities;
- (6) Details of systems to prevent and control the losses of materials through spills to the municipal sewer. (Ord. 2005-14, 2005)

10.03.606: ANALYSIS OF WATERS AND WASTES: All measurements, tests and analyses of the characteristics of waters and wastes to which reference is made in this chapter shall be determined in accordance with the latest edition of "Standard Methods For The Examination Of Water And Wastewater", published by the American Public Health Association. Sampling methods, location, times, durations and frequencies are to be determined on an individual basis subject to approval by the city. (Ord. 2005-14, 2005)

10.03.607: PROVISIONS NOT EXCLUSIVE: No statement contained herein shall be construed as preventing any special agreement or arrangement between the city and any industrial concern whereby an industrial waste of unusual strength or character may be accepted by the city for treatment. (Ord. 2005-14, 2005)

#### PART 7. DAMAGE TO SYSTEM

10.03.701: UNLAWFUL: No person shall maliciously, willully or negligently break, damage, destroy, uncover, deface or tamper with any structure, appurtenance or equipment which is a part of the

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wastewater facilities (the system). Any person violating this provision shall be subject to immediate arrest under charge of disorderly conduct. (Ord. 2005-14, 2005)

#### PART 8. POWERS AND AUTHORITY OF INSPECTIONS

10.03.801: INSPECTION OF BUILDING AND STRUCTURES: Duly authorized employees of the city bearing proper credentials and identification shall be permitted to enter all properties and buildings or structures for the purpose of inspection, observation, measurement, sampling and testing pertinent to discharge into the system in accordance with the provisions of this chapter. (Ord. 2005-14, 2005)

10.03.802: INFORMATION OF INDUSTRIAL PROCESSES: Duly authorized city employees are authorized to obtain information concerning industrial processes which have a direct bearing on the kind and source of discharge to the system. Industrial users may withhold information when they have established that the revelation of said information to the public might result in an advantage to competitors. (Ord. 2005-14, 2005)

10.03.803: INTERCEPTORS REQUIRED WHEN: Grease, oil and sand interceptors shall be provided when liquid wastes containing floatable grease in excessive amounts, as specified in subsection 10.03.604(3) of this chapter, or any flammable wastes, sand or other harmful ingredients are introduced into public sewers; except that such interceptors shall not be required for private living quarters or dwelling units. All interceptors shall be of a type and capacity approved by the state plumbing code, and shall be located as to be readily and easily accessible for cleaning and inspection. In the maintaining of these interceptors, the owners shall be responsible for the proper removal and disposal by appropriate means of the captivated material and shall maintain records of the dates and means of disposal which are subject to review by the city. Any removal and means of disposal are subject to review by the city. Any removal and hauling of the collected materials not performed by owner's personnel must be performed by currently licensed waste disposal firms. (Ord. 2005-14, 2005)

#### 10.03.804: MAINTENANCE OF PRETREATMENT OR FLOW EQUALI-ZATION FACILITIES: Where pretreatment or flow equalization facilities are provided or required for any water or wastes, they shall be maintained continuously in satisfactory and effective operation by the owner at its expense. (Ord. 2005-14, 2005)

10.03.805: OBSERVATION, SAMPLING AND MEASUREMENT OF WASTES; STRUCTURE TO BE INSTALLED BY OWNER: When determined necessary by the city, the owner of any property serviced by a building sewer carrying industrial wastes shall install a suitable structure, together with such necessary meters and other appurtenances, in the building sewer to facilitate observation, sampling and measurement of the wastes. Such structures, when required, shall be accessibly and safely located, and shall be constructed in accordance with plans approved by the city. The structure shall be installed by the owner at his expense, and shall be maintained by him so as to be safe and accessible at all times. (Ord. 2005-14, 2005)

10.03.806: INFORMATION REQUIRED TO DETERMINE COMPLI-ANCE: The city may require any user of sewer services to provide information needed to determine compliance with this chapter. These requirements may include:

- Wastewater discharge peak rate and volume over a specified item period;
- (2) Chemical analysis of wastewaters;
- Information on raw materials, processes and products affecting wastewater volume and quality;
- (4) Quantity and disposition of specific liquid, sludge, oil, solvent or other materials important to sewer control. (Ord. 2005-14, 2005)

10.03.807: INJURY TO EMPLOYEE OR DAMAGE TO PROPERTY; CITY HELD HARMLESS: While performing the necessary work on private properties referred to in section 10.03.801 of this chapter, duly authorized employees of the city shall observe all safety rules applicable to the premises established by any occupant or owner, and the city shall be held harmless for injury or death to the city employees, and the occupant shall indemnify the city against loss or damage to its property by city employees and against liability claims and demands for personal injury or property damage asserted against the owner growing out of the gauging and sampling operation, except as such may be caused by negligence or failure of the owner to maintain safe conditions as required by section 10.03.805 of this chapter. (Ord. 2005-14, 2005)

#### 10.03.808: CITY EMPLOYEES ALLOWED ON PRIVATE PROPERTY

WHEN: Duly authorized employees of the city bearing proper credentials and identification shall be permitted to enter all private properties through which the city holds a duly negotiated easement for the purposes of, but not limited to, inspection, observation, measurement, sampling, repair and maintenance of any portion of the wastewater facilities lying within the easement. All entry and subsequent work, if any, on the easement, shall be done in full accordance with the terms of the duly negotiated easement pertaining to the private property involved. (Ord. 2005-14, 2005)

#### PART 9. HEARING BOARD

10.03.901: ESTABLISHED: A hearing board shall be appointed as needed for arbitration of differences between the city and sewer users on matters concerning interpretation and execution of the provisions of this chapter by the city. The board shall meet once every three (3) months unless their services are determined to be necessary more often by the city engineer. One member shall be a representative of a local commercial enterprise. One member shall be a residential user selected at large for their interest in accomplishing the objectives of this chapter. As the board deems necessary and upon concurrence by the city, a qualified attorney may be consulted by the board to a specific case. (Ord. 2005-14, 2005)

#### PART 10. VIOLATION; PENALTY

10.03.1001: NOTICE TO OFFENDER: Any person found to be violating any provision of this chapter, except for section 10.03.204 of this chapter, and part 6 of this chapter, shall be served by the city with written notice stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within

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the period of time stated in such notice, permanently cease all violations, (Ord. 2005-14, 2005)

10.03.1002: **PENALTY:** Any person who fails to correct a noticed violation within the time limit provided for in the notice shall be guilty of a class C misdemeanor and, upon conviction thereof, shall be fined in the amount of two hundred ninety nine dollars (\$299.00) for each violation. Each day in which any such violation shall continue shall be deemed a separate offense. (Ord. 2005-14, 2005)

10.03.1003: OFFENDER LIABLE FOR EXPENSE, LOSS OR DAMAGE: Any person violating any of the provisions of this chapter shall become liable to the city for any expense, loss or damage occasioned the city by reason of such violation. (Ord. 2005-14, 2005) Appendix B

Sewer Map

2016 Ivins City SSMP





Ivins City Sewer Collection Map

Public Works Department GIS Mapping (435) 634-0689

Date: 6/15/2015

Appendix C

**Preventive Maintenance Forms** 

Pump No. G.P.M	1 S/N:				Pump T.D.H.	No. 2	2 5/N:_	
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Discharge Gauge	1.	1	-					
R.P.M.					1 1			
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# SEWER MANHOLE INSPECTION REPORT

#### IVINS CITY SANITARY SEWER OVERFLOW REPORT

Public Street       Private (Residence)       Private (Business)       City-Owned       Other         B. SPILL TIME LOG         Start of Spill:       Date:       Time:       A.M.         City Notified:       Date:       Time:       A.M.         Supervisor Notified:       Date:       Time:       A.M.         Operators Dispatched:       Date:       Time:       A.M.         Operators Arrival:       Date:       Time:       A.M.         Spill Stopped:       Date:       Time:       A.M.         Spill Contained:       Date:       Time:       A.M.         Spill Site:       Gravity Sewer       Force Main       Manhole       Building/Structure       Lift Station         Other Sewer System Structure       Other       Other       Approximate Spill Volume (gallons):       Coston of Blockage:       Main       Lateral       Private Lateral       Other         SSO Cause(s):       Blocked Sewer       Pipe Faihure       Mechanical Malfunction       Vandalism         Construction of Other U	455:	City:	State:	Zip:
B. SPILL TIME LOG Start of Spill: Date: Time: A.M City Notified: Date: Time: A.M Supervisor Notified: Date: Time: A.M Operators Dispatched: Date: Time: A.M Operators Arrival: Date: Time: A.M Operators Arrival: Date: Time: A.M Spill Stopped: Date: Time: A.M Spill Contained: Spill Spill Contained: Spill Spill Contained: Mathematica Mathema	olic Street 🛛 🗆 Private (Residence	e) 🛛 Private (Busines	s) 🛛 City-Owned	□Other
Start of Spill:       Date:       Time:       A.M.         City Notified:       Date:       Time:       A.M.         Supervisor Notified:       Date:       Time:       A.M.         Operators Dispatched:       Date:       Time:       A.M.         Operators Arrival:       Date:       Time:       A.M.         Operators Arrival:       Date:       Time:       A.M.         Spill Stopped:       Date:       Time:       A.M.         Spill Contained:       Date:       Time:       A.M.         Spill Stet:       Gravity Sewer       Force Main       Manhole       Building/Structure       Lift Station         C.       SPILL DESCRIPTION/CAUSE	PILL TIME LOG			
City Notified:       Date:       Time:       A.M.         Supervisor Notified:       Date:       Time:       A.M.         Operators Dispatched:       Date:       Time:       A.M.         Operators Arrival:       Date:       Time:       A.M.         Spill Stopped:       Date:       Time:       A.M.         Spill Stopped:       Date:       Time:       A.M.         Spill Contained:       Date:       Time:       A.M.         Spill Cleaned Up:       Date:       Time:       A.M.         Spill Cleaned Up:       Date:       Time:       A.M.         Spill Site:       Gravity Sewer       Force Main       Manhole       Building/Structure       I.ft Station         Other Sewer System Structure       Other       Other       Approximate Spill Volume (gallons):       Other         Location of Blockage:       Main       Lateral       Private Lateral       Other         SSO Cause(s):       Blocked Sewer       Pipe Failure       Mechanical Malfunction       Vandalism         Construction of Other Utilities       Natural Disaster       Other       Other         Description:       If causes included blocked sewer, indicate if any of the following apply:       If causes included blocked sewer, indicate if any of	of Spill: Date:	5	Fime:	□ A.M. □ P.N
Supervisor Notified:       Date:       Time:       A.M.         Operators Dispatched:       Date:       Time:       A.M.         Operators Arrival:       Date:       Time:       A.M.         Spill Stopped:       Date:       Time:       A.M.         Spill Stopped:       Date:       Time:       A.M.         Spill Contained:       Date:       Time:       A.M.         Spill Cleaned Up:       Date:       Time:       A.M.         Spill Cleaned Up:       Date:       Time:       A.M.         Spill Site:       Gravity Sewer       Force Main       Manhole       Building/Structure       Lift Station         Other Sewer System Structure       Other       Other       Other       A.M.         Sportium of Blockage:       Main       Lateral       Private Lateral       Other         SSO Cause(s):       Blocked Sewer       Pipe Failure       Mechanical Malfunction       Vandalism         Construction of Other Utilities       Natural Disaster       Other         Description:       If causes included blocked sewer, indicate if any of the following apply:       If causes included blocked sewer, indicate if any of the following apply:	Notified: Date:	1	Time:	□ A.M. □ P.N
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Operators Arrival:       Date:       Time:       A.M.         Spill Stopped:       Date:       Time:       A.M.         Spill Contained:       Date:       Time:       A.M.         Spill Cleaned Up:       Date:       Time:       A.M.         Spill Cleaned Up:       Date:       Time:       A.M.         Spill Cleaned Up:       Date:       Time:       A.M.         C. SPILL DESCRIPTION/CAUSE       Time:       A.M.         Spill Site:       Gravity Sewer       Force Main       Manhole       Building/Structure       Lift Station         Other Sewer System Structure       Other       Other       Additional Structure       Other         Approximate Spill Volume (gallons):       Location of Blockage:       Main       Lateral       Private Lateral       Other         SSO Cause(s):       Blocked Sewer       Pipe Failure       Mechanical Malfunction       Vandalism         Construction of Other Utilities       Natural Disaster       Other         Description:	tors Dispatched: Date:	1	Fime:	□ A.M. □ P.N
Spill Stopped:       Date:       Time:       A.M.         Spill Contained:       Date:       Time:       A.M.         Spill Cleaned Up:       Date:       Time:       A.M.         Spill Cleaned Up:       Date:       Time:       A.M.         C. SPILL DESCRIPTION/CAUSE       Image: Cleaned Up:       Date:       Image: Cleaned Up:       A.M.         C. SPILL DESCRIPTION/CAUSE       Spill Site:       Gravity Sewer       Force Main       Manhole       Building/Structure       Lift Station         I Other Sewer System Structure       I Other       Other       Other       Approximate Spill Volume (gallons):         Location of Blockage:       Main       Lateral       Private Lateral       Other         SSO Cause(s):       Blocked Sewer       Pipe Failure       Mechanical Malfunction       Vandalism         I Construction of Other Utilities       INatural Disaster       Other       Other         Description:       Image: Cleaned blocked sewer, indicate if any of the following apply:       Image: Cleaned blocked sewer, indicate if any of the following apply:	tors Arrival: Date:	5	lime:	□ A.M. □ P.N
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Spill Cleaned Up:       Date:       Time:       I A.M         C. SPILL DESCRIPTION/CAUSE         Spill Site:       Gravity Sewer       Force Main       Manhole       Building/Structure       Lift Station         Image: Other Sewer System Structure       Image: Other       Other         Approximate Spill Volume (gallons):       Image: Other       Other         Location of Blockage:       Main       Lateral       Private Lateral       Other         SSO Cause(s):       Blocked Sewer       Pipe Failure       Mechanical Malfunction       Vandalism         Image: Construction of Other Utilities       Instaral Disaster       Other         Description:       Image: Construction of Other Utilities       Image: Construction of Other         If causes included blocked sewer, indicate if any of the following apply:       Image: Construction of the community of the following apply:	Contained: Date:	5	Fime:	□ A.M. □ P.N
C. SPILL DESCRIPTION/CAUSE Spill Site: Gravity Sewer Force Main Manhole Building/Structure Lift Station Other Sewer System Structure Other Approximate Spill Volume (gallons): Location of Blockage: Main Lateral Private Lateral Other SSO Cause(s): Blocked Sewer Pipe Failure Mechanical Malfunction Vandalism Construction of Other Utilities Natural Disaster Other Description: If causes included blocked sewer, indicate if any of the following apply:	Cleaned Up: Date:	1	Time:	🗆 A.M. 🗆 P.N
Approximate Spill Volume (gallons):         Location of Blockage:       Main       Lateral       Private Lateral       Other         SSO Cause(s):       Blocked Sewer       Pipe Failure       Mechanical Malfunction       Vandalism         Construction of Other Utilities       Natural Disaster       Other         Description:       If causes included blocked sewer, indicate if any of the following apply:	Site: Gravity Sewer Ford	:e Main □ Manhole acture	Building/Structure	Lift Station
Approximate spin volume (galons).         Location of Blockage:       Main       Lateral       Private Lateral       Other         SSO Cause(s):       Blocked Sewer       Pipe Failure       Mechanical Malfunction       Vandalism         Construction of Other Utilities       Natural Disaster       Other         Description:       If causes included blocked sewer, indicate if any of the following apply:	Other Sewer System Stru	cture	Other	
SSO Cause(s):       Blocked Sewer       Pipe Failure       Mechanical Malfunction       Vandalism         Construction of Other Utilities       Natural Disaster       Other         Description:       If causes included blocked sewer, indicate if any of the following apply:	ion of Blockage:	□ Latera]	Private Lateral	Other
Construction of Other Utilities  Natural Disaster Description:  If causes included blocked sewer, indicate if any of the following apply:  Filterenergies of the comparison	Cause(s):  Blocked Sewer	□ Pipe Failure □ M	echanical Malfunction	Vandalism
Description: If causes included blocked sewer, indicate if any of the following apply:	astruction of Other Utilities	□Natural Disaster	Other	
If causes included blocked sewer, indicate if any of the following apply:	iption:			
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The second states are said to a second state and states are said to a second state and states are said to a second state and states are said to a second state are s	ses included blocked sewer, indica	te if any of the following	apply:	
L Flow exceeded the capacity of the sewer pipe	w exceeded the capacity of the sev	ver pipe		

D. SPILL RESPONSE	
Spill Response Activities: 🛛 Stopped the cause of SSO	Requested additional resources
Inspection 🛛 Contained the SSO 🖓 Flushed and clear	ned the area 🛛 Disinfected the site (where appropriate)
Other:	
Other Comments:	
Name of impacted waters (if applicable):	
Comments from visual inspection of impacted waters:	
Were health warnings posted (if applicable)?	Was the Washington County Health Department

□ Yes □ No □ N/A

contacted (if applicable)? □ Yes □ No □ N/A

#### IVINS CITY SANITARY SEWER OVERFLOW REPORT

#### E. SPILL CLASSIFICATION

Was the backup caused by a private lateral? 🛛 Yes 🖓 No

If "Yes" then the spill is neither a Class 1 nor Class 2 SSO

- If "No" then the spill is either a Class 1 or Class 2 SSO

Check the following that apply:

Spill affected more than five structures

A public, commercial, or industrial structure was affected

□ Spill posed a possible public health risk to the general public

□ Spill volume exceeded 5,000 gallons (excluding those in single private structures)

Spill volume discharged to waters of the State

 If one or more of the above are checked and the backup was not caused by a private lateral, the spill is a Class 1 SSO.

- If none of the above are checked and the backup was not caused by a private lateral, the spill is a Class 2 SSO.

Based on the information above, what is the classification of the spill?

Class 1 SSO Class 2 SSO Neither (private lateral)

F. COMMENTS	
Use this area to record comments made by the general public, o	ther agencies, property owners, etc.
Name:	Phone:
Category of commenter (i.e. general public, private property ov	vner):
Comments:	
Name:	Phone:
Category of commenter (i.e. general public, private property ov	vmer):
Comments:	
Name:	Phone:
Category of commenter (i.e. general public, private property ov	vner):
Comments:	