

Sewer System Management Plan

City of Ripon



March 14, 2023

1 Introduction

A Sewer System Management Plan, also called an SSMP, describes the activities that a public wastewater agency uses to manage its wastewater collection system effectively. The development of the City's SSMP was required when the State Water Resources Control Board (SWRCB) adopted the Statewide General Waste Discharge Requirement (GWDR) on May 2, 2006. The GWDR established requirements for operating, maintaining and managing wastewater collection systems. The GWDR applies to all public collection system agencies in California that own and operate collection systems comprised of more than one (1) mile of pipe or sewer lines, which convey untreated wastewater to a publicly owned treatment facility and requires each agency to prepare an SSMP.

2 Goals

GWDR Requirement:

The collection system agency must develop goals to properly manage, operate, and maintain all parts of its wastewater collection system in order to reduce and prevent SSOs, as well as to mitigate any SSOs that occur.

The goal of the SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. This will help to reduce and prevent SSOs, as well as mitigate any SSOs that do occur.

- a. Properly manage, operate and maintain all parts of the wastewater collection system.
- b. Provide adequate capacity to convey peak flows and reduce annual inflow and infiltration in the collection system.
- c. Minimize the frequency of SSOs
- d. Mitigate the impacts of SSOs utilizing safe, practical, proven and effective methods.
- e. Meet all applicable regulatory notification and reporting requirements.

A change log is included in **Appendix A** to document all changes to the SSMP starting with the January 2023 publication.

3 Organization

GWDR Requirement:

The collection system agency's SSMP must identify:

- a. The name of the agency's responsible or authorized representative.*
- b. The names and telephone numbers for management, administrative, and maintenance positions for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation; and*
- c. The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or State Office of Emergency Services (OES)).*

The intent of this section of the SSMP is to identify City staff who are responsible for implementing this SSMP, responding to SSO events, and meeting the SSO reporting requirements. This section also includes the designation of the Authorized Representative to meet SWRCB requirements for completing and certifying spill reports.

3.1 Authorized Representative

The City's Authorized Representative in all wastewater collection system matters is:

Mr. James Pease
Public Works Director
City of Ripon
259 N. Wilma Ave
Ripon, CA 95366

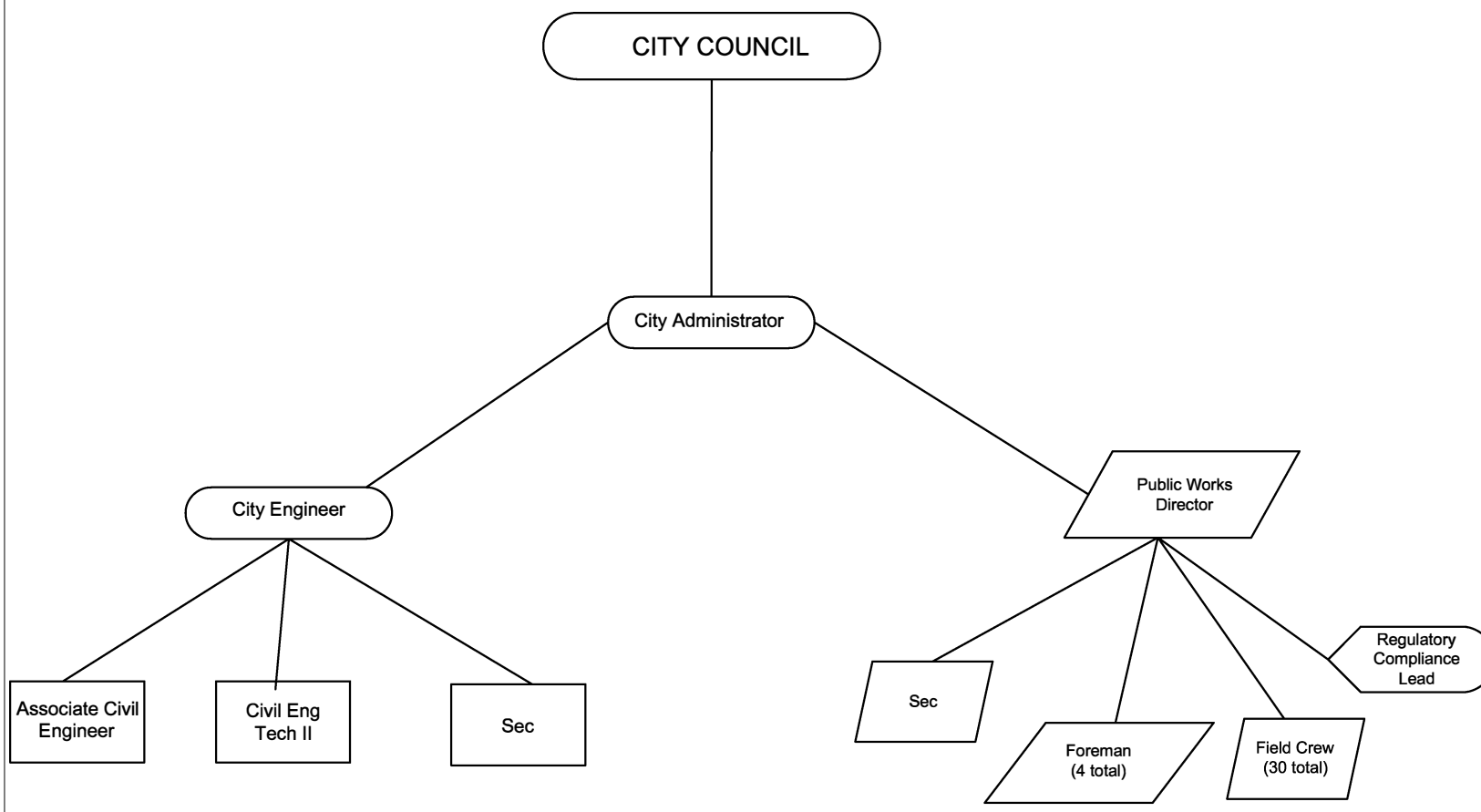
Mr. Pease is authorized to submit verbal, electronic, and written spill reports to the RWQCB, SWRCB, County Health Agency, and OES. Mr. Pease is also authorized to certify electronic spill reports submitted to the SWRCB.

3.2 Organization Chart

Figure 1 is the City of Ripon organization chart that shows the management, administrative, and maintenance positions for implementing specific measures in the SSMP program and lines of authority.

Figure 1

City of Ripon Organizational Chart



3.3 Names, Phone Numbers and Lines of Authority

Table 1 shows the names and telephone numbers for key management, administrative, and maintenance positions for implementing specific measures in the SSMP program. Each of the individuals listed is a registered Legally Responsible Official (LRO).

Table 1 – Legally Responsible Official Contact List

Position	Name	Phone	Email
City Administrator/ City Engineer	Kevin Werner	209-599-0235	kwerner@cityofripon.org
Public Works Director	James Pease	209-599-0225	jpease@cityofripon.org

Below is a summary of the key management, administrative, and maintenance positions.

City Administrator – Administrative officer is responsible for the efficient administration of all the affairs of the City, including overseeing laws and ordinances of the City are duly enforced, analyze the functions, duties and activities of the various departments.

City Engineer – will prepare collection system planning documents, manage the capital improvement program, coordinate development and implementation (specifically Sections 7-8) of the City’s SSMP, and provides support to all parts of operations and maintenance.

Public Works Director – manages field operations and maintenance activities, leads emergency response, investigates and reports SSOs, and trains field crews. Also, participates in the development and coordinates the implementation (specifically Sections 4-6) of the City’s SSMP.

Foreman – assists in the training and supervision of the field crew, issues work orders, and performs skilled work in maintenance and operations of the sewer and stormwater systems.

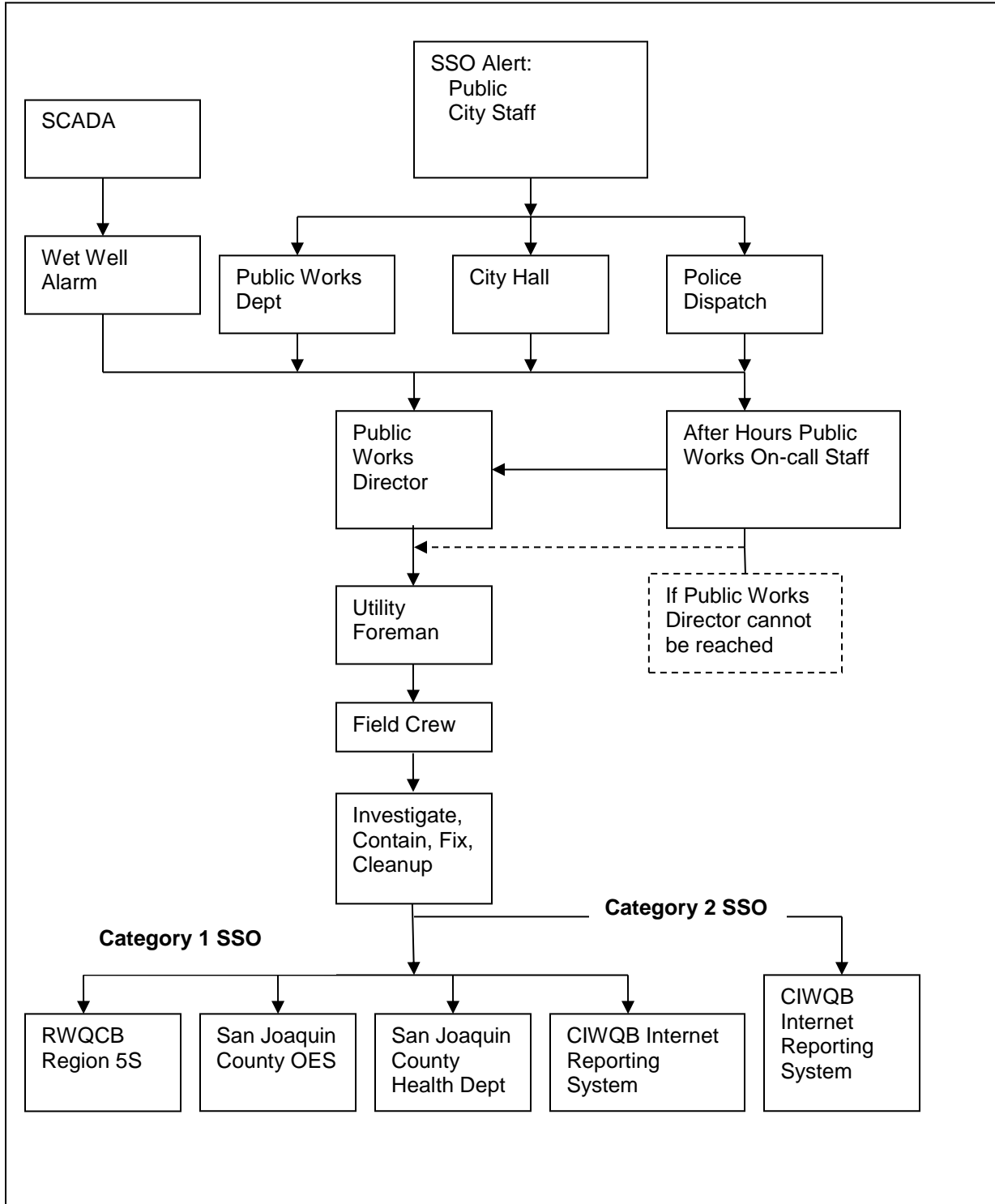
Regulatory Compliance Lead – implements the regulatory action and safety programs of the City, including updates to the SSMP.

Field Crew –will complete preventative maintenance activities, mobilize and respond to notification of stoppages and SSOs (mobilize sewer cleaning equipment, by-pass pumping equipment, and portable generators).

3.4 Chain of Communication for Reporting SSOs

Figure 2 shows the chain of communication for reporting SSOs.

Figure 2
Chain of Communication



4 Legal Authority

GWDR Requirement:

The collection system agency must demonstrate, through collection system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

- a. Prevent illicit discharges into its sanitary sewer system;*
- b. Require that sewers and connections be properly designed and constructed;*
- c. Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;*
- d. Limit the discharge of fats, oils, and grease and other debris that may cause blockages, and*
- e. Enforce any violation of its sewer ordinance.*

The City of Ripon possesses the necessary legal authority to prevent, require, ensure, limit and enforce specific features and operations required by the Order. A summary of the relevant sections of the Ripon Municipal Code (RMC) are shown in **Table 2**. A copy of each section of the code is included in **Appendix B**.

Table 2 – Summary of Legal Authority

Legal Authority To:	Existing Authority
1. Prevent illicit discharges into the wastewater collection system	13.08.040 13.08.050 13.08.090 13.08.100 13.08.130 13.13.020 13.13.030
2. Require that sewers and connections be properly designed and constructed	13.08.020 13.08.120 13.08.130
3. Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency	13.08.040
4. Limit the discharge of fats, oils, and grease and other debris that may cause blockages	13.13.040 13.13.050 13.13.090
5. Enforce any violation of its sewer ordinance	13.13.190 (O)

5 Operation and Maintenance Program

GWDR Requirement:

The SSMP must include those elements listed below that are appropriate and applicable to the collection system agency's system:

- a. Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water conveyance facilities;*
- b. Describe routine preventative operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders;*
- c. Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and system ranking the conditions of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule to implement the short- and long- term plans plus a schedule for developing the funds needed for the capital improvement plan.*
- d. Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and*
- e. Provide equipment and replacement part inventories, including identification of critical replacement parts.*

The intent of this section of the SSMP is to describe the current operation of the City's wastewater collection system. There are five areas of the City's Operations and Maintenance (O&M) program that are required to be described, including:

- Collection System Maps
- Preventative Operation and Maintenance Program
- Rehabilitation and Replacement Plan
- Training
- Contingency Equipment and Replacement Inventories

5.1 Collection System Map

Included in **Appendix C** is the City of Ripon sanitary sewer system map and storm drain map. The maps are updated electronically whenever a new subdivision is added or changes

are made to the collection system. These updates occur in less than a month from the time that the subdivision utilities have been completed and accepted by the City.

The Engineering Department is contacted by public works personnel and told of any discrepancies found in the field for map corrections. The discrepancies are investigated and the collection system map updated, as needed.

5.2 Preventive Operation and Maintenance Program

The City of Ripon owns, operates and maintains a sanitary sewer collection system that conveys wastewater to the City of Ripon Wastewater Treatment Plant (WWTP). The system has 60 miles of sanitary sewer and 50 miles of storm drain pipelines. The City does not own or maintain the service lateral piping which conveys the wastewater from the house or structure to the connection to the sewer main. The property owner is responsible for any problems in the service lateral.

The City of Ripon has a preventative maintenance program to minimize sewer overflows and to keep the wastewater flowing to the treatment plant, by employing a collection system crew made up of the following staff:

- Foreman (4)
- Field Crew (30)

The City crews' preventative maintenance approach to operating and maintaining the wastewater collection system consists of the following:

- Routine Sewer Cleaning:
 - Clean and flush sewer mains to maintain flow by removing obstructions, grit, grease, and build-up of other materials using flushing equipment. The sewer collection system crew completes approximately 1,200 feet of pipeline cleaning on a monthly basis. These activities are scheduled by the Public Works Department and work completed is documented on log sheets maintained by public works staff.
- “Hot-Spot” Sewer Cleaning:
 - There are currently 6 areas in the collection system that requires routine sewer cleaning. A description of these areas and the maintenance frequency are summarized in Section 7 of this SSMP.
 - The completed work is documented on log sheets maintained by public works staff.
- As-Needed Sewer Inspections:
 - As needed, the City crews subcontract a CCTV crew to inspect pipelines in an effort to monitor known troubled areas. The reports and videos are filed in the Public Works Department.
- Lift Station Inspections & Maintenance:

- The City's lift stations are inspected and maintained on a weekly basis. The logs documenting the inspection and maintenance are maintained at each lift station site by public works staff.
- Customer Complaints:
 - The public works staff fills out a complaint form each time a sewer complaint is received and maintains documentation of the complaint along with the resolution in the Public Works Department.

5.3 Rehabilitation and Replacement Plan

Ripon has not experienced many structural problems with the pipeline system. When a problem is discovered, an assessment is performed of the suspect area, including visual and TV inspections of manholes and sewer pipes. Funds are budgeted in the Capital Improvement Program (CIP) for the City's rehabilitation and replacement plan based on specific project needs. The prioritization of these projects is based on sewer pipes that are at risk of structural failure or prone to more frequent blockages. At this time, no sewer improvements are planned in the short term as the system is functioning well. Future improvements will be included in the City's 5-Year CIP as needed.

5.4 Training

The City provides the following training for the sewer collection system staff:

- Operation of flushing equipment
- Operation and maintenance of collection system
- Operation and maintenance of lift stations
- Confined space
- SSO spill containment and cleaning
- SSO Emergency Response Plan

Training records are kept in the Public Works Department.

5.5 Contingency Equipment and Replacement Inventories

The City maintains contingency equipment and replacement parts for the wastewater system. The equipment and spare parts are stored at the City's wastewater treatment plant, including:

- Hydro trucks (1)
- Combination vacuum/hydro flushing trucks (2)
- 6-inch portable pump (1)
- 55 KW portable generator (1)
- Spare pump for each lift station (1 ea)
- Spare control components for lift stations
- Various sized sewer plugs

The spare parts inventory is stored and maintained according to manufacturer specifications.

Through the use of spare parts, backup pumps and electrical generators, the City can readily deal with equipment failures at any of the pumping stations. The City can also readily repair any pipeline collapse that may occur for any pipe size up to 12-inch in diameter. In addition to spare parts on hand, there are a number of suppliers in the area where the City can obtain replacement equipment and material 24 hours per day, 7 days per week.

6 Design and Performance

GWDR Requirement:

- (a) Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations, and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and*
- (b) Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.*

The City maintains Standards and Specifications for the installation, inspection, and testing of new sanitary sewer systems, pump stations, appurtenances and for the rehabilitation and repair of existing sanitary sewer systems. The City's Standards and Specifications are available on the City's website at www.cityofripon.org/city_hall/departments/engineering.

7 Overflow Emergency Response Program

GWDR Requirement:

The collection system agency shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:

- a. Proper notification so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;*
- b. A program to ensure an appropriate response to all overflows;*
- c. Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g., health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach water of the State in accordance with the MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification;*
- d. Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;*
- e. Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities;and*
- f. A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting for the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.*

The City of Ripon's Overflow Emergency Response Plan is attached as **Appendix D**.

8 Fats, Oils, and Grease Control Program

GWDR Requirement:

The collection system agency shall evaluate its service area to determine whether a fats, oils, and grease (FOG) control program is needed. If an Enrollee determines that a FOG program is not needed, the Enrollee must provide justification as to why it is not needed. If FOG is found to be a problem, the Enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following, as appropriate:

- a. An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;*
- b. A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;*
- c. The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;*
- d. Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;*
- e. Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;*
- f. An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section;*
- g. Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (f) above.*

The City of Ripon has had very few related FOG related stoppages or overflows. The incidents that have occurred have been limited to specific “hot-spot” areas in town. Therefore, it has been deemed that a limited FOG control program was needed, which includes the components described below.

8.1 Public Education and Outreach

The City plans performs educational measures targeted towards businesses that contribute to the FOG related incidents in hot-spot areas. This public outreach consists of mailing a letter to each business with facts and suggestions related to FOG issues and how they can help prevent overflows.

8.2 Legal Authority

One of the main components for controlling FOG from nonresidential facilities is the requirement for installing FOG removal devices. The City is standardizing its procedure

of requiring grease removal devices based on the most recent version of the Plumbing Code (referenced as part of RMC 13.08.130) for food service establishments and for tenants who make major improvements to their kitchen area.

In addition, the City has the legal authority to require that businesses continuously maintain in satisfactory and effective operation any pretreatment facilities and provides the authority to inspect those facilities (RMC 13.13.080 and 13.13.090).

8.3 FOG Removal Devices

One of the main components for controlling FOG from nonresidential facilities is the requirement for installing FOG removal devices. The City requires new businesses and those that make major improvements to their kitchen area to install grease removal devices according to the most recent plumbing code. A FOG removal device can either be a grease trap or interceptor, depending on the location or the size of the tenant improvement. The size and type of grease removal device are also predicated on the flow volume of the business.

8.4 Inspection and Enforcement Authority

The City currently has the legal authority to inspect and enforce pretreatment facilities. The RMC section 13.13.090 requires that access be provided to the City Engineer for the purpose of inspecting, sampling, records examination or in the performance of those duties.

The City will perform inspections for areas and/or specific businesses that are believed to contribute FOG discharge to the system that further exacerbates any stoppage in the collection system. The City's collection system crews will identify those areas or businesses that may be the source. Subsequently, the City will inspect the targeted areas/businesses to determine if one or combination of the following remedies is required: enforcement actions, increased maintenance by the business, or public outreach.

8.5 Identification of FOG Blockages and Establishment of Maintenance Schedules

The City has identified the locations that routinely contain heavy concentrations of FOG, which require routine cleaning of the sewer lines. These grease blockage areas or locations are commonly known as "hot-spots". The City has identified the following locations and cleaning schedule, as shown in **Table 3**.

Table 3 – FOG Locations and Maintenance Summary

Location	Maintenance Schedule
Stockton Ave and Main St	Quarterly
99 Sewer Crossing at Stockton Ave	Quarterly
99 Sewer Crossing at Acacia Ave	Quarterly
99 Sewer Crossing at Second St	Quarterly
Industrial Ave and 4 th St	Quarterly
Locust Ave and Acacia Ave (easement)	Quarterly

The City intends to maintain this schedule since it has been successful in preventing SSOs due to FOG. The City is planning to conduct more public outreach and education to the areas or locations that require additional maintenance as a result of FOG, as previously described or implement a rehabilitation program to reduce sewer stoppages.

8.6 Source Control Program

The City's source control program primarily consists of the requirement to install grease removal devices for new businesses that produce grease and tenants who make major improvements to their site.

9 System Evaluation and Capacity Assurance Plan

GWDR Requirement:

The Collection system agency shall prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include:

- (a) Evaluation: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events; and*
- (b) Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria; and*
- (c) Capacity Enhancement Measures: The steps needed to establish a short-and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding; and*
- (d) Schedule: The Collection system agency shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a)-(c) above. This schedule shall be reviewed and updated consistent the SSMP review and update requirements.*

9.1 Capacity Evaluation

The major objective of the City's Master Plan is to develop a comprehensive planning document that can be utilized by City staff to identify and implement required improvements to the existing sewer system, as well as expansion of wastewater infrastructure to serve new developments consistent with the General Plan. The City's Sanitary Sewer System Master Plan and Storm Drain System Master Plan (master plans) were both updated in 2010. The Master Plans identify the expected number of additional wastewater and storm drain facilities, potential locations for those facilities, and locations for the disposal of treated effluent. Since development of the master plans in 2010, little population growth has occurred. Therefore the 2010 master plans are still utilized by the City for planning purposes.

The sewer system is evaluated to determine the capacity of its major trunk (larger) sewer pipes using a hydraulic model. The hydraulic analysis is used to determine the bottlenecks within the sewer system for which improvements will be recommended.

9.2 Design Criteria

The City's sewer design criteria are included in the City of Ripon Standards and Specifications.

9.3 Capacity Enhancement Measures

The City's approach is to prioritize, plan, and implement projects for any identified capacity enhancement needs based on capacity, condition, and risk assessment. These conditions are then incorporated into a CIP that is revised at least every 5 years along with the financing mechanism for each project.

9.4 Capital Improvement Plan Schedule

The list of improvement projects are prioritized and included in a CIP that is revised and updated at least every 5 years.

10 Monitoring, Measurement, and Plan Modifications

GWDR Requirement:

The collection system agency shall:

- (a) Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;*
- (b) Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;*
- (c) Assess the success of the preventative maintenance program;*
- (d) Update program elements, as appropriate, based on monitoring or performance evaluation; and*
- (e) Identify and illustrate SSO trends, including: frequency, location, and volume.*

The City tracks several performance measures through tracking logs and annual reports. In order to monitor the effectiveness of the SSMP, the City has selected certain specific parameters that can be documented and compared on an annual basis. These parameters were selected because they are straightforward, quantitative, and focused on results. Changes in these parameters over time will indicate the overall success of the SSMP; or conversely, underlying conditions that can then be investigated further. The actions or measures of program effectiveness are shown in **Table 4**.

Table 4 – FOG Locations and Maintenance Summary

SSMP Element	Summary of Element Purpose	Actions or Measures for Tracking Effectiveness	Responsibility
Goals	Reduce overflows	Not needed	N/A
Organization	Establish the hierarchy and assign responsibility within the organization	Review, update and adjust based on organizational changes	City Engineer
Legal Authority	Ensure the City has sufficient legal authority to properly maintain the system	Modify as needed	City Engineer
Operation and Maintenance Program	Minimize blockages and reduce SSOs by properly maintaining the system and keeping the system in good condition	<ul style="list-style-type: none"> • Update collection system map • Length of routine sewer cleaning • Length of “Hot Spot” sewer cleaning • Length of pipe CCTV’d and inspected • Lift station inspections & maintenance • Customer complaints and resolution • Training records 	PW Director
Design and Construction Standards	Ensure new facilities are properly designed and constructed	Modify as needed	City Engineer
Overflow Emergency Response Plan	Provide timely and effective response to SSO emergencies and comply with regulatory reporting requirements	<ul style="list-style-type: none"> • Total number and volume of SSOs • Number and repeat SSOs • Total number of mainline blockages 	Regulatory Compliance Lead
Fats, Oils & Grease Control	Minimize blockages and overflows due to FOG	<ul style="list-style-type: none"> • Public outreach efforts • Number of Facility inspections 	PW Director
Capacity Management	Minimize SSOs due to insufficient capacity by evaluating system capacity and implementing necessary projects	<ul style="list-style-type: none"> • CIP updates • Master plan updates • Total length of pipe replaced/rehab’d 	City Engineer
Monitoring, Measurement & Program Modifications	Evaluate effectiveness of SSMP, keep SSMP up-to-date, and identify necessary changes	As needed	City Engineer
Program Audits	Review the program and effectiveness and make necessary changes to comply with the requirements	Formally audit the program every two years	City Engineer
Communication Program	Evaluate the effectiveness of communication program and identify necessary changes	As needed	Regulatory Compliance Lead

11 SSMP Program Audits

GWDR Requirement:

The collection system agency shall conduct periodic, internal audits, appropriate to the size of the system and SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and your agency's compliance with the SSMP requirements, including identification of any deficiencies in the SSMP and steps to correct them.

The City will audit the SSMP at least every two years. The audit will evaluate how well the program accomplished the program goals established, and whether the program, as implemented, is effective overall. If deficiencies or modifications are identified as part of the audit, the SSMP will be updated accordingly. The audit report will be filed documenting the audit and kept on file at City Hall.

12 Communication Program

GWDR Requirement:

The collection system shall communicate on a regular basis with the public on the development, implementation and performance of its SSMP. The communication system shall provide the opportunity to provide input to the collection system agency as the program is developed and implemented. The collection system agency shall also create a plan of communication with systems that are tributary and/or satellite to the collection system agency's sanitary sewer system.

The City of Ripon is committed to communicating on a regular basis with interested parties on the implementation and performance of the SSMP. The most current version of the SSMP shall be posted on the City's website (www.cityofripon.org/engineering) where the public can be made aware of the SSMP and its performance. This will provide an opportunity to receive comments from the public.

A resolution adopting the SSMP is attached in Appendix E.

**APPENDIX A
SSMP Change Log**

Date	SSMP Element/ Section	Description of Changes/Revision Made	Change Authorized By:
1/9/23	8	Redefined SSO classification per Waterboard's new definitions	Christiana Giedd
2/27/23	3	Modified org chart and chain of communication to match current staffing	Christiana Giedd

APPENDIX B
Ripon Municipal Code Excerpts

Chapter 13.08
SEWER CONNECTIONS

Sections:

- 13.08.010 Compliance with Sewer Regulations Required.**
- 13.08.020 Construction Standards.**
- 13.08.030 Connection Required When.**
- 13.08.040 Connection Compliance Required.**
- 13.08.050 Permit - Required.**
- 13.08.060 Permit - Application.**
- 13.08.070 Permit - Conditions for Revocation.**
- 13.08.080 Responsibility for Damage to Sewers-repair.**
- 13.08.090 Unlawful connections.**
- 13.08.100 Unlawful deposit.**
- 13.08.110 Notice to Connect.**
- 13.08.120 Licensed Plumbers or Contractors Required.**
- 13.08.130 Inspection Required.**

13.08.010 Compliance with Sewer Regulations Required.

A. For the purpose of this chapter, a public sewer shall be deemed to be available to a building if such sewer is within two hundred fifty (250) feet of the nearest property line of the lot upon which such building is located.

B. Pursuant to the authority of Section 4762 of the Health and Safety Code of the state, the city finds and declares that the maintenance or use of private sewage disposal systems constitutes a public nuisance and finds it to be in the public interest that properties to which a public sewer is available be required to connect thereto. (Ord. 776 §1, 2009)

13.08.020 Construction Standards.

The city has adopted standard specifications and details for construction of sewers and appurtenances, which are on file in the office of the City Engineer. Said standard specifications and details are referred to and made a part of this code by reference as well as the most recent version of the Uniform Plumbing

Code. For good cause, the City Engineer may, in his sole discretion, allow deviations from the adopted standard specifications and details. (Ord. 776 §1, 2009)

13.08.030 Connection Required When.

A. When a public sewer becomes available, as defined in Section 13.08.010, to a building served by a private sewage disposal system, the owner shall connect the building to the public sewer within six (6) months after public sewer is available. This time frame may be extended by the City Engineer, in his sole discretion, upon a showing of good cause.

B. Where septic tanks or any private septic systems or equipment are abandoned as a result of connecting any building to the public sewer, the owner of the property to which such connection is made shall properly abandon all such tanks, systems or equipment according to all state and local regulations within ninety (90) days after the time of connecting to the public sewer. (Ord. 776 §1, 2009)

13.08.040 Connection Compliance Required.

A. All connections of private drains or sewers within the public sewer of the city shall be made in accordance with this chapter and at the places designated by the City Engineer.

B. All maintenance of a building connection between the building and the city sewer main is the responsibility of the lot owner or appropriate owner's association exclusive of the city sewer main.

C. Whenever any building connection is broken such that earth and other materials must be removed to remove the stoppage between the building sewer system and the city sewer main, said condition shall constitute a public nuisance, and the repair must be completed within two (2) days from the date of discovery of the breakage. If this is not completed within this specified time frame, the City Engineer may cause the deficiency to be abated and cause the cost of such abatement to be made a lien

upon the affected property, which lien may be foreclosed in court or collected together with the regular property taxes on said property. (Ord. 776 §1, 2009)

13.08.050 Permit - Required.

A. No person or corporation shall make any connection with any part of the public sewers or opening into such public sewers without the written permit of the City Engineer.

B. Nothing contained in this chapter shall be deemed to require the application for, or the issuance of, a permit for the purpose of removing stoppages or repairing leaks in a building or sewer lateral, except when it is necessary to replace any part of such sewer. (Ord. 776 §1, 2009)

13.08.060 Permit - Application.

Except as provided in Section 13.08.050, any person desiring to perform work involving sewers shall make a request in writing to the city, providing specific details of the proposed work and any other such information as the city may require. The work to be performed shall be done in accordance with city standards and codes. Approval of the proposed work will be issued in the form of an encroachment permit, a building permit, approved subdivision plans or other permit applicable to the overall project involved. The applicant shall pay all such permit and inspection fees associated with the approval. (Ord. 776 §1, 2009)

13.08.070 Permit - Conditions for Revocation.

All permits to connect with the sewers shall be given upon the express conditions that the city engineer may at any time before the work is completed revoke and annul the same unless the work is done in accordance with the provisions of this chapter. No person or party interested shall have any right to claim damages in consequence of such permit being revoked or annulled. Such work shall be done strictly in accordance with the terms of the permit. (Ord. 776 §1, 2009)

13.08.080 Responsibility for Damage to Sewers-repair.

A. The applicant to whom a permit for construction has been issued and the person performing the work under such permit shall be liable for all damages. Such applicant shall hold the city and its employees and agents harmless from all loss, including expenses incurred in defending any action against the city arising out of such construction work.

B. The applicant shall be liable for defects in the work and for any failure, which may develop in the facilities because of defective work or materials.

C. The cost of repairing the damage if not paid by the person causing the same within thirty days shall become a lien upon the property owned or occupied by the person causing the damage, and may be foreclosed in the same manner as claims for labor or materials under the lien laws of the state, except that no equity of redemption shall apply. (Ord. 776 §1, 2009)

13.08.090 Unlawful connections.

No person or corporation shall connect any open gutter, cesspool, privy, vault or cistern with any public sewer or with any private sewer connecting with a public sewer. (Ord. 35 § 10, 1949)

13.08.100 Unlawful deposit.

No person or corporation shall deposit any garbage, offal, dead animals, sand, rags, potato peelings, vegetable offal, or any substance having a tendency to obstruct the flow of sewage in any manhole, water closet, sink, or any other plumbing fixture or fixtures connected with the sewer system of the city. This provision shall apply to garbage disposal units connected with the public sewers. (Ord. 35 § 10, 1949)

13.08.110 Notice to Connect.

A. It shall be the duty of the City Engineer to notify in writing all persons owning or occupying,

or having under his or her control any premises situated or being within two hundred fifty feet of a public sewer in the city, where the City Engineer has determined that the premises are in an unsafe condition, to connect their private drains, water closets, basins, sinks, baths, and other plumbing fixtures with such sewer in the manner provided for in this chapter.

B. Any person owning or occupying, or having under his or her control any premises as provided in this section who shall fail, refuse or neglect to commence work within ten days from the date of service of the aforesaid notice and diligently and without interruption prosecute the same to completion shall forfeit as a penalty therefore the sum of twenty-five dollars for each day's delay in commencing the work after the expiration of the ten days' notice as aforesaid and after commencement thereof. Such penalty shall be recovered for the use of the city by prosecution and the court having jurisdiction thereof, and shall be paid into the treasury of the city to the use of the city. Should the owner or occupant or person having under his or her control such premises still fail, neglect or refuse to connect their private drains, sinks and privies with such sewer the City Engineer may order the performance of the work and the costs thereof shall be recoverable in an action brought in the name of the city for such purpose or the costs of such work

may be paid from moneys recovered as a penalty under this section. (Ord. 776 §1, 2009)

13.08.120 Licensed Plumbers or Contractors Required.

No person or persons except licensed plumbers or contractors or one to whom a permit has been especially granted by the city for the doing of such work shall be permitted to connect any private drain from any building premises or fixtures with the public sewer system of the city. (Ord. 776 §1, 2009)

13.08.130 Inspection Required.

No connection with the public sewers shall be completed or covered until an opportunity for inspection has been afforded to the City Engineer or his designee, and any work covered or concealed prior to inspection shall be uncovered and opened at the expense of the person so covering or concealing the same, provided that in all of the connections with the public sewers, all work shall be done in accordance with the most recent plumbing code adopted as the official code of the city by the city council, copies of which most recent plumbing code are on file in the office of the city clerk, and are available for inspection as to the requirements pertaining to such work. (Ord. 776 §1, 2009)

Chapter 13.13

PUBLIC DOMESTIC SANITARY SEWERS

Sections:

13.13.010	Definitions.
13.13.020	Drainage into Sanitary Sewers Prohibited.
13.13.030	Types of Wastes Prohibited.
13.13.040	Interceptors Required.
13.13.050	Maintenance of Interceptors.
13.13.060	Pretreatment
13.13.070	Preliminary Treatment of Wastes.
13.13.080	Maintenance of Pretreatment Facilities.
13.13.090	Inspection.
13.13.100	Confidential Information.
13.13.110	Control Manholes.
13.13.120	Measurement and Tests.
13.13.130	Wastewater Discharge.
13.13.140	Industrial Wastewater Permit.
13.13.150	Industrial Wastewater Permit—Nontransferable.
13.13.160	Special Agreements.
13.13.170	Swimming Pools.
13.13.180	Storm Sewers Required.
13.13.190	Control of Objectionable Wastes.
13.13.200	Federal Categorical Pretreatment Standards.
13.13.210	State Requirements.
13.13.220	Inconsistency with Other Ordinances.

13.13.010 Definitions.

Unless the context specifically indicates otherwise, the following terms and phrases as used in this chapter shall have the meanings designated in this section:

A. "Authorized representative of industrial user" may be: a principal executive officer of at least the level of vice president, a general partner or proprietor, a duly authorized representative of the individual designated above if such representative is responsible for the overall

operation of the facilities from which the discharge originates.

B. "City Engineer" means the city engineer of the City of Ripon, or such other person as may be designated by the city engineer to perform any service or make any determinations permitted or required in this chapter to be made by the city engineer.

C. "Domestic wastewater" means water deposited, released or discharged into a sewer system from any commercial or residential source which may contain human or animal excreta.

D. "Industrial wastewater" means all water-carried wastes, and wastewater of the city, excluding domestic wastewater, and shall include all wastewater from any producing, manufacturing, processing, institutional, commercial, service, agricultural, or other operation. These wastewaters shall not include wastes of human origin similar to domestic wastewater.

E. "Permittee" means the person to whom a permit has been issued pursuant to this chapter.

F. "Person" means any individual, partnership, firm, company, corporation, association, governmental entity or other legal entity or their legal representatives, agents or assigns.

G. "Pretreatment" means the reduction of the amount of pollutants, the elimination of pollutants or the alteration of the nature of pollutant properties in wastewater to a less harmful state prior to or in lieu of discharging into the city POTW.

H. "Publicly owned treatment works (POTW)" means the city wastewater collection, transmission, treatment and disposal facilities. This definition includes any sewers that convey wastewater to the treatment facility.

I. "User" means any person who contributes, causes or permits the contribution of wastewater to the city POTW. (Ord. 529 § 1, 1994)

13.13.020. Drainage into Sanitary Sewers Prohibited.

A. No leaders from roofs and no surface drains for rain water shall be connected to any sanitary sewer.

B. No surface or subsurface drainage, rain water, storm water, seepage, cooling water, or unpolluted industrial process waters shall be permitted to enter any sanitary sewer by any device or method whatsoever.

C. Unpolluted water such as single pass cooling water, will not be discharged through direct or indirect connection to a city sewer without approval from City Engineer.

D. When the City Engineer determines that a user may be or is contributing to the POTW any of the substances enumerated in this section in such amounts as to interfere with the operation of the POTW, the City Engineer shall develop effluent limitations for such user to correct the interference with the POTW. (Ord. 529 § 1, 1994)

13.13.030. Types of Wastes Prohibited.

No user shall contribute or cause to contributed directly or indirectly, any pollutant or waste water which will interfere with the operation of the publicly owned treatment works (POTW). Except as hereinafter provided, no user shall discharge or cause to be discharged any of the following described waters or wastes to any domestic sewer:

A. Any liquids, solids, or gases which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosion or be injurious in other way to the POTW.

B. Any liquid or vapor having a temperature higher than 150 F.

C. Any water or waste which may contain more than 50 parts per million, by weight, of floating or soluble fat, oil, or grease.

D. Prohibited materials include but are not limited to: gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates,

bromates, carbides, hydrides, sulfides, naphtha, fuel oil, and any other substances, solid or gas, which the City Engineer has notified the user is a fire or explosion hazard to the POTW.

E. Any garbage that has not been properly shredded. Properly shredded garbage shall mean the wastes from the preparation, cooking, and dispensing of food that has carried freely under the flow conditions normally prevailing in the domestic sewers, with no particle greater than three eights (3/8) inch in any dimension. All shredded particles shall be carried freely under the flow conditions prevailing in the POTW.

F. Any ashes, cinder, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, paunch manure, pulp, cement, tar, asphalt, resins, or any other solid or viscous substances capable of causing obstruction to the flow in sewers or other interference with the proper operation of the POTW.

G. Any waters or wastes having a pH lower than 5.5 or higher than 9.0 or having any other corrosive property capable of causing damage or hazard to structures, equipment, and personnel of the sewage works.

H. Any water or wastes containing a toxic or poisonous substance in sufficient quantity to injure or interfere with any sewage treatment process, constitute a hazard to human or animals, or create any hazard in the receiving waters of the sewage treatment plant, including but not limited to cyanides in excess of (2) mg/l as CN in the wastes as discharged to the domestic sewer.

I. Any waters or wastes containing suspended solids or dissolved matter of such character and quantity that unusual attention or expense is required to handle such materials in the POTW.

J. Any noxious or malodorous gas or substance capable of creating a public nuisance.

K. Any septic tank sludge.

L. Any radioactive waste.

M. Any water or waste containing more than 0.5 milligrams per liter dissolved sulfides.

N. Any substance which will cause damage or imbalance to any portion of the treatment or sludge disposal process.

O. Any substance which will cause the POTW to violate any state or federal disposal system conditions or receiving water quality standards.

P. Any pollutants, including oxygen demanding pollutants (BOD, etc.) released at a flow rate and/or concentration which will cause interference to the POTW. (Ord. 529 § 1, 1994)

13.13.040. Interceptors Required.

Grease, oil, and sand interceptors shall be provided when, in the opinion of the City Engineer, they are necessary for the proper handling of liquid wastes, sand, and other harmful ingredients; except that such interceptors shall normally not be required for buildings used for residential purposes. All interceptors shall be of a type and capacity approved by the City Engineer and shall be located as to be readily and easily accessible for cleaning and inspection. (Ord. 529 § 1, 1994)

13.13.050. Maintenance of Interceptors.

All grease, oil, and sand interceptors shall be subject to inspection by the City Engineer at any reasonable time. If the City Engineer determines maintenance is needed, it shall be done at owner's expense as directed by the City Engineer. (Ord. 529 § 1, 1994)

13.13.060. Pretreatment.

Users shall provide necessary pretreatment facilities to comply with this chapter and federal and state standards. (Ord. 529 § 1, 1994)

13.13.070. Preliminary Treatment of Wastes.

The admission into the public domestic sanitary sewers of any waters or wastes having

A. A 5-day Biochemical Oxygen Demand greater than 300 parts per million by weight; or

B. containing more than 350 parts per million by weight of suspended solids; or

C. containing any quantity of substance having the characteristics described in Section 13.13.030; or

D. having an average daily flow greater than two percent (2%) of the average daily sewage flow of the city, shall be subject to the review and approval of the City Engineer.

Where necessary in the opinion of the City Engineer, the owner shall provide, at his expense, such preliminary treatment as may be necessary to:

A. reduce the Biochemical Oxygen Demand to 300 parts per million by weight; or

B. reduce objectionable characteristics or constituents to within the maximum limits provided for in Section 13.13.030; or

C. control the quantities and rates of discharge of such waters or wastes.

Plans, specifications, and any other pertinent information relating to proposed preliminary treatment facilities shall be submitted for the approval of the City Engineer and of the California Regional Water Quality Control Board, Central Valley Region and no construction of such facilities shall be commenced until said approvals are obtained in writing. (Ord. 529 § 1, 1994)

13.13.080. Maintenance of Pretreatment Facilities.

Where preliminary treatment facilities are provided for any waters or wastes, they shall be maintained continuously in satisfactory and effective operation by the owner at his expense. If the owner does not correct the deficiency forthright, the City Engineer shall have work done at the property owner's expense. (Ord. 529 § 1, 1994)

13.13.090. Inspection.

The City Engineer shall inspect the facilities of any user to ascertain whether the purpose of this chapter is being met. Persons or occupants of premises where wastewater is being created or discharged shall allow the city easy access at all

reasonable times, to all parts of the premises for the purpose of inspection, sampling, records examination or in the performance of any of these duties. (Ord. 529 § 1, 1994)

13.13.100. Confidential Information.

A. Information and data on a user obtained from reports and permit applications shall be available to the public or other governmental agencies without restriction, unless the user specifically requests and is able to demonstrate to the satisfaction of the City Engineer that the release of such information would divulge information, processes or methods of production entitled to protection as trade secrets of the user.

B. The portions which might disclose trade secrets or secret processes shall not be made available for inspection by the public but shall be made available upon written request to government agencies for uses related to this chapter, the national pollutant discharge elimination system, state disposal system permit, or the pretreatment program. (Ord. 529 § 1, 1994)

13.13.110. Control Manholes.

When required by the City Engineer, the owner of any property served by a side sewer carrying industrial wastes shall install a suitable control manhole in the side sewer to facilitate observation, sampling, and measurement of wastes. Such manhole, when required, shall be accessible and safely located, and shall be constructed in accordance with plans approved by the City Engineer. The manholes 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. 529 § 1, 1994)

13.13.120. Measurement and Tests.

All measurements, tests, and analysis of the characteristics of waters and wastes to which reference is made in Sections 13.13.030 and 13.13.070 shall be determined in accordance with standard methods and shall be determined at the

control manhole provided for in Section 13.13.110, or upon suitable samples taken at said control manhole. In the event that no special manhole has been required, the control manhole shall be considered to be the nearest downstream manhole in the domestic sewer to the point at which the side sewer is connected. (Ord. 529 § 1, 1994)

Section 13.13.130. Wastewater discharge.

It is unlawful to discharge to the city POTW any waste prohibited or regulated by this chapter or state or federal law without a permit to discharge said waste issued by the city. (Ord. 529 § 1, 1994)

13.13.140. Industrial Wastewater Permit.

All industrial users proposing to connect to or to contribute to the POTW shall obtain an industrial wastewater discharge permit. Permit application shall be made on the form provided by the city. Any existing user which the City Engineer has reason to believe is discharging prohibited or regulated materials shall apply for a permit within thirty days of written notice. (Ord. 529 § 1, 1994)

13.13.150. Industrial Wastewater Permit-- Nontransferable.

An industrial wastewater discharge permit shall not be reassigned or transferred or sold to a new owner, new user, different premises or a new or changed operation. (Ord. 529 § 1, 1994)

13.13.160. Special Agreements.

No statement contained in this Article shall be construed as preventing any special agreement of arrangement between the City Engineer and any industrial concern whereby an industrial waste of unusual, strength or character may be accepted by the city for treatment, subject to payment therefore by the industrial concern and subject to such terms and conditions as might be required by the city. (Ord. 529 § 1, 1994)

13.13.170. Swimming Pools.

It shall be unlawful for any person to discharge the contents of a swimming pool into sanitary sewer except in the manner specified in this section. The size of pipe carrying discharge water shall not be larger than two inches and shall not be under head to exceed twenty (20) feet. If the water is discharged by pumping, the rate of flow shall not exceed one hundred (100) gallons per minute. Each swimming pool discharging to a sanitary sewer shall be equipped with an approved separator to preclude any possibility of a backflow of sewage into the swimming pool of piping system. (Ord. 529 § 1, 1994)

13.13.180. Storm Sewers Required.

Storm water and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as combined sewers or storm sewers, or to a natural outlet approved by the City Engineer. Industrial cooling water or unpolluted process water may be discharged, upon approval of the City Engineer to a storm sewer, combined sewer, or natural outlet. (Ord. 529 § 1, 1994)

13.13.190. Control of Objectionable Wastes.

A. Actions Authorized. If any waters or wastes are discharged or wasted or are proposed to be discharged or wasted, to the domestic sewers, which waters contain the substances or possess the characteristics enumerated in sections 13.13.030 or this Article, and which in the judgement of the City Engineer, may have deleterious effect upon the sewerage works, processes, equipment, or receiving waters, or which otherwise create a hazard to life or constitute a public nuisance, the City Engineer may:

1. Reject the wastes.
2. Require pretreatment to an acceptable condition for discharge to the domestic sewers.
3. Require control over the quantities and rates of discharge; and/or
4. Require payment of charges in accordance with the following schedule or by special agreement with the city to cover the added cost of handling and treating the wastes, which charges

are in addition to all other applicable sewer charges, fees, assessments, or taxes for sewer service.

B. Rate Schedule. All persons discharging waste into the sewer system in violation of section 13.13.040 and pursuant to determination by the City Engineer of the requirement of this subsection of Section 13.13.190 and provided that no special agreement has been reached hereunder, shall pay a service charge to the city for use of treatment facilities and said service charge shall be based on the Biochemical Oxygen Demand of the discharge, and the demand placed on the system, the volume of such discharge, and such charge shall be in accordance with rates outline in Chapter 13.12.020 as amended, Ripon Municipal Code.

C. Sampling. Provision of sampling of waste water flow shall be provided at a readily accessible location near the connection to the domestic sewer.

D. Pollutant limitations. No person shall discharge wastewater containing in excess of:

<u>Substance</u>	<u>lb./day</u>
Antimony	.25
Arsenic	.25
Barium	5.00
Beryllium	2.50
Boron	5.00
Cadmium	.005
Chromium	.25
Copper	1.00
Cyanide	.50
Iron	1.50
Lead	.25
Manganese	.25
Mercury	-0-
Molybdenum	.025
Nickel	2.50
Selenium	.05
Silver	.25
Tin	10.00
Vanadium	.50
Zinc	.40

E. Monitoring of Discharge. The city or its agent shall take not less than one sample per month for determination of analysis of waste to be paid for by the person charged hereunder, and which shall show the strength demand factors and other factors as may be determined by the City Engineer or its qualified agent. Additional samples will be taken upon request and payment therefor by the requesting person.

F. Discharge--Quantity.

1. The quantity of wastewater discharge for new development shall be limited to the most restrictive of the following:

- a. The property's proportional share of the serving sewer lines;
- b. Maximum average daily flow of five thousand gallons for each acre of site to be developed;
- c. Maximum daily flow shall not exceed ten percent of the POTW remaining capacity.

2. If industrial development immediately adjacent to the proposed development has developed to a use less than that specified in subdivision (b) of subsection (1) of this section, additional capacity may be credited up to a maximum of ten thousand gallons per acre per day.

G. Discharge--Excessive. No use shall increase the use of process water or in any way attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations of this chapter or state and federal standards.

H. Discharge--Accidental.

1. Each user shall provide protection from accidental discharge of prohibited material or other substances regulated by this chapter.

2. In the case of accidental discharge, it is the responsibility of the user to immediately telephone and notify the POTW of the incident. Failure to notify of an accidental discharge shall be cause to disconnect service.

I. Violation--Suspension of Service.

1. The city may immediately suspend the wastewater treatment service and/or an industrial waste discharge permit of any user when such a

suspension is necessary, in the opinion of the city engineer in order to stop an actual or threatened discharge which presents or may present an imminent or substantial endangerment to the health or welfare of persons to the environment, uses interference to the POTW or causes the city to violate any condition of its discharge permit.

2. Any person notified of a suspension of wastewater treatment service shall immediately stop or eliminate the contribution. In the event of a failure to comply voluntarily with the suspension order, the City Engineer shall take such steps deemed necessary including severance to the sewer connection to prevent or minimize damage to the POTW or endangerment to any individuals or the environment.

3. The City Engineer shall reinstate the industrial waste discharge permit and/or the wastewater treatment service upon proof of the elimination of the noncomplying discharge and payment of any costs incurred by the city to disconnect the service.

4. A detailed written report describing the causes of the harmful contribution and the measures taken to prevent any future occurrence shall be submitted to the City Engineer within fifteen days of the date of occurrence.

J. Revocation of permit. Any user who violates the following conditions of this chapter or applicable state and federal regulations, is subject to having their permit revoked in accordance with Section 13.13.190 (i).

1. Failure to factually report the wastewater constituents and characteristics of their discharge;
2. Failure to report significant changes in operations, or wastewater constituents or characteristics;
3. Refusal of reasonable access to users premises for purpose of inspection of monitoring;
4. Violations of conditions of the permit.

K. Violation notification. Whenever the City Engineer finds that user has violated or is violating this chapter, wastewater contribution permit, or any prohibition, limitation or requirements contained in this chapter, the city may serve upon such person a written notice

stating the nature of the violation. Within thirty days of the date of notice a plan for correction thereof shall be submitted to the City Engineer by the user.

L. Sewage Charge a Lien, Authority to Disconnect. Each charge or rental levied by, or pursuant of this Ordinance on property within the limit of the city, is hereby made a lien upon corresponding premises served by a connection to the sewerage system. In the event of failure of payment of charge as provided herein for sewage service for property located out of the city, the secretary, or other authorized and directed to disconnect such property from the sewerage system.

M. Collection Charges: In order to facilitate the payment of charges made in accordance with the rate schedule in subsection (B) of this section, each and every person being so charged shall be billed for volume based on 80% of water consumption shown on their last water billing. If said water billing is for a greater or lesser period of time than the period being billed for sewer service, the average daily water consumption for said water billing period will be used to determine water consumption for the period of sewer service.

N. Design Approval. If the City Engineer requires 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 Engineer, and subject to the requirements of all applicable codes, ordinances, and laws.

O. Notice. Notice of violation of Section 13.13.030 shall be given by certified mail to the person as shown on the last equalized assessment roll of San Joaquin County for the parcel or parcels discharging or causing to be discharged said objectionable waste. Said notice shall inform

said person of violation of said Section 13.13.030 and that they have 15 days from the date of such notice to contract the City of Ripon to make arrangements satisfactory to the City Engineer evidencing the necessary remedial action taken or to be taken to prevent or control such violation.

Failure to respond will result in the application of the rate schedule in Subsection (B) from the date of such notice until the City Engineer determines compliance with this Ordinance, as now or hereafter amended. (Ord. 529 § 1, 1994)

13.13.200. Federal Categorical Pretreatment Standards.

A. Upon the promulgation of federal categorical pretreatment standards for a particular industrial subcategory, any federal standard more stringent than limitations imposed under this chapter shall immediately supersede the limitations imposed by this chapter.

B. Federal limitations for maximum of one day shall be determined by grab samples; limitation for average daily value for consecutive days shall be measured by twenty-four-hour composite samples. (Ord. 529 § 1, 1994)

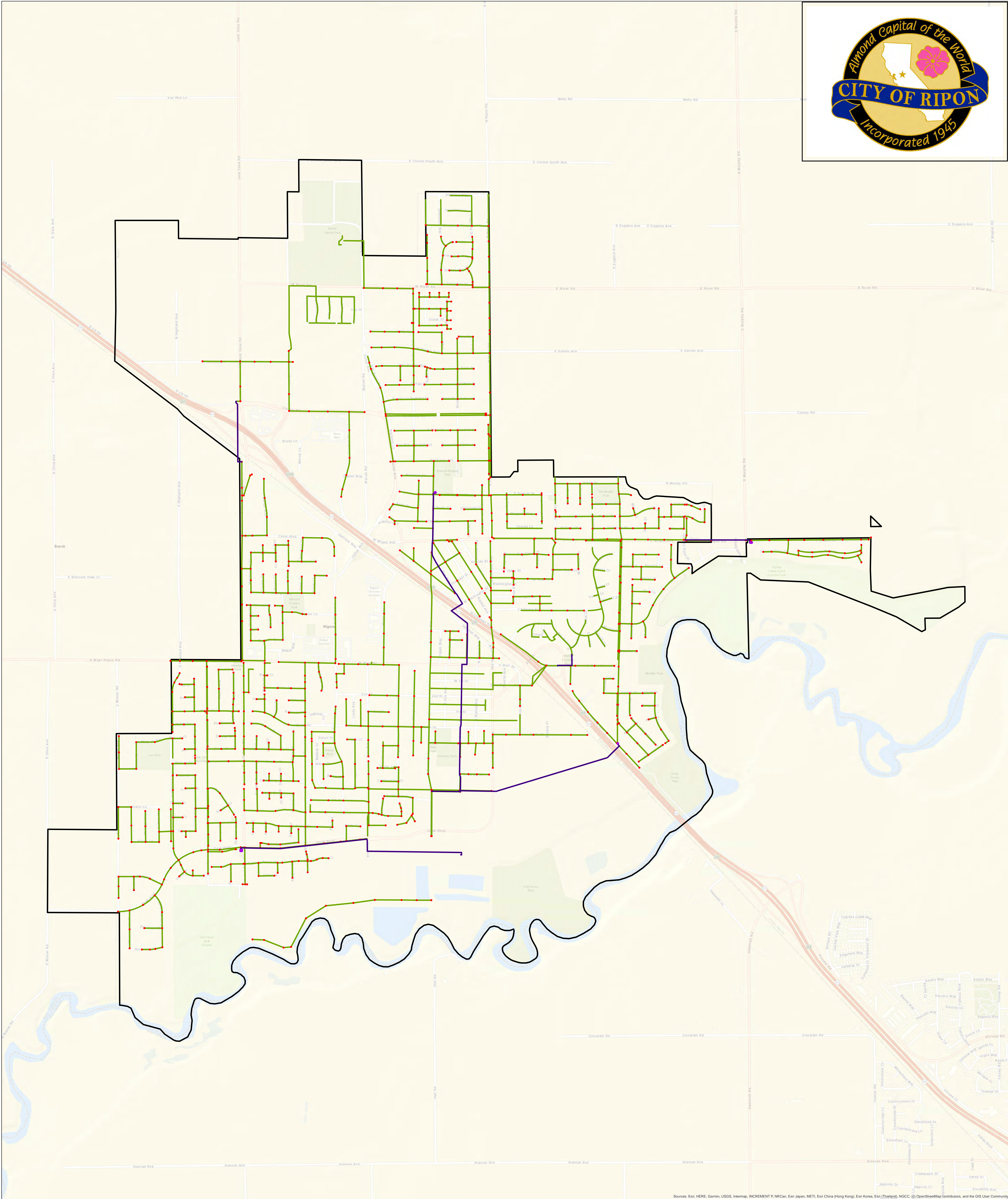
13.13.210. State Requirements.

State requirements and limitations when adopted shall apply when they are more stringent than those in this chapter. (Ord. 529 § 1, 1994)

13.13.220. Inconsistency with Other Ordinances:

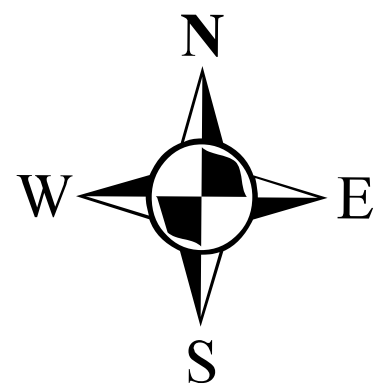
The requirements of this ordinance when adopted shall apply when they are more stringent than those in this chapter. (Ord. 529 § 1, 1994)

APPENDIX C
Ripon Sewer and Stormwater Maps



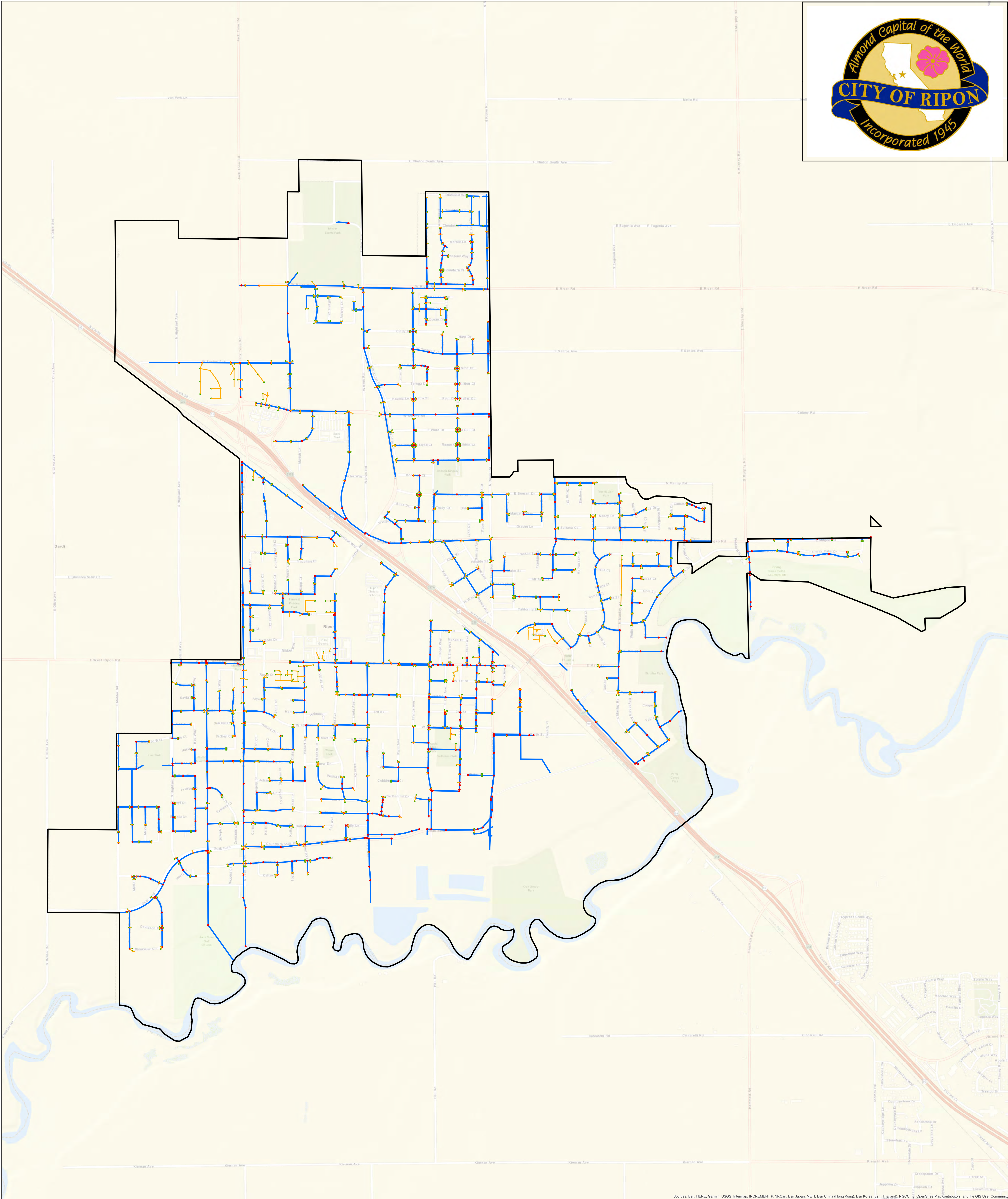
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

City of Ripon Stormwater System



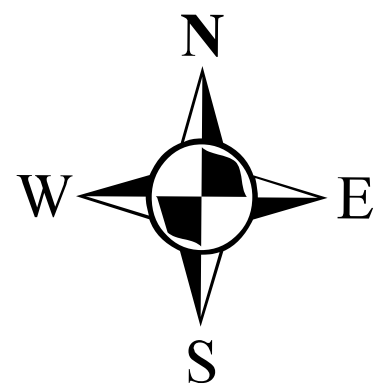
Legend

- Sewer Main Lines
- Sewer Manholes
- Lift Stations
- Sewer Force Mains
- City Limits



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

City of Ripon Stormwater System



Legend

- Storm Main Lines
- Storm Manholes
- Storm Catch Basins
- Storm Laterals
- City Limits

APPENDIX D
Overflow Emergency Response Plan



City of Ripon

SANITARY SEWER OVERFLOW (SSO) EMERGENCY RESPONSE PLAN

January 2023

1 PURPOSE

The Overflow Emergency Response Plan (ERP) has been established to identify measures required in the event of a Sanitary Sewer Overflow (SSO) within the City of Ripon to protect public health, the environment, to insure proper notification of primary responders, and that regulatory agencies are notified of all SSO in a timely manner.

2 INVESTIGATION OF SSO REPORT

Once an SSO is reported, the Public Works Department shall:

- Immediately investigate the reported SSO.
- Verify and assess the type and extent of the SSO.
- Notify Public Works management of the spill and its assessment.

3 CONTAINMENT OF THE SSO SPILL

After the spill has been verified and assessed, the Public Works Department shall:

- Immediately contain the spill from spreading further.
- Isolate storm drain system from the spill or if the spill has found its way into the storm drain system, isolate affected area of storm drain system so that spill does not access the river.
- Secure SSO spill site from public access.

4 CORRECTION OF CAUSE OF SSO

After the spill has been assessed and contained, the Public Works Department shall determine the cause of the SSO. The most common reasons for SSO are collection system blockages and lift station failures. The Public Works Department shall take the following corrective action:

- Collection System Blockage:
 - Use vacuum/hydro flushing truck to clear blockage. If possible use vacuum equipment to remove excessive solids.
 - After the blockage is cleared, check downstream manholes to verify blockage did not relocate downstream.
 - Check downstream Lift Station to verify station is operating properly with addition released flow and debris.

- Lift Station Power Failure:
 - Use portable emergency generator to provide temporary power until power is restored.

- Lift Station Control System Failure:
 - Use hand controls until the automatic control system is restored.

- Lift Station Pump Failure:
 - Repair or replace defective pump or pumps with spare pumps which are stored at the Public Works Corporation Yard. Portable emergency pump stored at the corporation yard, can also be used until pump can be place into operation.

5 CLEAN UP OF SSO SPILL

After correcting the SSO (*or at the same time if possible*), the Public Works Department shall cleanup the SSO spill in lines with the following procedures:

- Clean up all raw sewage with vacuum equipment.
- Pressure wash affected area of street, curb/gutter and storm drain system.
- Disinfect affected areas, street, curb/gutter and storm drain system with chlorine water solution.
- All raw sewage; wash down, water and disinfect solution shall be collected by using vacuum equipment and delivered to the City of Ripon wastewater treatment plant for proper disposal.
- All soil affected by the SSO will be removed and delivered to the City of Ripon wastewater treatment plant for proper disposal.
- Biological sampling shall be performed on the affected areas of the storm drain system to ensure that it has effectively been clean.

6 NOTIFICATION REQUIREMENTS

There are three categories of SSO which have varying reporting requirements. The three categories are defined as shown in **Table 1**.

Table 1 – Spill Categories and Definitions

CATEGORIES	DEFINITIONS [see Section A on page 5 of Order 2006-0003-DWQ, for Sanitary Sewer Overflow (SSO) definition]
CATEGORY 1	Discharges of untreated or partially treated wastewater of any volume resulting from an enrollee's sanitary sewer system failure or flow condition that: <ul style="list-style-type: none"> • Reach surface water and/or reach a drainage channel tributary to a surface water; or • Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).
CATEGORY 2	Discharges of untreated or partially treated wastewater of 1,000 gallons or greater resulting from an enrollee's sanitary sewer system failure or flow condition that do not reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.
CATEGORY 3	All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.
PRIVATE LATERAL SEWAGE DISCHARGE (PLSD)	Discharges of untreated or partially treated wastewater resulting from blockages or other problems within a privately owned sewer lateral connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be <u>voluntarily</u> reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.

The Public Works Director or his designee shall report the spill to the proper outside agencies. Agencies to be notified are depended on the Category of spill as shown in **Table 2**. All occurrences of SSO shall be reported on the CIWQS Online SSO Database. If no SSO occurs in a given month, than a no-spill certification shall be submitted. Section 8 includes optional worksheets provided by the California Waterboard to assist with spill reporting.

Table 2 – Notification, Reporting, Monitoring, and Record Keeping Requirements

ELEMENT	REQUIREMENT	METHOD
NOTIFICATION (see section B of MRP)	<ul style="list-style-type: none"> • Within two hours of becoming aware of any Category 1 SSO greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water, notify the California Office of Emergency Services (Cal OES) and obtain a notification control number. 	Call Cal OES at: (800) 852-7550
REPORTING (see section C of MRP)	<ul style="list-style-type: none"> • Category 1 SSO: Submit draft report within three business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date. • Category 2 SSO: Submit draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date. • Category 3 SSO: Submit certified report within 30 calendar days of the end of month in which SSO the occurred. • SSO Technical Report: Submit within 45 calendar days after the end date of any Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters. • "No Spill" Certification: Certify that no SSOs occurred within 30 calendar days of the end of the month or, if reporting quarterly, the quarter in which no SSOs occurred. • Collection System Questionnaire: Update and certify every 12 months. 	Enter data into the CIWQS Online SSO Database (http://ciwqs.waterboards.ca.gov/), certified by enrollee's Legally Responsible Official(s).
WATER QUALITY MONITORING (see section D of MRP)	<ul style="list-style-type: none"> • Conduct water quality sampling within 48 hours after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters. 	Water quality results are required to be uploaded into CIWQS for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.
RECORD KEEPING (see section E of MRP)	<ul style="list-style-type: none"> • SSO event records. • Records documenting Sanitary Sewer Management Plan (SSMP) implementation and changes/updates to the SSMP. • Records to document Water Quality Monitoring for SSOs of 50,000 gallons or greater spilled to surface waters. • Collection system telemetry records if relied upon to document and/or estimate SSO Volume. 	Self-maintained records shall be available during inspections or upon request.

7 SSO TRAINING

To assure that the Public Works Maintenance Employees are aware of required SSO spill procedures all Public Works Maintenance Employees will be provide with annual training on SSO Emergency Response Plan (ERP), SSO spill containment technics, and clean up procedures. Training records are maintained at the Public Works office.

8 SSO WORKSHEETS FROM THE CALIFORNIA WATERBOARD

2.6.7 Attachments

2.6.7.1 Sample Field Report

REPORTED BY

Call Address:
On Service Request _____ (SR # _____)

Caller Name: _____ Phone: _____

Receipt of Call: Date: ____/____/____ Time: ____:____ AM PM Call Received By:

Call Dispatch: ____/____/____ Time: ____:____ AM PM Assigned To:

USD Arrival Time: Date: ____/____/____ Time: ____:____ AM PM

SPILL START TIME NOTES

Caller Interview: Where did you see sewage spill from? From: Manhole Inside Building C/O
 Wet well/Lift station Other _____

Time Caller noticed spill: ____:____ AM PM Date: ____/____/____

Comments:

Last time Caller observed NO Spill occurring: ____:____ AM PM Date:
____/____/____

Comments:

SSO End Time ____:____ AM PM Date: ____/____/____

Other Comments regarding spill start time:



SPILL LOCATION

Observed: Spill from: Manhole ID _____ Lift Station ID _____

Clean Out Address _____

Comments: _____

Building Address _____

Comments: _____

Spill Destination: Building Paved Surface Storm Sys Curb/Gutter Unpaved Surface

Answer these questions:

#1 – Was there a discharge to surface water or a drainage channel that is tributary to surface water? ____ Yes ____ No

#2 - Was there a discharge to a storm drain pipe that was “NOT” fully captured & returned to the sanitary sewer system? ____ Yes ____ No

Water

If you answered no to both questions above, was it ≥ 1,000 gallons? ____ Yes ____ No

If yes, the SSO is a Category 2. If NO, the SSO is a Category 3.



SPILL VOLUME WORKSHEET

The purpose of this worksheet is to capture the data and method(s) used in estimating the volume of an SSO. Since there are many variables and often unknown values involved, this calculation is just an estimate. Additionally, it is useful to use more than one method, if possible, to validate your estimate.

The following methods and tools are the approved methods in the SOP CS-103 SSO *Response*. Check all methods and tools that you used:

- Eyeball Estimate Method
- Measured Volume Method
- Duration and Flow Rate Method (Account for diurnal flow pattern for long duration)
- USD SSO Flow Rate Estimating Tool
- Other (explain) i.e.; estimated daily use per capita upstream or meter @ Pump Station.

Eyeball Estimate Method- Imagine a bucket(s) or barrel(s) of water tipped over.

Size of bucket(s) or barrel(s)	How many of this Size?	Multiplier	Total Volume Estimated
1 gal. water jug		X 1	
5 gal. bucket		X 5	
32 gal. trash can		X 32	
55 gal drum		X 55	
Total Volume Estimated Using Eyeball Method			

Measured Volume Method (this may take several calculation as may have to break down the odd shaped spill to rectangles, circles, and polygons) It is important when guessing depth to measure, if possible in several locations and use an average depth. Use the SSO Volume Estimate by Area Work Sheet , if necessary, to sketch the shapes and show your work.

1. Draw a sketch of the spill SSO Volume Estimate by Area Work Sheet, or use a photo copy of USD block book to draw on and attach it.
2. Draw shapes and dimensions used on your sketch
3. Use correct formula for various shapes

Rectangle	$L \times W \times D$
Circle	$3.14 \times R^2 \times D$
Polygons see reference chart	Show formula used

Duration and Flow Rate Method worksheet:

Start Date and Time	1.
End Date and time	2.
Total time elapsed of SSO event (subtract line 1 from line 2. Show time in minutes)	3.
Average flow rate GPM (account for diurnal pattern)	4.
Total volume estimate using duration and flow rate method (Line 3 x Line 4)	5.

CAUSE OF SPILL

Spill Cause: Roots Grease Debris Vandalism Lift Station Fail Other _____

Spill cause to be determined by CCTV inspection (Attach TV Report to this form)

Final Cause Determination:

Follow-up or Corrective Action Taken:

SPILL CONTAINMENT

Containment Implemented: _____: _____ AM PM Date: _____/____/____



Containment Measures: Plugged Storm Drain Washed Down Vacuum Up Water/Sewage

Other Measures: _____

CLEAN UP



Clean Up Begin: _____:_____ AM PM Date: _____/_____/_____

Clean Up Complete: _____:_____ AM PM Date: _____/_____/_____

Describe Clean Up Operations:

_____ Gallons – Estimate Volume of Spill Recovered (do not count wash down water)

OTHER IMPORTANT MILESTONES

Contacted Supervisor: _____:_____ AM PM Date: _____/_____/_____

Requested Additional EE's/Equip: _____:_____ AM PM Date: _____/_____/_____

Requested Additional EE's/Equip: _____:_____ AM PM Date: _____/_____/_____

Requested Additional EE's/Equip: _____:_____ AM PM Date: _____/_____/_____

Departure Time: _____:_____ AM PM Date: _____/_____/_____

_____ _____:_____ AM PM Date: _____/_____/_____

_____ _____:_____ AM PM Date: _____/_____/_____

_____ _____:_____ AM PM Date: _____/_____/_____

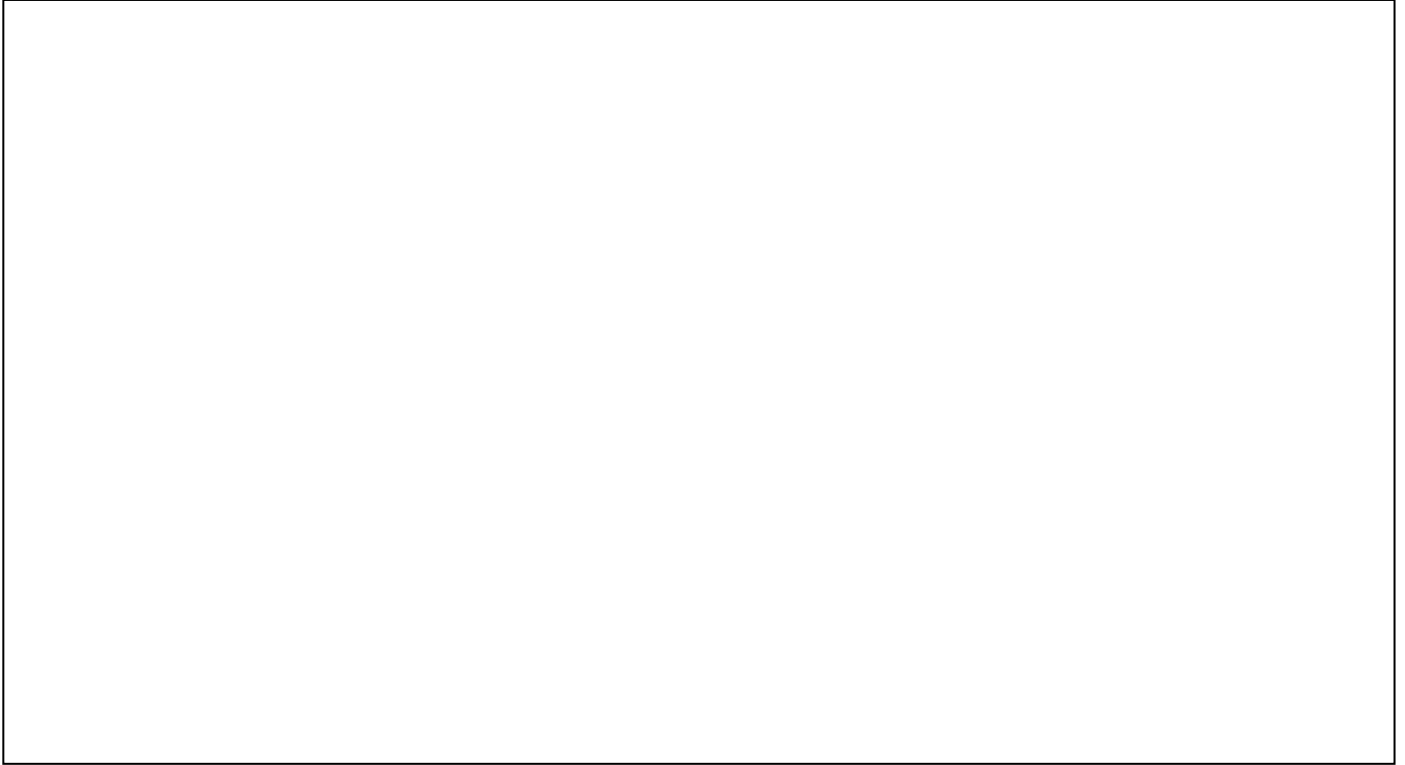
Response Crew: _____, _____, _____

SSO Volume by Area Estimation Work Sheet

2.6.7.2 SSO Volume by Area Estimation Work Sheet

Surface: Asphalt Concrete Dirt Landscape Inside Building Other _____

(Draw / Sketch outline of Spill 'Footprint' and attach photos)



~~ Breakdown the 'Footprint' into Recognizable Shapes and Determine Dimensions of Each Shape ~~

Area #1 _____ % Wet _____

Stain. Depth1 _____ Depth2 _____ Depth3 _____ Depth4 _____ Depth5 _____ Depth6 _____

Area #2 _____ % Wet _____

Stain. Depth1 _____ Depth2 _____ Depth3 _____ Depth4 _____ Depth5 _____ Depth6 _____

Area #3 _____ % Wet _____

Stain. Depth1 _____ Depth2 _____ Depth3 _____ Depth4 _____ Depth5 _____ Depth6 _____

Area #4 _____ % Wet _____

Stain. Depth1 _____ Depth2 _____ Depth3 _____ Depth4 _____ Depth5 _____ Depth6 _____

Area #5 _____ % Wet _____

Stain. Depth1 _____ Depth2 _____ Depth3 _____ Depth4 _____ Depth5 _____ Depth6 _____

SSO Volume by Area Estimation Work Sheet

Area #6 _____ % Wet _____

Stain. Depth1 _____ Depth2 _____ Depth3 _____ Depth4 _____ Depth5 _____ Depth6 _____

Area #1 Square Feet: _____ x % Wet _____ = _____ Sq/Ft
 Ave Depth: _____ Concrete 0.0026' Asphalt 0.0013'
 Volume: _____ Cu/Ft

Area #2 Square Feet: _____ x % Wet _____ = _____ Sq/Ft
 Ave Depth: _____ Concrete 0.0026' Asphalt 0.0013'
 Volume: _____ Cu/Ft

Area #3 Square Feet: _____ x % Wet _____ = _____ Sq/Ft
 Ave Depth: _____ Concrete 0.0026' Asphalt 0.0013'
 Volume: _____ Cu/Ft

Area #4 Square Feet: _____ x % Wet _____ = _____ Sq/Ft
 Ave Depth: _____ Concrete 0.0026' Asphalt 0.0013'
 Volume: _____ Cu/Ft

Area #5 Square Feet: _____ x % Wet _____ = _____ Sq/Ft
 Ave Depth: _____ Concrete 0.0026' Asphalt 0.0013'
 Volume: _____ Cu/Ft

Area #6 Square Feet: _____ x % Wet _____ = _____ Sq/Ft
 Ave Depth: _____ Concrete 0.0026' Asphalt 0.0013'
 Volume: _____ Cu/Ft

Total Volume:

#1 _____, #2 _____, #3 _____, #4 _____, #5 _____, #6 _____ = _____ *cu ft

_____ *cu ft x 7.48 gallons = _____ **gallons Spilled.**

SSO Volume by Area Estimation Work Sheet

CONVERSIONS

** To convert inches into feet: Divide the inches by 12.

Example: $27'' / 12 = 2.25'$

Or Use Chart A

Example: $1 \frac{3}{4}'' = ?$

$1'' (0.08') + \frac{3}{4}'' (0.06') = \underline{0.14'}$

** One Cubic Foot = 7.48 gallons of liquid.

Chart A		
Conversion:		
<u>Inches</u>	to	<u>Feet</u>
1/8''	=	0.01'
1/4''	=	0.02'
3/8''	=	0.03'
1/2''	=	0.04'
5/8''	=	0.05'
3/4''	=	0.06'
7/8''	=	0.07'
1''	=	0.08'
2''	=	0.17'
3''	=	0.25'
4''	=	0.33'
5''	=	0.42'
6''	=	0.50'
7''	=	0.58'
8''	=	0.67'
9''	=	0.75'
10''	=	0.83'
11''	=	0.92'
12''	=	1.00'

GEOMETRY

For the purposes of this work sheet, the unit of measurement will be in feet for formula examples.

Area is two-dimensional - represented in square feet. (Length x Width)

Volume is three-dimensional - represented in cubic feet. (Length x Width x depth) or (Diameter Squared) $D^2 \times 0.785 \times \text{depth}$.

A Note about Depth

Wet Stain on a Concrete Surface - For a stain on concrete, use 0.0026'. This number is 1/32" converted to feet. For a stain on asphalt use 0.0013' (1/64"). These were determined to be a reasonable depth to use on the respective surfaces through a process of trial and error by SPUD staff. A known amount of water (one gallon) was poured onto both asphalt and concrete surfaces. Once the Area was determined as accurately as possible, different depths were used to determine the volume of the wetted footprint until the formula produced a result that (closely) matched the one gallon spilled. 1/32" was the most consistently accurate depth on concrete and 1/64" for asphalt. This process was repeated several times.

Sewage "Ponding" or Contained – Measure actual depth of standing sewage whenever possible. When depth varies, measure several (representative) points, determine the average and use that number in your formula to determine volume.

Area/Volume Formulas

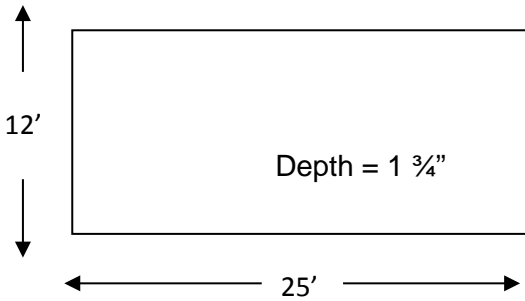
Area is two dimensional and is represented as Square Feet (Sq. Ft.)

Volume is three dimensional and is represented as Cubic Feet (Cu. Ft.)

One Cubic Foot = 7.48 gallons

AREA/VOLUME OF A RECTANGLE OR SQUARE

Formula: **Length x Width x Depth = Volume in Cubic Feet**



Length (25') x Width (12') x Depth (0.14')

25' x 12' x 0.14' = 42 Cubic Feet.

Now the Volume in Cubic Feet is known.

There are 7.48 Gallons in one Cubic Foot

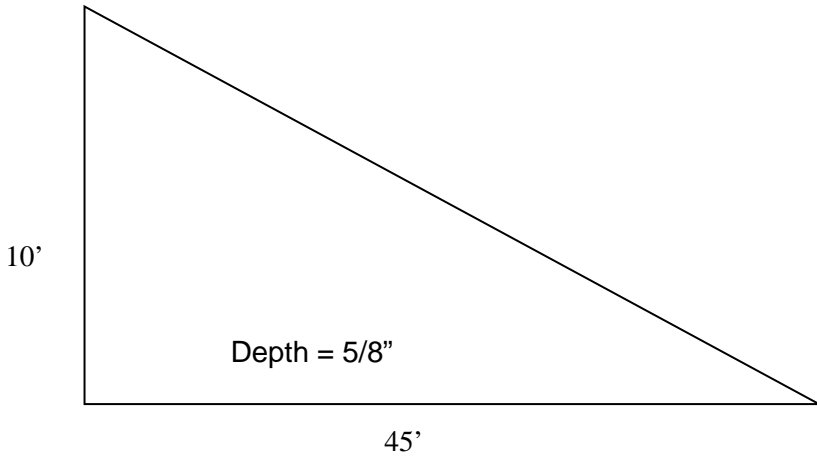
So, 42 Cubic Feet x 7.48 gallons/cubic feet = 314 Gallons

Chart A		
Conversion:		
<u>Inches</u>	to	<u>Feet</u>
1/8"	=	0.01'
1/4"	=	0.02'
3/8"	=	0.03'
1/2"	=	0.04'
5/8"	=	0.05'
3/4"	=	0.06'
7/8"	=	0.07'
1"	=	0.08'
2"	=	0.17'
3"	=	0.25'
4"	=	0.33'
5"	=	0.42'
6"	=	0.50'
7"	=	0.58'
8"	=	0.67'
9"	=	0.75'

SSO Volume by Area Estimation Work Sheet

AREA/VOLUME OF A RIGHT TRIANGLE

Base x Height x 0.5 x Depth = Volume in Cubic Feet



Base (45') x Height (10') x 0.5 x Depth (.05') x 7.48 gallons/cubic foot = 84 gallons
 For Isosceles Triangles (two sides are equal lengths),
 Break it down into two Right Triangles and compute area
 as you would for the Right Triangle above.

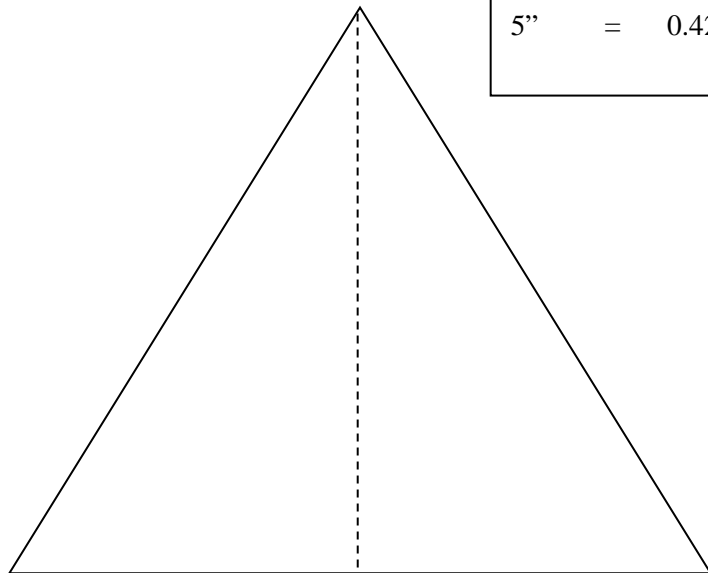


Chart A		
Conversion:		
<u>Inches</u>	to	<u>Feet</u>
1/8"	=	0.01'
1/4"	=	0.02'
3/8"	=	0.03'
1/2"	=	0.04'
5/8"	=	0.05'
3/4"	=	0.06'
7/8"	=	0.07'
1"	=	0.08'
2"	=	0.17'
3"	=	0.25'
4"	=	0.33'
5"	=	0.42'

SSO Volume by Area Estimation Work Sheet

AREA/VOLUME OF A CIRCLE/CYLINDER

$$D^2 \times 0.785 \times d$$

Diameter Squared x 0.785 x Depth = Volume in cubic feet.

Diameter = Any straight line segment that passes through the center of a circle.

For our purposes, it is the measurement across the widest part of a circle.

$$D^2 \times 0.785 \times \text{depth} = \text{Volume in cubic feet}$$

Example:

$$27' \times 27' \times 0.785 \times 0.03 = 17.17 \text{ cubic feet}$$

$$17.17 \text{ cubic feet} \times 7.48 \text{ gallons/cubic feet} = 128 \text{ gallons}$$

Chart - A

Conversion:

Inches to Feet

$$1/8'' = 0.01'$$

$$1/4'' = 0.02'$$

$$3/8'' = 0.03'$$

$$1/2'' = 0.04'$$

$$5/8'' = 0.05'$$

$$3/4'' = 0.06'$$

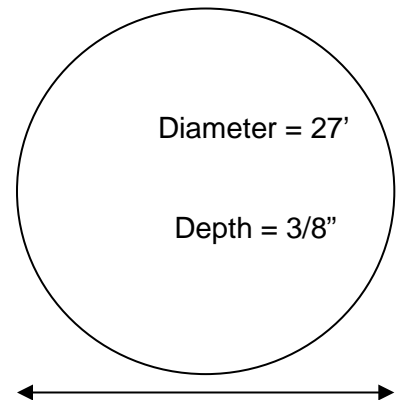
$$7/8'' = 0.07'$$

$$1'' = 0.08'$$

$$2'' = 0.17'$$

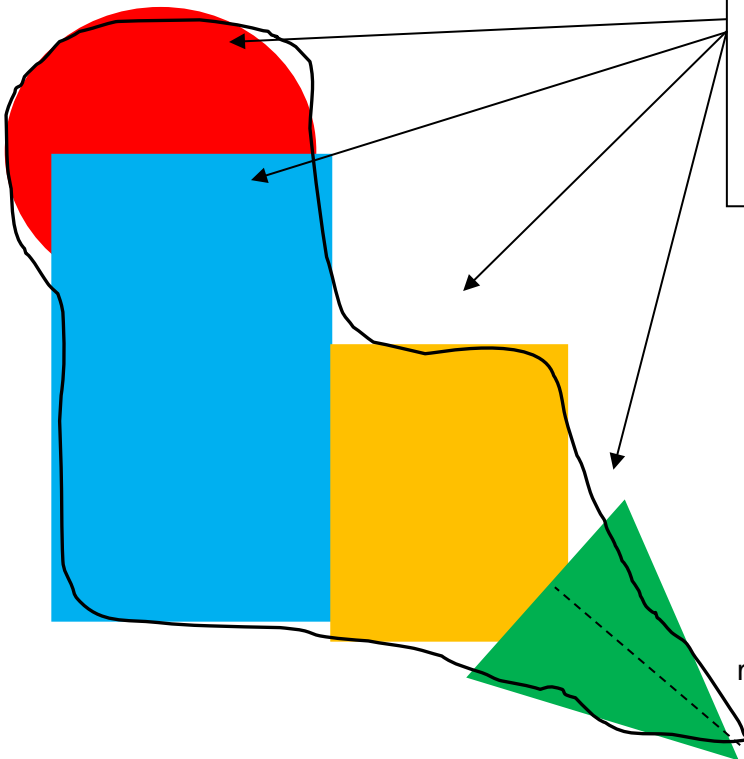
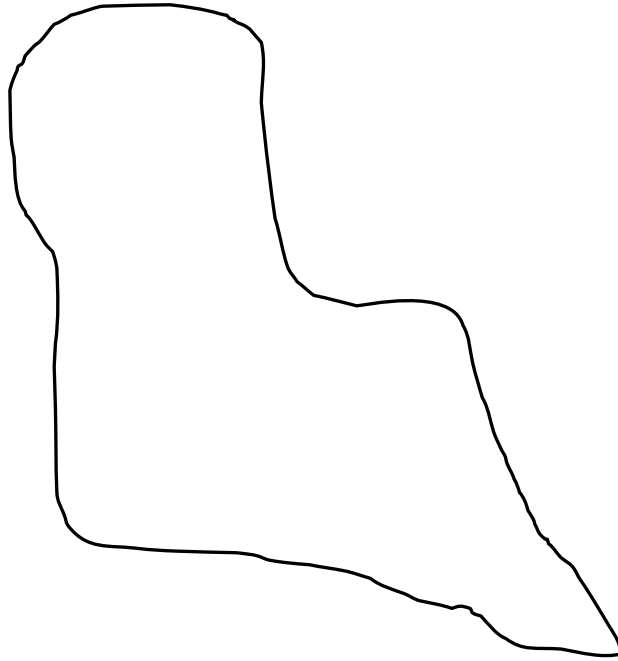
$$3'' = 0.25'$$

$$4'' = 0.33'$$



SSO Volume by Area Estimation Work Sheet

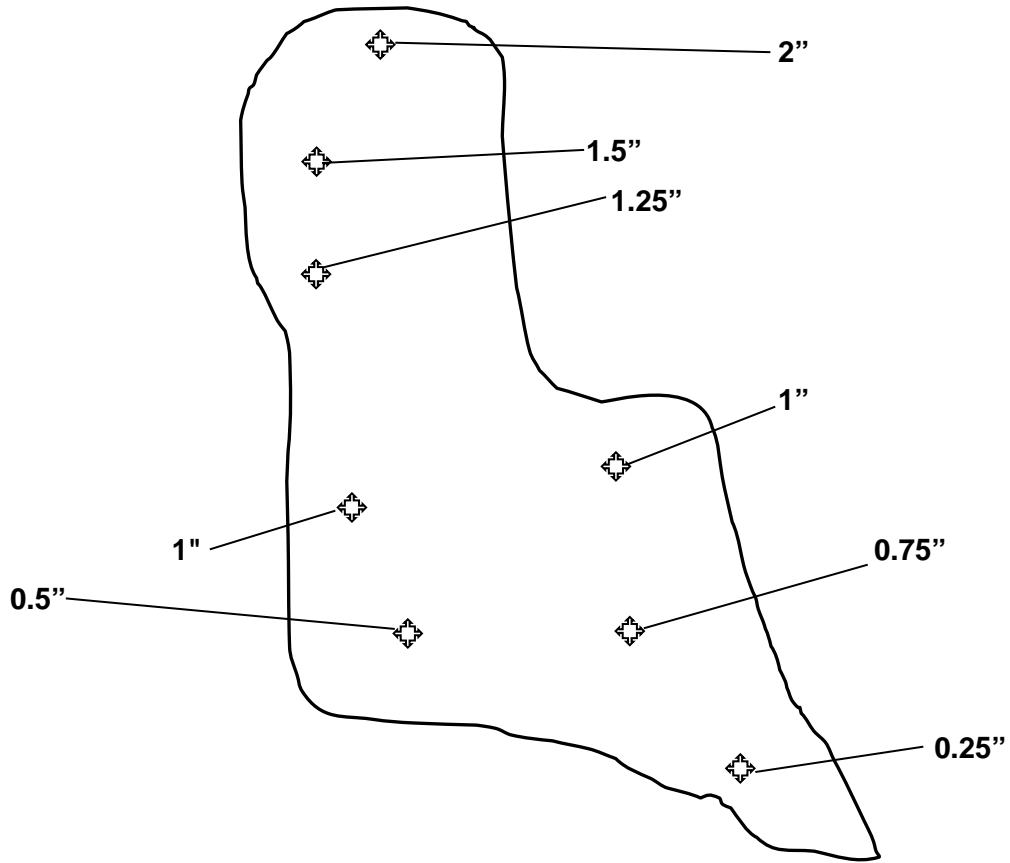
Find the geometric shapes within the shape. If this was the shape of your spill, break it down, as best you can, with the shapes we know.



1. Determine the volumes of each shape.
In this example, after the volume of the circle is determined, multiply it by 55% (+/-) so that the overlap area won't be counted twice.
2. Add all the volumes to determine total spill volume.

If the spill depth is of varying depths, take several measurements at different depths and find the average.

SSO Volume by Area Estimation Work Sheet



$$2" + 1.5" + 1.25" + 1" + 1" + 0.75" + 0.5" + 0.25" = 8.25"$$

$$8.25" / 8 \text{ measurements} = 1.03"$$

Average Depth = 1.03"

SSO Volume by Area Estimation Work Sheet

Step 1

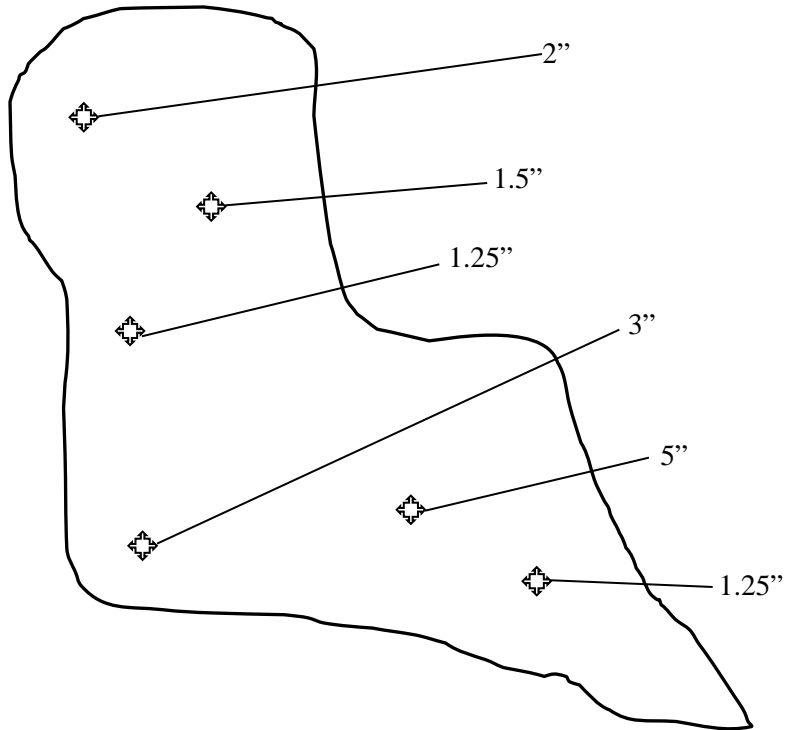
If the spill affects a dry, unimproved area such as a field or dirt parking lot, determine the Area of the wetted ground in the same manner as you would on a hard surface. Using a round-point shovel, dig down into the soil until you find dry soil. Do this in several locations within the wetted area and measure the depth of the wet soil. Average the measurement/thickness of the wet soil and determine the average depth of the wet soil.

NOTE: This can be used in a (Dry) dirt or grassy area that is not regularly irrigated like a field or a dirt parking lot.

Wet weather would make this method ineffective.

Step 2

Take a Test Sample



EXAMPLE:

If the Area of the spill was determined to be 128 Sq/Ft and the average depth of the wet soil is 2.33 inches:

$$128 \text{ Sq/Ft} \times 0.194' = 24.83 \text{ Cu/Ft}$$

$$24.83 \text{ Cu/Ft} \times 7.48 \text{ Gals/Cu/Ft} = 185.74 \text{ gallons}$$

$$185.74 \times 18\% = \underline{33 \text{ Gallons}} \text{ (water in soil)}$$

$$2'' + 1.5'' + 1.25'' + 3'' + 5'' + 1.25'' = 14.0''$$

$$14.0'' / 6 \text{ measurements} = 2.33''$$

$$\text{Average Depth} = 2.33'' (0.194')$$

APPENDIX E
SSMP Adoption Resolution

RESOLUTION NO. 23-12

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
RIPON ADOPTING THE 2023 RIPON SEWER SYSTEM
MANAGEMENT PLAN UPDATE

WHEREAS, in May 2006, the State Water Resource Control Board adopted Statewide General Waste Discharge Requirements for Sanitary Sewer System, Order No. 2006-0003; and

WHEREAS, the City has coverage under Order No. 2006-0003; and

WHEREAS, Order No. 2006-0003 requires permittees to develop and approve a Sewer System Management Plan (SSMP); and

WHEREAS, the City of Ripon approved its Sewer System Management Plan in 2009 and is required to update the plan every five years; and

WHEREAS, the updated Sewer System Management Plan (SSMP) considered for approval before us today will serve as a work plan to manage the sanitary sewer system in a manner consistent with Order No. 2006-0003.

NOW, THEREFORE BE IT RESOLVED that the City Council of the City of Ripon does hereby accept the Sewer System Management Plan in satisfaction of State Order No. 2006-0003 to serve as the work plan in management of the City's sanitary sewer collection system.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of Ripon this 14th day of March, 2023, by the following vote:

RESULT: ADOPTED AS AMENDED BY CONSENT VOTE [UNANIMOUS]

MOVER: Daniel de Graaf, Council Member

SECONDER: Leo Zuber, Vice Mayor

AYES: Restuccia, Zuber, de Graaf, Barton, Uecker

THE CITY OF RIPON,
A Municipal Corporation

By


MICHAEL RESTUCCIA, Mayor

ATTEST:

By:


LISA ROOS, City Clerk